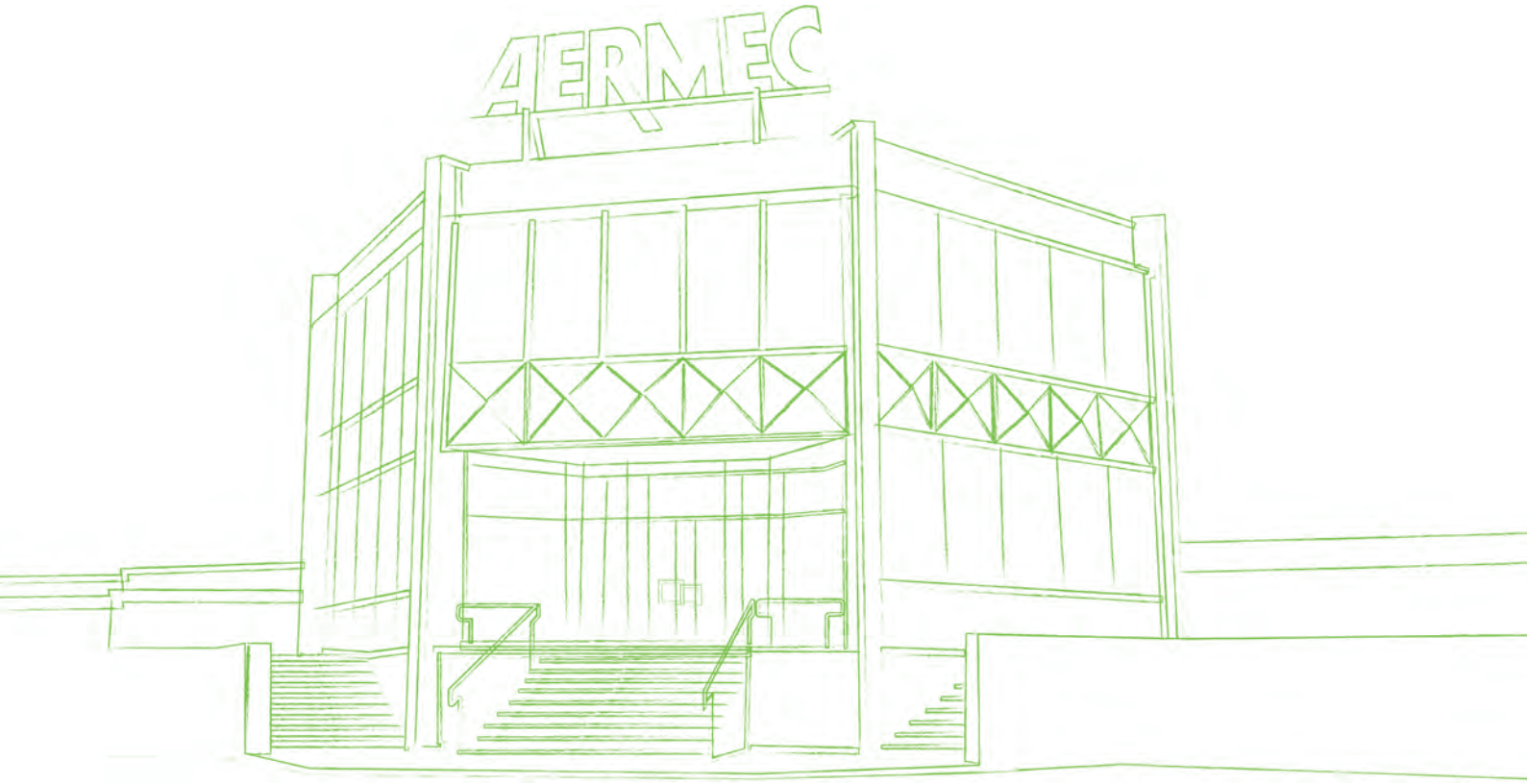
AERMEC

Product Guide 2025



The company

Giordano Riello, founder of Aermec, assisted by his son Alessandro and daughter Raffaella, has solidly associated the Company name with precise values:

Respect for the environment

By using new eco-friendly refrigerants as well as innovative installations using water as the carrier fluid.

Energy saving

The great challenge of the Third Millennium, with the development of combined heating and air conditioning systems where appliances are used only as and when necessary.

Noise pollution control

With low-noise emission products, which undergo scrupulous testing before being put on the market.

Health care

With special filters that hold back the smallest suspension particles, the Cold Plasma Generator system that guarantees effective air purification (making for a healthier environment), and the new photocatalytic device, this air purification system is ideal for places where the highest degree of hygiene is required.

History

1961
Giordano Riello sets up Riello Condizionatori, initially producing for contractors only. The story begins.

1963
The Aermec brand is born and marks all future company products designed and manufactured on site. The brand name gains a stronghold as a major product name in Italy and throughout Europe.

1970
Aermec can already supply fresh and warm air. Aermec presents the first dual section conditioner: the first "split-system". Fancoil production starts.

1973
Aermec receives European Award Gold Mercury.

1980
The Eighties sees the development of water chillers and air handling units.

1990
The Nineties mark the definitive consolidation of the company on the market. The Aermec brand is associated with advanced technology and high quality design.

1998
The name makes the company. From 1 January Aermec becomes the company name as well as product brand.

2002
Design and technology: Aermec launched Omnia a new generation of fancoils, designed for domestic applications. OMNIA is the result of co operation with a worldwide prestigious designer.

2003
Aermec UK was acquired.

2004
The international market ask for number and Aermec answer. Giordano Riello make the producing system more technogical.

2008
Aermec responds with more and more efficient units to the world challenge of energy saving with a special attention for our environment.

2011
Aermec turns 50. The company has developed and enlarged, always willing to understand and anticipate the needs of the market. Promoter of "integrated design" between designer and architect.

2012
Aermec Polska was acquired.

2015
The news Europe's largest test facility for air conditioning applications was inaugurated.

2017
Aermec receives Innovation Award from the US Organizations ASHRAE, AHRI and AHR. Aermec receives "Prime Company" certificate for the economic strength and commercial reliability from the Dun & Bradstreet. Aermec Deutschland was acquired.

2018
Aermec awards first prize in "RAC Cooling Industry Award 2018" in London by an Internationally qualified Jury.

2019
Aermec receives the prizes:"NATIONAL ACR & HEAT PUMPS AWARDS 2019" in the category of Data Centre Rooftop Chiller installation, "H&V News Awards 2019" attributed by a HVAC technical jury the United Kingdom.

2020
For the second year in a row, Aermec receives the prize ACR NEWS AWARDS for Data Centers category in the UK.

2021
Aermec turns 60.
Aermec's 60th anniversary coincides with
the Covid 19 pandemic.
The company opens a vaccination hub available not only to its own employees but to the entire population of the area.

2022
Aermec breaks through the barrier of 300 million turnover. The Raffaello Riello Research and Training Centre was inaugurated on 12 May.

2023
Founder Giordano Riello leaves us on May 14.

2024
The Spanish companies Airlan and Airlan Industrial were acquired. The holding company Aermec North America that controls Aermec USA and Aermec Canada for the distribution of products in the North American continent was established.

LOGO INDEX:

CERTIFICATIONS:

CE marking

REFRIGERANT:

R290 refrigerant

R32 refrigerant

R1234ze refrigerant

R134a refrigerant

R410A refrigerant

XP10 refrigerant

OPERATIONAL TYPES:

Evaporating unit

Cooling and heating

Cooling only

DHW

Condensing unit

Free-Cooling

Heating only

Multipurpose

For four pipes plants

For three pipes plants

For two pipes plants

INSTALLATION TYPES:

Cassette installation

Ceiling installation

Ducted installation

Floor installation

Wall installation

Air indoor unit

Air outdoor unit

Water indoor unit

KINDS OF EXCHANGERS :

Heat recovery

Plate exchanger

Pump kit

Shell and tube exchanger

Water tank

KINDS OF COMPRESSORS:

Centrifugal compressor

Inverter centrifugal compressor

Rotary compressor

Inverter rotary compressor

Scroll compressor

Inverter scroll compressor

Twin screw compressor

Inverter twin screw compressor

KINDS OF FANS:

Axial fan

Inverter axial fan

Centrifugal fan

Inverter centrifugal fan

EC fan

Inverter EC fan

Plug fan

Inverter plug fan

EXTRA:

Inverter device

Compatible with ModBus protocol

Cold Plasma device

Touch control

Compatible with VMF system (Variable Multi Flow)

EUROVENT CERTIFIED PERFORMANCE
AHU N° 04.04.052
Range NCD
www.eurovent-certification.com

Aermec is one of the companies belonging to Giordano Riello International Group and takes part to Eurovent programme for NCD series.

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

Aermec takes part to EUROVENT Programmes: FCH - FCHP for fan coil series.
Aermec is involved in EUROVENT Programme: LCP for chiller range.
The products involved appear on the website www.eurovent-certification.com

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INDEX

	FAN COILS		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	With cabinet; universal installation					
	FCZ	On/Off	110-1300	0,65-7,62	1,45-17,02	12
	FCZI	Inverter	140-1140	0,89-8,60	2,02-17,10	25
	FCZ-D	On/Off	140-720	0,89-4,25	2,02-8,50	34
	FCZI-D	Inverter	140-720	0,89-4,25	2,02-8,50	39
	FCZ-H	On/Off	140-1140	0,89-8,60	2,02-17,10	44
	FCZI-H	Inverter	140-1140	0,89-8,60	2,02-17,10	50
new	**FCZ-ASW**	On/Off	110-1300	0,65-7,62	1,45-17,02	56
	Omnia UL	On/Off	80-460	0,53-2,79	1,06-5,94	57
	Omnia ULI	Inverter	110-460	0,69-2,79	0,76-5,94	61
	Omnia Radiant	On/Off o inverter with radiant panel	190-460	1,42-2,83	2,89-5,94	65
new	**Omnia ULSI_B**	Inverter	46-427	0,37-3,00	0,35-5,73	70
	Without cabinet; concealed installation with low static pressure					
	FCY	On/Off	148-1050	0,93-5,80	1,05-12,09	74
	FCYI	Inverter	123-799	0,80-4,70	0,90-10,15	85
	FCZ P - PO	On/Off	110-1300	0,65-7,62	1,45-17,02	95
	FCZI P	Inverter	140-1140	0,89-8,60	2,02-17,10	111
	Omnia UL P	On/Off	80-460	0,53-2,79	0,52-5,94	123
	Omnia ULI P	Inverter	110-460	0,69-2,79	0,76-5,94	127
new	**Omnia ULSI_P**	Inverter	46-427	0,37-3,00	0,35-5,73	130
	Without cabinet; duct installation with high static pressure					
	VED 030-340	On/Off with static pressure 21-66Pa	161-775	0,97-5,26	0,90-10,95	134
	VED 030I-340I	Inverter with static pressure 21-66Pa	161-775	0,98-5,27	0,90-10,95	140
	VED 430-741	On/Off with static pressure 24-75Pa	750-2358	4,54-16,10	5,20-31,71	146
	VED 530I-741I	Inverter with static pressure 32-69Pa	1060-2358	6,05-16,08	6,70-31,71	152
	VDCA-D	Fan coil unit for ducted installations	260-2800	0,79-12,81	1,57-16,67	158
	VDCB-D	Fan coil unit for ducted installations	200-3200	0,53-14,32	1,04-18,63	165
	MZC	Plenum with motor-driven dampers for channelling fan coils	-	-	-	173
	Cassette; ceiling installation					
	VEC	On/Off with coanda effect	130-613	0,80-4,28	0,95-9,18	177
	VEC-I	Inverter with coanda effect	130-613	0,80-4,28	0,95-9,18	181
	FCL	On/Off	300-1750	1,14-10,83	1,74-21,75	185
	FCLI	Inverter	300-1750	1,15-10,87	1,10-21,75	192
	Wall installation					
	FCW	On/Off	280-1082	1,37-7,00	1,42-14,00	199
	FCW I	Inverter	280-1082	1,37-7,00	1,42-14,00	203
	Ventilcassaforma	Template for recessed installation of fancoils in the wall	-	-	-	206
	Control panels	Range of control panels for fan coils	-	-	-	209
	VMF	Variable Multi Flow system for plant management	-	-	-	213

	HEAT RECOVERY UNITS		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	RPS	Counter-current flow heat recovery unit with inverter motor	800	-	-	224
	REPURO	With cross-flow exchanger	100-650	-	-	229
	TRS	Heat recovery unit with enthalpy exchanger	250-1300	-	-	235
	RPLI	Counter-current flow heat recovery unit with inverter motor	200-3900	-	-	237
	RTD	Thermodynamic recovery unit with integrated heat pump	1100-3200	-	-	242
	RPF	High performance heat recovery unit with cross-current recuperator	790-4250	-	-	246
	URX-CF	With cross-flow exchanger and refrigerant circuit	750-3300	-	-	250
	URHE-CF	High efficiency version with cross-flow exchanger and refrigerant circuit	1000-3300	-	-	254
	ERSR	High-efficiency heat recovery with rotary recovery unit	1000-30000	-	-	258

AIR HANDLING UNITS

			Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Compact air handling units					
	TVS	Air flow rate 800÷5200 m^3/h	800-5200	4,40-27,80	10,50-66,40	264
	TVH	Air flow rate 800÷5200 m^3/h	800-5200	4,70-29,30	11,60-73,90	273
	TS	Air flow rate 810÷4225 m^3/h	810-4225	4,39-24,93	8,89-52,44	282
	TA	Air flow rate 800÷5000 m^3/h	800-5000	4,2-39,6	3,9-72,8	286
	TN	Air flow rate 3000÷23000 m^3/h	3000-23000	12,6-127,8	14,7-277,3	291
	Modular air handling units					
	NCD	Air handling units	1134-79475	-	-	298
	SPL 025-130	For wellness areas	4000-13000	-	-	301
	SPL 160-250	For wellness areas	16000-25000	-	-	305
	Packaged ROOF-TOP units					
new	**RTG 060X-125X**	For medium crowding applications	-	57,7-128,1	58,1-124,6	308
	RTX N1-N8	For medium crowding applications	-	12,70-49,95	13,50-50,79	314
	RTX 09-16	For medium crowding applications	-	50-135	49-141	319
	RTX 17-23	For medium crowding applications	-	151-307	152-310	325
	RTY 01-10	For high crowding applications	-	30,2-133,6	29,3-137,9	330

AIR / WATER CHILLERS AND HEAT PUMPS

			Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll compressors					
	ANKI 020-080	Reversible heat pumps inverter	-	5,8-24,8	6,1-20,8	336
	HMI	Reversible air/water heat pump	-	3,0-14,5	4,0-15,5	342
new	**HMI 180T-220T**	Reversible air/water heat pump	-	17,5-21,0	18,0-22,0	349
	BHP	Air/Water split type reversible heat pump	-	3,2-11,5	4,0-16,0	354
	HMG	Reversible air/water heat pump	-	32-60	35-65	367
	HMG_P		-	33-60	36-65	
	ANLI	Reversible heat pumps inverter	-	29,0-42,3	31,4-33,3	375
	ANK 020-150	Reversible air/water heat pump optimised for use in heating mode	-	6,8-39,8	8,0-35,3	381
new	**SHW**	Heat pump water heater	-	-	-	388
	MIC	Air-water chiller	-	3	-	391
	ANL 021-202	Air-water chiller	-	5,7-43,3	-	396
	ANL 021H-203H	Reversible air/water heat pump	-	5,7-49,1	6,2-43,3	402
	NRK 0090-0150	Reversible air/water heat pump optimised for use in heating mode	-	18,4-31,0	20,8-34,4	410
	NRK 0200-0700	Reversible air/water heat pump optimised for use in heating mode	-	35,5-148,0	42,3-175,0	414
	NRV 0550	Air-water chiller	-	108,3	-	420
new	**PRM 0504**	Air-cooled reversible modular heat pump	-	95,6	101,7	425
new	**PRG-0282H-0654H**	Reversible air/water heat pump	-	49-143	51-143	432
	NRB 0282-0754	Air-water chiller	-	56-202	-	441
	NRB 0282H-0754H	Reversible air/water heat pump		52-261	57-193	451
	NRG 0282-0804	Air-water chiller	-	55,8-224,6	-	459
	NRG 0282H-0804H	Reversible air/water heat pump	-	52,5-212,0	56,6-214,4	468
	NRGI 151-602	Air-water chiller	-	31,0-132,2	-	476
	NRGI 151H-602H	Reversible air/water heat pump	-	28,9-123,7	31,6-133,9	481
	NRL 0280-0350	Air-water chiller	-	56,0-82,0	-	487
	NRL 0280H-0350H	Reversible air/water heat pump	-	51,0-76,0	58,0-86,0	492
	NRG 0800-3600	Air-water chiller	-	225,7-725,0	-	497
	NRG 0800H-3600H	Reversible air/water heat pump	-	194,9-962,3	209,6-991,9	506
	NRB 0800-2406	Air-water chiller (plate heat exchanger)	-	216,9-716,9	-	515
	NRB 0800-2406 Q	Air-water chiller (shell and tube heat exchanger)	-	216,9-716,9	-	524
	NRB 0800H-2406H	Reversible air/water heat pump (plate heat exchanger)	-	196,4-647,7	209,8-683,9	533
	NRB 0800W-2406W	Reversible air/water heat pump (shell and tube heat exchanger)	-	196,4-647,7	209,8-683,9	542
	CL 025-200	Air-water chiller with Plug Fan	-	5,8-41,0	-	550
	CL 025H-200H	Reversible air/water heat pump with Plug Fan	-	6,5-50,9	7,7-44,8	555
	NLC 0280-1250	Air-water chiller with Plug Fan	-	53-322	-	561
	NLC 0280H-1250H	Reversible air/water heat pump with Plug Fan	-	53-322	55-342	568
	Units with screw compressors					
	NSM 1402-9603	Air-water chiller	-	302-2100	-	573
	NSMI 1251-6102	Chiller with Inverter screw compressors	-	285,6-1342,6	-	587
	NSH	Reversible air/water heat pump	-	251-731	281-786	591
	NSG	Air-water chiller (with R1234ze)	-	228-1580	-	597
	Units with centrifugal compressors					
	TBA 1300-4325	Air-water chiller	-	328-1404	-	609
	TBG 1230-4310	Air-water chiller	-	200-1165	-	614

AIR / WATER CHILLERS WITH FREECOOLING

		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
Units with scroll compressors					
NRG 0282-0754 F	Air-water chiller with free-cooling	-	58-190	-	622
NRG 0800-2400-F	Air-water chiller with free-cooling	-	224-717	-	627
NRG 0800-2400-B	Air-water chiller with free-cooling glycol free	-	224-717	-	634
NRB 0800-2406 F	Air-water chiller with free-cooling	-	211-680	-	641
NRB 0800-2406 B	Air-water chiller with free-cooling glycol free		211-680	-	649
NRV 0550 F	Air-water chiller with free-cooling	-	99,9-105,4	-	656
Units with screw compressors					
NSM 1402-9603 F	Air-water chiller with free-cooling	-	306-2028	-	660
NSM 1402-9603 B	Air-water chiller with free-cooling glycol free	-	305,8-2028,1	-	673
NSM-HWT-1402-9603-F	Air-water chiller with free-cooling	-	306-2001	-	684
NSM-HWT-1402-9603-B	Air-water chiller with free-cooling glycol free	-	306-1991	-	693
NSMI 1251-6102 F	Air-water chiller with free-cooling and Inverter screw compressors	-	286-1280	-	702
TBA 1300-3350 F	Air-water chiller with free-cooling	-	317,2-1223,6	-	707
TBG 1230-4310 F	Air-water chiller with free-cooling	-	238-1110	-	712

WATER / WATER CHILLERS AND HEAT PUMPS

			Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll compressors					
	VENICE-H	Reversible water-cooled heat pump, gas side	-	6,9-,9,7	8,3-11,7	720
	WRL 026H-161H	Reversible water-cooled heat pump, gas side	-	6,0-40,0	8,0-48,0	723
	WRL 026-161	Water cooled heat pump reversible water side	-	6,6-44,2	7,5-48,0	730
	WRL 180H-650H	Reversible water-cooled heat pump, gas side	-	44,9-157,4	53,0-183,3	736
	WRL 180-650	Water cooled heat pump reversible water side	-	49,0-174,0	55,0-192,0	740
	WRK	Reversible water-cooled heat pump, gas side	-	38,9-165,9	48,5-207,7	745
	WWB 0300-0900	Water-water heat pumps only	-	-	56,7-265,9	753
new	**WWBG**	Water-water heat pumps only	-	-	77,2-,138,2	758
	WWM	Water cooled heat pump reversible water side	-	96	110	763
	NXW 0503-1654	Water cooled heat pump reversible water side	-	111-511	127-582	769
	NXW 0503H - 1654H	Reversible water-cooled heat pump, gas side	-	106-477	125-565	774
new	**NGW-0500-2600**	Water cooled heat pump reversible water side	-	116,3-790,2	131,3-904,6	779
new	**NGW-0350H-2600H**	Reversible water-cooled heat pump, gas side	-	107,0-746,4	126,3-879,3	784
	Units with screw compressors					
	WS 0601-2802	Water cooled heat pump reversible water side	-	147-700	164-778	790
	HWS 0601 - 2802	Water cooled heat pump reversible water side	-	147-369	165-778	794
	HWSG	Water cooled heat pump reversible water side	-	110-396	122-595	799
	WSH	Reversible water-cooled heat pump, gas side	-	165,8-269,7	183,3-300,3	803
	WFGI	Water cooled heat pump reversible water side	-	217-1765	243-1960	807
	WFGN	Water cooled heat pump reversible water side	-	136-1727	153-1921	817
	WFI	Water cooled heat pump reversible water side	-	291-2406	326-2664	824
	WFN	Water cooled heat pump reversible water side	-	182-2349	205-2610	833
	Units with centrifugal compressors					
	WMX	Water/water chiller (with R134a)	-	280,1-324,2	-	841
	WMG	Water/water chiller (with R1234ze)	-	282,3-312,4	-	844
	WTX	Water/water chiller	-	222,9-1958,4	-	847
	WTG	Water/water chiller (with R1234ze)	-	246,6-1959,4	-	852

MULTI-PURPOSE

		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
NRP 0200-0750	Air-water multipurpose (plate heat exchanger)	-	43-185	46-205	858
NRP 0804-2406	Air-water multipurpose (plate heat exchanger)	-	207-639	208-662	865
NPG 0800-3600	Air-water multipurpose (plate heat exchanger)	-	206,5-657,8	212,0-670,8	872
CPS	Multifunction unit with multiple temperature level capability	-	164-491	176-505	882
NXP 0500-1650	Water-water multipurpose (plate heat exchanger)	-	108-502	122-549	887

	PRECISION AIR CONDITIONING		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	P 10-932	Direct expansion (air or water cooled); chilled water	-	7-160	-	896
	G 070-1342	Direct expansion (air or water cooled); chilled water	-	50-222	-	901
	R 20-361	Direct expansion (air or water cooled); chilled water	-	10-37	-	905
	ROOM AIR CONDITIONERS		**Air flow rate (m3/h)**	**Cool. Cap. (kW)**	**Heat. Cap. (kW)**	**Page**
	Monobloc					
	FK	Monobloc window	-	2,7-3,6	-	912
	CMP (COMPACT)	Monobloc without outdoor unit	-	2,35	2,36	915
new	PST	Portable air conditioner	-	3,5	2,9	918
	Monosplit					
	SPG	Monosplit	-	2,5-6,2	2,8-6,5	921
	SGE	Monosplit	-	2,8-5,9	2,9-6,0	926
	SCG_1	Monosplit	-	7,2-12,5	7,9-14,5	930
	CKG	Monosplit	-	2,7-6,6	2,9-6,8	934
	LPG	Monosplit	-	3,5-16,0	4,0-17,0	940
	MVAS	Monosplit high head duct	-	22,4-28,0	24,0-30,0	949
	Multisplit					
	MPG	Multisplit	-	4,1-12,1	4,4-13,0	952
	MGE	Multisplit		4,1-7,9	4,4-8,2	969
new	MGEHW	Multisplit	-	7,91	8,21	979
	VRF SYSTEM		**Air flow rate (m3/h)**	**Cool. Cap. (kW)**	**Heat. Cap. (kW)**	**Page**
new	MVBM - MVAS - MVBHR	Direct expansion variable refrigerant flow system VRF	-	12,1-246,0	14,0-276,0	994
	COMPLEMENTARY PRODUCTS		**Air flow rate (m3/h)**	**Cool. Cap. (kW)**	**Heat. Cap. (kW)**	**Page**
	DHW Systems and solar kits					
	GSA - KSA - CXS	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds				1022
	Thermal Buffers tank					
	SAF	Thermal Buffer tank kit with instantaneous Domestic Hot Water production	-	-	-	1026
	SAP	Buffer tank with capacity from 75 to 3500 litres	-	-	-	1028
	Plug&Play hydronic kit					
	WST	Hydronic kit plug & play	-	80-1500	-	1031
	Cooling towers					
	TRA	Cooling towers	-	-	-	1034
	Remote condensers - Dry coolers					
new	Remote condensers - Dry Cooler		-	8-2200	-	1037
	Water cooled condensing unit					
	FW-R	Water-cooled air conditioner	-	2,9-4,0	4,3-5,2	1043
	CWX-CWXM	Water motocondensing unit	-	2,7-7,1	-	1045
	Dehumidifier					
	DMT	Dehumidifier	-	-	-	1048
	DMH -DMV	Dehumidifier	-	-	-	1052

BIM

Building Information Modeling

3D digital information system

- **Easy and intuitive downloading**
- **RFA (Autodesk Revit Family File) format**

DESCRIPTION

Aermec BIM models contain information that is useful in the MEP plant design phase. BIM technology offers multiple advantages such as: greater efficiency and productivity, fewer errors, lower costs, greater interoperability, maximum sharing of information, more timely and consistent control of units, overcoming the inefficiencies and inaccuracies of the design method that traditionally characterises conventional professional practices, allowing for full integration between the design and execution phases.
Search and download HVAC products for heating, ventilation and air conditioning. Browse the library of BIM families to select the products to be used in your project.

FEATURES

Aermec BIM models contain the following information:
— Performance in heating and cooling mode data
— Energy data
— Electrical data
— Sound data
— Features of the hydraulic connections
— Construction features
— Dimensional data

COMPATIBILITY

Aermec BIM models are downloadable in rfa (Autodesk Revit Family File) format and on request also in .ifc interchange format to ensure maximum compatibility with all BIM software.

MODELS AVAILABLE

— Fan coils
— Recovery units
— Air treatment units
— Air-to-water chillers and heat pumps
— Freecooling air/water chillers
— Water-to-water chillers and heat pumps
— Multipurpose
— Rooftop

By scanning the QR code below you can access the AERMEC download area where you can select and download the desired unit:

FAN COILS

In this area of climate control, Aermec is real leader:
a major company in Italy and one of the top in Europe.
A leading position gained through long-standing experience that has gained ground year after year. Special attention to detail, quality materials state-of-the-art technology ensure optimal performance with virtually imperceptible noise levels, especially at low speed;
attention paid to dimensions and overall size, comparable to those of standard radiators, to enable installation in all residential and commercial environments;
exclusive design, anticipating trends and in harmony with interior design requirements;
new electronic control panel to enable automatic operation and achieve the most user-friendly climatisers to date.
Aermec fancoils boast all these features and more.

FAN COILS

			Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	With cabinet; universal installation					
	FCZ	On/Off	110-1300	0,65-7,62	1,45-17,02	12
	FCZI	Inverter	140-1140	0,89-8,60	2,02-17,10	25
	FCZ-D	On/Off	140-720	0,89-4,25	2,02-8,50	34
	FCZI-D	Inverter	140-720	0,89-4,25	2,02-8,50	39
	FCZ-H	On/Off	140-1140	0,89-8,60	2,02-17,10	44
	FCZI-H	Inverter	140-1140	0,89-8,60	2,02-17,10	50
new	**FCZ-ASW**	On/Off	110-1300	0,65-7,62	1,45-17,02	56
	Omnia UL	On/Off	80-460	0,53-2,79	1,06-5,94	57
	Omnia ULI	Inverter	110-460	0,69-2,79	0,76-5,94	61
	Omnia Radiant	On/Off o inverter with radiant panel	190-460	1,42-2,83	2,89-5,94	65
new	**Omnia ULSI_B**	Inverter	46-427	0,37-3,00	0,35-5,73	70
	Without cabinet; concealed installation with low static pressure					
	FCY	On/Off	148-1050	0,93-5,80	1,05-12,09	74
	FCYI	Inverter	123-799	0,80-4,70	0,90-10,15	85
	FCZ P - PO	On/Off	110-1300	0,65-7,62	1,45-17,02	95
	FCZI P	Inverter	140-1140	0,89-8,60	2,02-17,10	111
	Omnia UL P	On/Off	80-460	0,53-2,79	0,52-5,94	123
	Omnia ULI P	Inverter	110-460	0,69-2,79	0,76-5,94	127
new	**Omnia ULSI_P**	Inverter	46-427	0,37-3,00	0,35-5,73	130
	Without cabinet; duct installation with high static pressure					
	VED 030-340	On/Off with static pressure 21-66Pa	161-775	0,97-5,26	0,90-10,95	134
	VED 030I-340I	Inverter with static pressure 21-66Pa	161-775	0,98-5,27	0,90-10,95	140
	VED 430-741	On/Off with static pressure 24-75Pa	750-2358	4,54-16,10	5,20-31,71	146
	VED 530I-741I	Inverter with static pressure 32-69Pa	1060-2358	6,05-16,08	6,70-31,71	152
	VDCA-D	Fan coil unit for ducted installations	260-2800	0,79-12,81	1,57-16,67	158
	VDCB-D	Fan coil unit for ducted installations	200-3200	0,53-14,32	1,04-18,63	165
	MZC	Plenum with motor-driven dampers for channelling fan coils	-	-	-	173
	Cassette; ceiling installation					
	VEC	On/Off with coanda effect	130-613	0,80-4,28	0,95-9,18	177
	VEC-I	Inverter with coanda effect	130-613	0,80-4,28	0,95-9,18	181
	FCL	On/Off	300-1750	1,14-10,83	1,74-21,75	185
	FCLI	Inverter	300-1750	1,15-10,87	1,10-21,75	192
	Wall installation					
	FCW	On/Off	280-1082	1,37-7,00	1,42-14,00	199
	FCW I	Inverter	280-1082	1,37-7,00	1,42-14,00	203
	Ventilcassaforma	Template for recessed installation of fancoils in the wall	-	-	-	206
	Control panels	Range of control panels for fan coils	-	-	-	209
	VMF	Variable Multi Flow system for plant management	-	-	-	213

FCZ

Fan coil for universal and floor installation

Cooling capacity 0,65 ÷ 7,62 kW
Heating capacity 1,45 ÷ 17,02 kW

- **Very quiet**
- **Touch controller mounted on-board. allows remote control with smart devices**

DESCRIPTION

fan coil can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

FEATURES

Case

Metallic micro-perforated cabinet with rustproofing polyester paint RAL 9003. Head with plastic air distribution grille RAL 7047.
Depending on the version, the distribution grille may be adjustable.

Ventilation group

Consisting of double suction centrifugal fans that are particularly silent, statically and dynamically balanced, and directly coupled with the motor shaft.
The motor is wired for single phase and has three speeds, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings.
Extractable shrouds for easy, effective cleaning

Finned pack heat exchanger

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
Reversibility of the water connections during installation only for units with a standard or boosted main heat exchanger, or standard with BV accessory. Not reversible in all other configurations. In any case, units with the coil water connections on the right are available at the time of ordering.

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

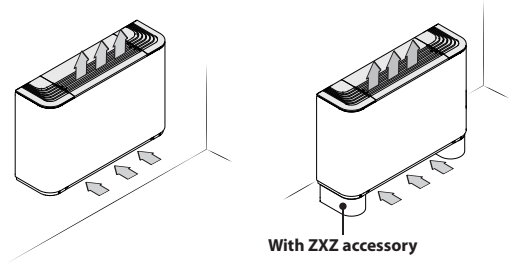
Air filter class Coarse 25% for all versions easy to pull out and clean.
In the APC version, air purification is guaranteed by the Cold Plasma purifier.

The purifier is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionized air, free of foul odours.

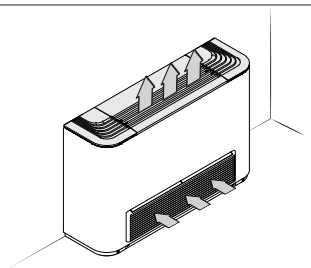
VERSIONS

A High, with fixed air distribution grille and built-in command
ACT High, with air distribution grille and electronic thermostat
AF High, without built-in command but with front intake
APC High, with air distribution grille, electronic thermostat and Cold Plasma purifier
AS High, with air distribution grille without built-in command
U Universal, with adjustable air distribution grille but without built-in thermostat
UA Universal, with fixed air distribution grille but without built-in thermostat
UF Universal, with adjustable air distribution grille but without built-in thermostat and with front intake grille

Versions with fixed grille (high cabinet)

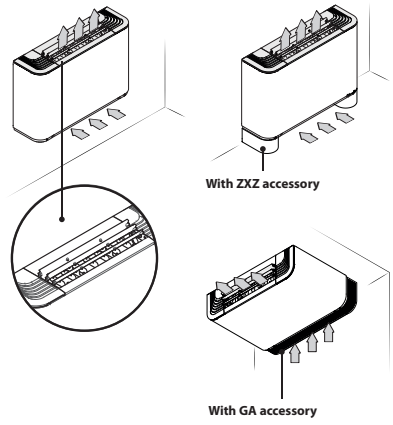


FCZ_A
— With built-in selector.
FCZ_AS
— Compatibility with VMF system.
— Without installed switch
FCZ_ACT
— With electronic thermostat for 2-pipe systems only.
FCZ_APC
— With electronic thermostat for 2-pipe systems only.
— Cold Plasma purifier

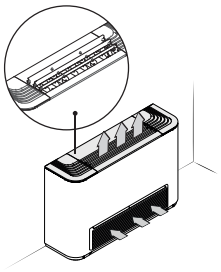


FCZ_AF
— Without installed switch
— Compatibility with VMF system.
— Front intake grille.

Versions with adjustable and fixed grille (universal)



FCZ_U
— Compatibility with VMF system.
— Without installed switch
— Distribution grille with adjustable louvers. Sizes 1, 2 and 3 have a single grille, whereas sizes 4, 5, 6, 7, 8, 9 and 10 have three grilles fully independent of each other. When all the fins have closed, the unit switches off.
— Vertical and horizontal installation for 2-pipe and 4-pipe systems.
FCZ_UA
— Compatibility with VMF system.
— Without installed switch
— Air distribution grille with fixed louvers.
— Vertical and horizontal installation for 2-pipe and 4-pipe systems.



FCZ_UF
— Compatibility with VMF system.
— Without installed switch
— Air delivery grille with adjustable louvers.
— Front intake grille.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field		Description
1,2,3		**FCZ**
4		**Size** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
5		**main heat exchanger**
	0	Standard
	5	Oversized
6		**Secondary heat exchanger**
	0	Without exchanger
	1	Standard
	2	Oversized
7		**Version**
		Only vertical installation.
	A	High, with fixed air distribution grille and built-in command
	ACT	High, with air distribution grille and electronic thermostat
	AF	High, without built-in command but with front intake
	APC	High, with air distribution grille, electronic thermostat and Cold Plasma purifier
	AS	Free standing without installed switch
		Vertical and horizontal installation.
	U	Universal, with adjustable air distribution grille but without built-in thermostat
	UA	Universal, with fixed air distribution grille but without built-in thermostat
	UF	Universal, with adjustable air distribution grille but without built-in thermostat and with front intake grille

SIZE AVAILABLE FOR VERSION

Size		100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
Versions produced (by size)																					
Versions available (by size)	A,AS,U,UA	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	ACT,APC	•	-	-	•	•	-	-	•	•	-	-	•	•	-	-	•	•	-	-	•
	AF,UF	•	-	-	•	•	-	-	•	•	-	-	•	•	-	-	•	•	-	-	•

Size		600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
Versions produced (by size)																		
Versions available (by size)	A,AS,U,UA	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	ACT,APC	•	-	-	•	•	-	-	•	•	-	-	•	•	-	•	•	-
	AF,UF	-	-	-	-	-	-	-	-	-	-	-	-	•	-	•	•	-

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
DSKT: Thermostat with an easy-to-read light display that provides clear information on room temperature, programming settings and more. Thanks to the ergonomic ring nut switch, adjusting the desired temperature is very easy. The knob allows precise and immediate adjustments, offering a classic but highly effective control mode. Not only functional, but also aesthetically pleasing. Our thermostat features a modern, compact design that fits perfectly in any environment, adding a touch of style to your home or office.
PX2Z: On-board electromechanical switch.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.
SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
T-TOUCH: Touch control on board the machine, for controlling fan coils with asynchronous motors. In 2-pipe systems, it can control standard fan coils or those equipped with an electric heater, with air purifying devices or with FCZ-D twin delivery (Dualjet). In 4-pipe systems, only standard fan coils.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
TXB: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.
WMT16: Electronic thermostat with thermostated ventilation.
WMT16CV: Electronic thermostat with continuous ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.
VMF-E2Z: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils

with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.
VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.
VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

(Heating only) additional coil

BV: Hot water heat exchanger with 1 row.
RX: Armoured electric coil with safety thermostat.

Installation accessories

PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.
GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.
FIKIT: Structural bracket in floor installation.
DSCZ4: Condensate drainage device.
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.
AMP: Wall mounting kit

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	100	101	102	150	200	201	202	250
AER503IR (1)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
DSKT	AS	•	•	•	•	•	•	•	•
PX2Z	AF,UF	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•
SA5 (2)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
SIT3 (3)	AS,U,UA	•	•	•	•	•	•	•	•
SIT5 (4)	AS,U,UA	•	•	•	•	•	•	•	•
SW3 (2)	AF,AS,UF	•			•	•			•
	U,UA	•	•	•	•	•	•	•	•
SW5 (2)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
T-TOUCH (5)	AF,UF	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•
TX (6)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
TXB (5)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
WMT10 (6)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
WMT16 (6)	AF,AS,U,UA,UF	•			•	•			•
WMT16CV (6)	AF,UF	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•

Model	Ver	300	301	302	350	400	401	402	450
AER503IR (1)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
DSKT	AS	•	•	•	•	•	•	•	•
PX2Z	AF,UF	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•
SA5 (2)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
SIT3 (3)	AS,U,UA	•	•	•	•	•	•	•	•
SIT5 (4)	AS,U,UA	•	•	•	•	•	•	•	•
SW3 (2)	AF,AS,UF	•			•	•			•
	U,UA	•	•	•	•	•	•	•	•
SW5 (2)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
T-TOUCH (5)	AF,UF					•			•
	AS,U	•	•	•	•	•	•	•	•
TX (6)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
TXB (5)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
WMT10 (6)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
WMT16 (6)	AF,AS,U,UA,UF	•			•	•			•
WMT16CV (6)	AF,UF	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•

Model	Ver	500	501	502	550	600	601	602	650
AER503IR (1)	AF,UF	•			•				
	AS,U,UA	•	•	•	•	•	•	•	•
DSKT	AS	•	•	•	•	•	•	•	•
PX2Z	AF,UF	•			•				
	AS,U	•	•	•	•	•	•	•	•
SA5 (2)	AF,UF	•			•				
	AS,U,UA	•	•	•	•	•	•	•	•
SIT3 (3)	AS,U,UA	•	•	•	•	•	•	•	•
SIT5 (4)	AS,U,UA	•	•	•	•	•	•	•	•
SW3 (2)	AF,UF	•			•				
	AS	•			•	•	•	•	•
	U,UA	•	•	•	•	•	•	•	•
SW5 (2)	AF,UF	•			•				
	AS,U,UA	•	•	•	•	•	•	•	•
T-TOUCH (5)	AF,UF	•			•				
	AS,U	•	•	•	•	•	•	•	•
TX (6)	AF,UF	•			•				
	AS,U,UA	•	•	•	•	•	•	•	•
TXB (5)	AF,UF	•			•				
	AS,U,UA	•	•	•	•	•	•	•	•
WMT10 (6)	AF,UF	•			•				
	AS,U,UA	•	•	•	•	•	•	•	•
WMT16 (6)	AF,UF	•			•				
	AS,U,UA	•			•	•			•
WMT16CV (6)	AF,UF	•			•				
	AS,U	•	•	•	•	•	•	•	•

Model	Ver	700	701	702	750	800	801	802	850
AER503IR (1)	AS,U,UA	•	•	•	•	•	•	•	•
DSKT	AS	•	•	•	•	•	•	•	•
PX2Z	AS,U	•	•	•	•	•	•	•	•
SA5 (2)	AS,U,UA	•	•	•	•	•	•	•	•
SIT3 (3)	AS,U,UA	•	•	•	•	•	•	•	•
SIT5 (4)	AS,U,UA	•	•	•	•	•	•	•	•
SW3 (2)	AS,U,UA	•	•	•	•	•	•	•	•
SW5 (2)	AS,U,UA	•	•	•	•	•	•	•	•
T-TOUCH (5)	AS,U	•	•	•	•	•	•	•	•
TX (6)	AS,U,UA	•	•	•	•	•	•	•	•
TXB (5)	AS,U,UA	•	•	•	•	•	•	•	•
WMT10 (6)	AS,U,UA	•	•	•	•	•	•	•	•
WMT16 (6)	AS,U,UA	•			•	•			•
WMT16CV (6)	AS,U	•	•	•	•	•	•	•	•

Model	Ver	900	901	950	1000	1001
AER503IR (1)	AF,UF			•	•	
	AS,U,UA	•	•	•	•	•
DSKT	AS	•	•	•	•	•
PX2Z	AF,UF				•	
	AS,U	•	•	•	•	•
SA5 (2)	AF,UF			•	•	
	AS,U,UA	•	•	•	•	•
SIT3 (3)	AF,UF				•	
	AS,U,UA	•	•	•	•	•
SIT5 (4)	AF,UF				•	
	AS,U,UA	•	•	•	•	•
SW3 (2)	AF,UF			•	•	
	AS	•	•	•	•	
	U,UA	•	•	•	•	•
SW5 (2)	AF,UF			•	•	
	AS,U,UA	•	•	•	•	•
T-TOUCH (5)	AF,UF	•		•	•	
	AS,U	•	•	•	•	•
TX (6)	AF,UF			•	•	
	AS,U,UA	•	•	•	•	•
TXB (5)	AF,UF	•		•	•	
	AS,U,UA	•	•	•	•	•
WMT10 (6)	AF,UF	•		•	•	
	AS,U,UA	•	•	•	•	•
WMT16 (6)	AF,AS,U,UA,UF	•		•	•	

Model	Ver	900	901	950	1000	1001
WMT16CV (6)	AF,UF	•		•	•	
	AS,U	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
(4) Probe for AER503IR-TX thermostats, if fitted.
(5) Installation on the fan coil.
(6) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

For more information about VMF system, refer to the dedicated documentation.

VMF system

Model	Ver	100	101	102	150	200	201	202	250	300	301
DI24	AF,AS,U,UA,UF	•			•	•			•	•	
VMF-E19 (1)	AF,UF	•			•	•			•	•	
	AS,U,UA	•	•	•	•	•	•	•	•	•	•
VMF-E2Z	AF,UF	•			•	•			•	•	
	AS,U,UA	•	•	•	•	•	•	•	•	•	•
VMF-E3	AF,UF	•			•	•			•	•	
	U,UA	•	•	•	•	•	•	•	•	•	•
VMF-E4DX	AF,UF	•			•	•			•	•	
	AS,U,UA	•	•	•	•	•	•	•	•	•	•
VMF-E4X	AF,UF	•			•	•			•	•	
	AS,U,UA	•	•	•	•	•	•	•	•	•	•
VMF-IR	AF,UF	•			•	•			•	•	
	U,UA	•	•	•	•	•	•	•	•	•	•
VMF-SW	AF,UF	•			•	•			•	•	
	AS,U	•	•	•	•	•	•	•	•	•	•
VMF-SW1	AF,UF	•			•	•			•	•	
	AS,U	•	•	•	•	•	•	•	•	•	•
VMHI	AF,UF	•			•	•			•	•	
	AS,U,UA	•	•	•	•	•	•	•	•	•	•

Model	Ver	302	350	400	401	402	450	500	501	502	550
DI24	AF,AS,U,UA,UF		•	•			•	•			•
VMF-E19 (1)	AF,UF		•	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•	•	•
VMF-E2Z	AF,UF		•	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•	•	•
VMF-E3	AF,UF		•	•			•	•			•
	U,UA	•	•	•	•	•	•	•	•	•	•
VMF-E4DX	AF,UF		•	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•	•	•
VMF-E4X	AF,UF		•	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•	•	•
VMF-IR	AF,UF		•	•			•	•			•
	U,UA	•	•	•	•	•	•	•	•	•	•
VMF-SW	AF,UF		•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•
VMF-SW1	AF,UF		•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•
VMHI	AF,UF		•	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801
DI24	AF,AS,U,UA,UF	•			•	•			•	•	
VMF-E19 (1)	AS,UA	•	•	•	•	•	•	•	•	•	•
	U		•	•			•	•			•
VMF-E2Z	AS,UA	•	•	•	•	•	•	•	•	•	•
	U		•	•			•	•			•
VMF-E3	AF,UF	•			•	•			•	•	
	U,UA	•	•	•	•	•	•	•	•	•	•
VMF-E4DX	AS,UA	•	•	•	•	•	•	•	•	•	•
	U		•	•			•	•			•
VMF-E4X	AS,UA	•	•	•	•	•	•	•	•	•	•
	U		•	•			•	•			•
VMF-IR	AF,UF	•			•	•			•	•	
	U,UA	•	•	•	•	•	•	•	•	•	•
VMF-SW	AS	•	•	•	•	•	•	•	•	•	•
	U		•	•			•	•			•
VMF-SW1	AS	•	•	•	•	•	•	•	•	•	•
	U		•	•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801
VMHI	AS,UA	•	•	•	•	•	•	•	•	•	•
	U		•	•			•	•			•

Model	Ver	802	850	900	901	950	1000	1001
DI24	AF,AS,U,UA,UF		•	•		•	•	
VMF-E19 (1)	AF,UF					•		
	AS,UA	•	•	•	•	•	•	•
	U	•		•	•	•	•	•
VMF-E2Z	AF,UF					•		
	AS,UA	•	•	•	•	•	•	•
	U	•		•	•	•	•	•
VMF-E3	AF		•	•		•		
	U,UA	•	•	•	•	•	•	•
	UF		•	•		•	•	
VMF-E4DX	AF,UF					•		
	AS,UA	•	•	•	•	•	•	•
	U	•		•	•	•	•	•
VMF-E4X	AF,UF					•		
	AS,UA	•	•	•	•	•	•	•
	U	•		•	•	•	•	•
VMF-IR	AF		•	•		•		
	U,UA	•	•	•	•	•	•	•
	UF		•	•		•	•	
VMF-SW	AF,UF					•		
	AS	•	•	•	•	•	•	•
	U	•		•	•	•	•	•
VMF-SW1	AF,UF					•		
	AS	•	•	•	•	•	•	•
	U	•		•	•	•	•	•
VMHI	AF,UF					•		
	AS,UA	•	•	•	•	•	•	•
	U	•		•	•	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Water valves

3 way valve kit

	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224
Secondary coil	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-
Additional coil "BV"	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-

	500	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850
Main coil	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224
Secondary coil	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-
Additional coil "BV"	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-

	900	901	950	1000	1001
Main coil	VCZ43 VCZ4324	VCZ43 VCZ4324	VCZ43 VCZ4324	VCZ43 VCZ4324	VCZ43 VCZ4324
Secondary coil	-	VCF45 VCF4524	-	-	VCF45 VCF4524
Additional coil "BV"	VCF45 VCF4524	-	-	VCF45 VCF4524	-

2 way valve kit

	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224
Secondary coil	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-
Additional coil "BV"	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-

	500	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850
Main coil	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224

	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450
Secondary coil	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-
Additional coil "BV"	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-

	900	901	950	1000	1001
Main coil	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324
Secondary coil	-	VCFD4 VCFD424	-	-	VCFD4 VCFD424
Additional coil "BV"	VCFD4 VCFD424	-	-	VCFD4 VCFD424	-

Valve Kit for 4 pipe systems - Requires a thermostat with valve management

Model	Ver	100	101	102	150	200	201	202	250
VCZ1X4L (1)	AF,AS,U,UA,UF	•			•	•			•
VCZ1X4R (1)	AF,AS,U,UA,UF	•			•	•			•

Model	Ver	300	301	302	350	400	401	402	450
VCZ2X4L (1)	AF,AS,U,UA,UF	•			•	•			•
VCZ2X4R (1)	AF,AS,U,UA,UF	•			•	•			•

Model	Ver	500	501	502	550	600	601	602	650
VCZ2X4L (1)	AF,UF	•			•				
	AS,U,UA	•			•	•			•
VCZ2X4R (1)	AF,UF	•			•				
	AS,U,UA	•			•	•			•

Model	Ver	700	701	702	750	800	801	802	850
VCZ2X4L (1)	AS,U,UA	•			•	•			•
VCZ2X4R (1)	AS,U,UA	•			•	•			•

Model	Ver	900	901	950	1000	1001
VCZ3X4L (1)	AF,AS,U,UA,UF	•		•	•	
VCZ3X4R (1)	AF,AS,U,UA,UF	•		•	•	

(1) The valves can be combined with the units if there is a control panel for managing them.

Combined Adjustment and Balancing Valve Kit

Model	Ver	100	101	102	150	200	201	202	250
VJP060 (1)	ACT,APC	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
VJP060M (2)	ACT,APC	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•

Model	Ver	300	301	302	350	400	401	402	450
VJP060 (1)	ACT,APC	•			•				
	AS,U,UA	•	•	•	•				
VJP060M (2)	ACT,APC	•			•				
	AS,U,UA	•	•	•	•				
VJP090 (1)	ACT,APC					•			•
	AS,U,UA					•	•	•	•
VJP090M (2)	ACT,APC					•			•
	AS,U,UA					•	•	•	•

Model	Ver	500	501	502	550	600	601	602	650
VJP090 (1)	ACT,APC	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
VJP090M (2)	ACT,APC	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
VJP150 (1)	ACT,APC					•			•
	AS,U,UA					•	•	•	•
VJP150M (2)	ACT,APC					•			•
	AS,U,UA					•	•	•	•

Model	Ver	700	701	702	750	800	801	802	850
VJP150 (1)	ACT,APC	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
VJP150M (2)	ACT,APC	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•

Model	Ver	900	901	950	1000	1001
VJP150 (1)	ACT,APC	•		•	•	
	AS,U,UA	•	•	•	•	•

Model	Ver	900	901	950	1000	1001
VJP150M (2)	ACT,APC	•		•	•	
	AS,U,UA	•	•	•	•	•

(1) 230V~50Hz
(2) 24V

(Heating only) additional coil

Heating only additional coil

Model	Ver	100	101	102	150	200	201	202	250
BV117 (1)	A,AF,AS,U,UA,UF	•							
BV122 (1)	A,AF,AS,U,UA,UF					•			

Model	Ver	300	301	302	350	400	401	402	450
BV132 (1)	A,AF,AS,U,UA,UF	•							
BV142 (1)	A,AF,AS,U,UA,UF					•			

Model	Ver	500	501	502	550	600	601	602	650
BV142 (1)	A,AF,AS,U,UA,UF	•							
BVZ800 (1)	A,AS,U,UA					•			

Model	Ver	700	701	702	750	800	801	802	850
BVZ800 (1)	A,AS,U,UA	•				•			

Model	Ver	900	901	950	1000	1001
BV162 (1)	A,AF,AS,U,UA,UF	•			•	

(1) Not available for sizes with oversized main coil.

Electric coil - Requires a thermostat with heater management. Not available for sizes with an oversized main coil.

Model	Ver	100	101	102	150	200	201	202	250
RX17 (1)	AF,AS,U,UA,UF	•							
RX22 (1)	AF,AS,U,UA,UF					•			

Model	Ver	300	301	302	350	400	401	402	450
RX32 (1)	AF,AS,U,UA,UF	•							
RX42 (1)	AF,AS,U,UA,UF					•			

Model	Ver	500	501	502	550	600	601	602	650
RX52 (1)	AF,AS,U,UA,UF	•							
RXZ800 (1)	AS,U,UA					•			

Model	Ver	700	701	702	750	800	801	802	850
RXZ800 (1)	AS,U,UA	•				•			

Model	Ver	900	901	950	1000	1001
RX62 (1)	AF,AS,U,UA,UF	•			•	

(1) Requires a thermostat with heater management. Not available for sizes with an oversized main coil. The PCR1 PCR2 or PCR1V appliance must also be provided depending on the unit.

Installation accessories

Wall mounting kit

Ver	100	101	102	150	200	201	202	250
U, UA	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20
UF	AMP20	-	-	AMP20	AMP20	-	-	AMP20

Ver	300	301	302	350	400	401	402	450
U, UA	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20
UF	AMP20	-	-	AMP20	AMP20	-	-	AMP20

Ver	500	501	502	550	600	601	602	650
U, UA	AMP20	AMP20	AMP20	AMP20	AMPZ	AMPZ	AMPZ	AMPZ
UF	AMP20	-	-	AMP20	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Ver	700	701	702	750	800	801	802	850
U, UA	AMPZ	AMPZ	AMPZ	AMPZ	AMPZ	AMPZ	AMPZ	AMPZ

Ver	900	901	950	1000	1001
U, UA	AMPZ	AMPZ	AMPZ	AMPZ	AMPZ

Condensate recirculation device

Model	Ver	100	101	102	150	200	201	202	250
DSCZ4 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	300	301	302	350	400	401	402	450
DSCZ4 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	500	501	502	550	600	601	602	650
DSCZ4 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	700	701	702	750	800	801	802	850
DSCZ4 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	900	901	950	1000	1001
DSCZ4 (1)	A,AS,U,UA	•	•	•	•	•
	ACT,APC	•		•	•	

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Condensate drip

Model	Ver	100	101	102	150	200	201	202	250
BCZ4 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•
BCZ5 (2)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	300	301	302	350	400	401	402	450
BCZ4 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•
BCZ5 (2)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	500	501	502	550	600	601	602	650
BCZ4 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•
BCZ5 (2)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	700	701	702	750	800	801	802	850
BCZ4 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•
BCZ5 (2)	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	900	901	950	1000	1001
BCZ4 (1)	A,AS,U,UA	•	•	•	•	•
	ACT,APC	•		•	•	
BCZ6 (2)	A,AS,U,UA	•	•	•	•	•
	ACT,APC	•		•	•	

(1) For vertical installation.
(2) For horizontal installation.

Panel closing the rear of the unit

Model	Ver	100	101	102	150	200	201	202	250
PCZ100	A,AS,U,UA	•	•	•	•				
	ACT,APC	•			•				
PCZ200	A,AS,U,UA					•	•	•	•
	ACT,APC					•			•

Model	Ver	300	301	302	350	400	401	402	450
PCZ300	A,AS,U,UA	•	•	•	•				
	ACT,APC	•			•				
PCZ500	A,AS,U,UA					•	•	•	•
	ACT,APC					•			•

Model	Ver	500	501	502	550	600	601	602	650
PCZ500	A,AS,U,UA	•	•	•	•				
	ACT,APC	•			•				
PCZ800	A,AS,U,UA					•	•	•	•
	ACT,APC					•			•

Model	Ver	700	701	702	750	800	801	802	850
PCZ800	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	900	901	950	1000	1001
PCZ1000	A,AS,U,UA	•	•	•	•	•
	ACT,APC	•		•	•	

Lower intake grille

Model	Ver	100	101	102	150	200	201	202	250
GA100	U,UA	•	•	•	•				
GA200	U,UA					•	•	•	•

Model	Ver	300	301	302	350	400	401	402	450
GA300	U,UA	•	•	•	•				
GA500	U,UA					•	•	•	•

Model	Ver	500	501	502	550	600	601	602	650
GA500	U,UA	•	•	•	•				
GA800	U,UA					•	•	•	•

Model	Ver	700	701	702	750	800	801	802	850
GA800	U,UA	•	•	•	•	•	•	•	•

Model	Ver	900	901	950	1000	1001
GA800	U,UA	•	•	•	•	•

Supports to be combined with the ornamental grille (GA) for floor installation of the fan coil

Model	Ver	100	101	102	150	200	201	202	250
FIKIT100	A,AS,U,UA	•	•	•	•				
	ACT,AF,APC,UF	•			•				
FIKIT200	A,AS,U,UA					•	•	•	•
	ACT,AF,APC,UF					•			•

Model	Ver	300	301	302	350	400	401	402	450
FIKIT300	A,AS,U,UA	•	•	•	•				
	ACT,AF,APC,UF	•			•				
FIKIT500	A,AS,U,UA					•	•	•	•
	ACT,AF,APC,UF					•			•

Model	Ver	500	501	502	550	600	601	602	650
FIKIT500	A,AS,U,UA	•	•	•	•				
	ACT,AF,APC,UF	•			•				
FIKIT800	A,AS,U,UA					•	•	•	•
	ACT,APC					•			•

Model	Ver	700	701	702	750	800	801	802	850
FIKIT800	ACT,APC	•			•	•			•
	U,UA	•	•	•	•	•	•	•	•

Model	Ver	900	901	950	1000	1001
FIKIT800	A,AS,U,UA	•	•	•	•	•
	ACT,AF,APC,UF	•		•	•	

Pair of stylish structural feet

Model	Ver	100	101	102	150	200	201	202	250
ZXZ	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	300	301	302	350	400	401	402	450
ZXZ	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	500	501	502	550	600	601	602	650
ZXZ	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	700	701	702	750	800	801	802	850
ZXZ	A,AS,U,UA	•	•	•	•	•	•	•	•
	ACT,APC	•			•	•			•

Model	Ver	900	901	950	1000	1001
ZXZ	A,AS,U,UA	•	•	•	•	•
	ACT,APC	•		•	•	

PERFORMANCE SPECIFICATIONS

2-pipe

		FCZ100			FCZ150			FCZ200			FCZ250			FCZ300			FCZ350			FCZ400			FCZ450			FCZ500			FCZ550		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																															
Heating capacity	kW	1,45	2,00	2,40	1,55	2,19	2,65	2,02	2,95	3,70	2,20	3,18	4,05	3,47	4,46	5,50	3,77	4,92	6,15	4,32	5,74	7,15	4,57	6,29	7,82	5,27	7,31	8,50	5,82	8,34	9,75
Water flow rate system side	l/h	125	172	206	136	192	232	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685	462	641	745	510	731	855
Pressure drop system side	kPa	4	7	9	5	9	12	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16	12	21	28	10	20	26
Heating performance 45 °C / 40 °C (2)																															
Heating capacity	kW	0,72	0,99	1,19	0,77	1,09	1,31	1,00	1,46	1,84	1,09	1,58	2,01	1,72	2,21	2,73	1,87	2,44	3,06	2,14	2,85	3,55	2,27	3,12	3,88	2,62	3,63	4,22	2,89	4,14	4,85
Water flow rate system side	l/h	126	173	207	134	189	229	174	254	319	190	274	350	299	385	475	325	425	531	373	495	617	394	543	675	455	631	734	502	720	842
Pressure drop system side	kPa	4	7	10	5	9	12	6	12	18	8	15	22	8	12	18	8	14	20	10	16	24	6	11	16	12	21	28	10	20	26
Cooling performance 7 °C / 12 °C																															
Cooling capacity	kW	0,65	0,84	1,00	0,80	1,06	1,27	0,89	1,28	1,60	1,06	1,55	1,94	1,68	2,17	2,65	1,89	2,46	3,02	2,20	2,92	3,60	2,41	3,21	4,03	2,68	3,69	4,25	2,91	4,13	4,79
Sensible cooling capacity	kW	0,51	0,69	0,83	0,57	0,80	0,97	0,71	1,05	1,33	0,79	1,20	1,52	1,26	1,65	2,04	1,33	1,76	2,18	1,59	2,14	2,67	1,69	2,30	2,90	1,94	2,73	3,18	2,07	2,98	3,49
Water flow rate system side	l/h	112	144	172	138	182	219	153	221	275	182	267	334	288	374	456	350	460	560	379	503	619	414	552	694	460	634	731	501	711	824
Pressure drop system side	kPa	4	6	8	6	12	13	6	12	18	8	17	25	8	13	18	11	18	25	10	16	24	9	15	22	13	22	29	12	22	28
Fan																															
Type	type	Centrifugal																													
Fan motor	type	Asynchronous																													
Number	no.	1			1			1			1			2			2			2			2			2			2		
Air flow rate	m^3/h	110	160	200	110	160	200	140	220	290	140	220	290	260	350	450	260	350	450	330	460	600	330	460	600	400	600	720	400	600	720
Input power	W	19	29	35	19	29	35	25	29	33	25	29	33	25	33	44	25	33	44	30	43	57	30	43	57	38	52	76	38	52	76
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)																															
Sound power level	dB(A)	31,0	38,0	45,0	31,0	38,0	45,0	35,0	46,0	51,0	35,0	46,0	51,0	34,0	41,0	48,0	34,0	41,0	48,0	37,0	44,0	51,0	37,0	44,0	51,0	42,0	51,0	56,0	42,0	51,0	56,0
Sound pressure level	dB(A)	23,0	30,0	37,0	23,0	30,0	37,0	27,0	38,0	43,0	27,0	38,0	43,0	26,0	33,0	40,0	26,0	33,0	40,0	29,0	36,0	43,0	29,0	36,0	43,0	34,0	43,0	48,0	34,0	43,0	48,0
Diametre hydraulic fittings																															
Main heat exchanger	Ø	1/2"			1/2"			1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Power supply																															
Power supply		230V~50Hz																													

		FCZ600			FCZ650			FCZ700			FCZ750			FCZ800			FCZ850			FCZ900			FCZ950			FCZ1000		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																												
Heating capacity	kW	6,50	8,10	10,00	7,19	9,15	11,50	8,10	9,80	11,00	9,10	11,30	12,50	9,80	10,80	12,00	11,30	12,35	14,00	10,77	13,35	15,14	11,20	14,42	17,10	12,53	15,24	17,02
Water flow rate system side	l/h	570	710	877	631	802	1008	710	860	964	798	991	1096	859	947	1052	991	1083	1227	945	1171	1328	982	1264	1500	1101	1337	1493
Pressure drop system side	kPa	12	18	26	14	21	31	17	24	29	10	15	18	22	27	32	17	20	25	12	17	22	16	24	33	22	32	38
Heating performance 45 °C / 40 °C (2)																												
Heating capacity	kW	3,32	4,03	4,97	3,57	4,55	5,72	4,03	4,87	5,47	4,52	5,62	6,21	4,87	5,37	5,97	5,62	6,14	6,96	5,35	6,64	7,53	5,57	7,17	8,50	6,24	7,58	8,46
Water flow rate system side	l/h	561	699	863	621	790	993	699	846	950	786	975	1079	846	932	1036	975	1066	1209	930	1152	1307	967	1245	1476	1084	1316	1469
Pressure drop system side	kPa	12	18	26	14	20	31	16	24	29	10	14	18	22	26	32	6	20	25	12	17	22	15	24	33	22	31	38
Cooling performance 7 °C / 12 °C																												
Cooling capacity	kW	3,22	3,90	4,65	3,95	4,80	5,67	3,92	4,89	5,50	4,27	5,34	6,14	4,84	5,66	6,10	5,26	6,29	6,91	4,29	5,00	6,91	5,77	7,32	8,60	5,69	6,88	7,62
Sensible cooling capacity	kW	2,56	3,17	3,92	2,78	3,43	4,12	2,99	3,76	4,30	3,20	4,05	4,72	3,72	4,42	4,83	4,00	4,83	5,36	2,97	3,78	5,68	3,80	4,87	5,78	4,42	5,34	5,53
Water flow rate system side	l/h	554	671	800	595	825	975	675	841	946	734	918	1056	833	974	1049	904	1082	1189	738	860	1189	992	1259	1479	979	1183	1311
Pressure drop system side	kPa	14	19	26	15	21	28	16	24	30	10	14	18	20	26	30	14	20	23	10	12	22	15	22	30	22	31	36
Fan																												
Type	type	Centrifugal																										
Fan motor	type	Asynchronous																										
Number	no.	3			3			3			3			3			3			3			3			3		
Air flow rate	m^3/h	520	720	920	520	720	920	700	930	1140	700	930	1140	900	1120	1300	900	1120	1300	700	930	1140	700	930	1140	900	1120	1300
Input power	W	38	60	91	38	60	91	59	80	106	59	80	106	80	100	131	80	100	131	59	80	106	59	80	106	80	100	131
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)																												
Sound power level	dB(A)	42,0	51,0	57,0	42,0	51,0	57,0	50,0	57,0	62,0	50,0	57,0	62,0	56,0	61,0	66,0	56,0	61,0	66,0	51,0	57,0	62,0	51,0	57,0	62,0	56,0	61,0	66,0
Sound pressure level	dB(A)	34,0	43,0	49,0	34,0	43,0	49,0	42,0	49,0	54,0	42,0	49,0	54,0	48,0	53,0	58,0	48,0	53,0	58,0	43,0	49,0	54,0	43,0	49,0	54,0	48,0	53,0	58,0
Diametre hydraulic fittings																												
Main heat exchanger	Ø	3/4"																										
Power supply																												
Power supply		230V~50Hz																										

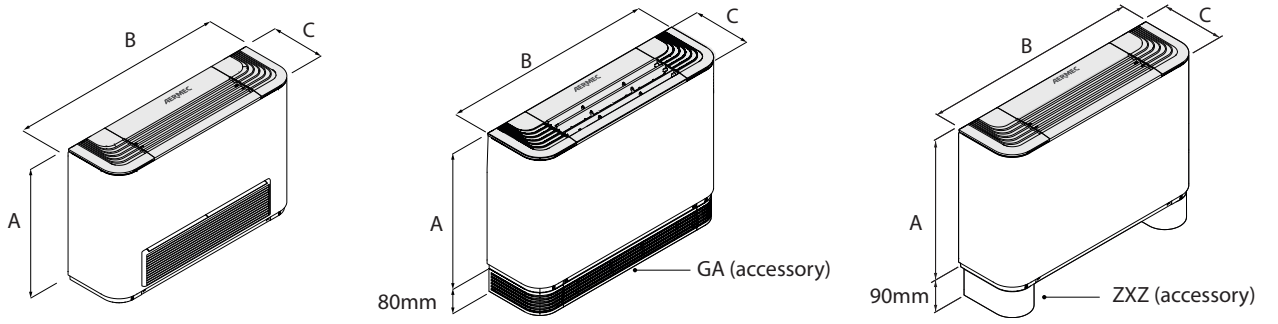
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

4-pipe

		FCZ101			FCZ201			FCZ301			FCZ401			FCZ501			FCZ601			FCZ701			FCZ801			FCZ901			FCZ1001		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)																															
Heating capacity	kW	0,75	1,01	1,17	1,02	1,35	1,60	1,80	2,18	2,56	2,21	2,65	3,12	2,59	3,34	3,73	2,96	3,67	4,36	3,66	4,29	4,94	4,20	4,79	5,35	4,73	5,63	5,72	4,85	5,56	6,08
Water flow rate system side	l/h	65	89	102	89	118	140	158	191	224	186	232	273	227	293	327	259	321	381	320	375	437	368	419	467	414	492	501	424	487	532
Pressure drop system side	kPa	2	4	4	4	8	10	16	23	30	4	6	8	6	8	10	8	12	16	11	14	18	16	20	24	8	12	12	10	14	16
Cooling performance 7 °C / 12 °C																															
Cooling capacity	kW	0,65	0,84	1,00	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25	3,22	3,90	4,65	3,92	4,89	5,50	4,84	5,66	6,10	4,29	5,00	6,91	5,69	6,88	7,62
Sensible cooling capacity	kW	0,51	0,69	0,83	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18	2,56	3,17	3,92	2,99	3,76	4,30	3,72	4,42	4,83	2,97	3,78	5,68	4,42	5,34	5,53
Water flow rate system side	l/h	112	144	172	153	221	275	288	374	456	379	503	619	460	634	731	554	671	800	675	841	946	833	974	1049	738	860	1189	979	1183	1311
Pressure drop system side	kPa	4	6	8	6	12	18	8	13	18	10	16	24	13	22	29	14	19	26	16	24	30	20	26	30	10	12	22	22	31	36
Fan																															
Type	type	Centrifugal																													
Fan motor	type	Asynchronous																													
Number	no.	1			1			2			2			2			3			3			3			3			3		
Air flow rate	m^3/h	110	160	200	140	220	290	260	350	450	330	460	600	400	600	720	520	720	920	700	930	1140	900	1120	1300	700	930	1140	900	1120	1300
Input power	W	19	29	35	25	29	33	25	33	44	30	43	57	38	52	76	38	60	91	59	80	106	80	100	131	59	80	106	80	100	131
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (2)																															
Sound power level	dB(A)	31,0	38,0	45,0	35,0	46,0	51,0	34,0	41,0	48,0	37,0	44,0	51,0	42,0	51,0	56,0	42,0	51,0	57,0	50,0	57,0	62,0	56,0	61,0	66,0	51,0	57,0	62,0	56,0	61,0	66,0
Sound pressure level	dB(A)	23,0	30,0	37,0	27,0	38,0	43,0	26,0	33,0	40,0	29,0	36,0	43,0	34,0	43,0	48,0	34,0	43,0	49,0	42,0	49,0	54,0	48,0	53,0	58,0	43,0	49,0	54,0	48,0	53,0	58,0
Diametre hydraulic fittings																															
Main heat exchanger	Ø	1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Secondary heat exchanger	Ø	1/2"																													
Power supply																															
Power supply		230V~50Hz																													

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		FCZ100	FCZ101	FCZ102	FCZ150	FCZ200	FCZ201	FCZ202	FCZ250	FCZ300	FCZ301	FCZ302	FCZ350	FCZ400	FCZ401	FCZ402	FCZ450
Dimensions and weights																	
A	mm	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486
B	mm	640	640	640	640	750	750	750	750	980	980	980	980	1200	1200	1200	1200
C	mm	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
Empty weight	kg	13	14	14	14	15	15	16	16	17	18	19	19	33	23	23	24

		FCZ500	FCZ501	FCZ502	FCZ550	FCZ600	FCZ601	FCZ602	FCZ650	FCZ700	FCZ701	FCZ702	FCZ750	FCZ800	FCZ801	FCZ802	FCZ850
Dimensions and weights																	
A	mm	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486
B	mm	1200	1200	1200	1200	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320
C	mm	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
Empty weight	kg	24	22	23	24	24	29	31	33	29	31	33	33	29	29	31	33

		FCZ900	FCZ901	FCZ950	FCZ1000	FCZ1001
Dimensions and weights						
A	mm	591	591	591	591	591
B	mm	1320	1320	1320	1320	1320
C	mm	220	220	220	220	220
Empty weight	kg	34	34	34	34	34

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

FCZI

Fan coil for universal and floor installation

Cooling capacity 0,65 ÷ 7,62 kW
Heating capacity 1,45 ÷ 17,02 kW

- **Very quiet**
- **Touch controller mounted on-board. allows remote control with smart devices**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

fan coil can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.
Depending on the version, the distribution grille may be adjustable.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Their characteristics permit energy savings compared to conventional fans.
They are statically and dynamically balanced and directly coupled to the motor shaft.
The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.
The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).
The plastic augers are extractable for easy and efficient cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
Reversibility of the water connections during installation only for units with a standard or boosted main heat exchanger, or standard with BV accessory. Not reversible in all other configurations. In any case, units with the coil water connections on the right are available at the time of ordering.

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

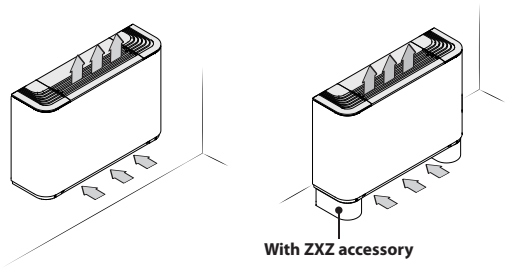
Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean.

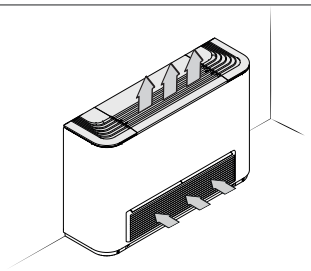
Versions

ACT High, with air distribution grille and electronic thermostat
AF High, without built-in command but with front intake
AS Free standing without installed switch
U Universal, with adjustable air distribution grille but without built-in thermostat
UF Universal, with adjustable air distribution grille but without built-in thermostat and with front intake grille

Versions with fixed grille (high cabinet)

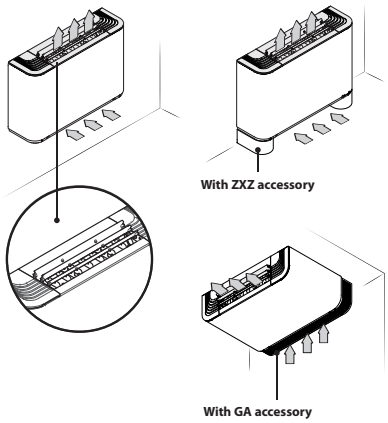


FCZI_AS
— Compatibility with VMF system.
— Without installed switch
FCZI_ACT
— With electronic thermostat for 2-pipe systems only.

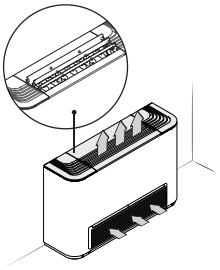


FCZI_AF
— Without installed switch
— Compatibility with VMF system.
— Front intake grille.

Versions with adjustable and fixed grille (universal)



FCZI_U
— Compatibility with VMF system.
— Without installed switch
— Distribution grille with adjustable fins. Sizes 2 and 3 have a single grille, whereas sizes 4, 5, 7 and 9 have three grilles fully independent of each other. When all the louvers have closed, the unit switches off.
— Vertical and horizontal installation for 2-pipe and 4-pipe systems.



FCZI_UF
— Compatibility with VMF system.
— Without installed switch
— Air delivery grille with adjustable louvers.
— Vertical and horizontal installation.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3,4	**FCZI**
5,6,7	**Size** 200, 201, 202, 250, 300, 301, 302, 350, 400, 401, 402, 450, 500, 501, 502, 550, 700, 701, 702, 750, 900, 901, 950
8	**main heat exchanger**
9	**Secondary heat exchanger**
10,11,12	**Version**
ACT	High, with air distribution grille and electronic thermostat
AF	High, without built-in command but with front intake
AS	Free standing without installed switch
U	Universal, with adjustable air distribution grille but without built-in thermostat
UF	Universal, with adjustable air distribution grille but without built-in thermostat and with front intake grille

SIZE AVAILABLE FOR VERSION

Size		200	201	202	250	300	301	302	350	400	401	402	450
Versions produced (by size)													
Versions available (by size)	**AS,ACT,U**	•	•	•	•	•	•	•	•	•	•	•	•
	AF,UF	•	-	-	•	•	-	-	•	•	-	-	•

		500	501	502	550	700	701	702	750	900	901	950
Versions produced (by size)												
Versions available (by size)	**A,AS,U,UA**	•	•	•	•	•	•	•	•	•	•	•
	AF,UF	•	-	-	•	-	-	-	-	•	-	•

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
T-TOUCH-I: Touch control on board the machine, for controlling fan coils with brushless motors. In 2-pipe systems, it can control standard fan coils or those equipped with an electric heater, with air purifying devices or with FCZI-D twin delivery (Dualjet). In 4-pipe systems, only standard fan coils.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
TXBI: On board thermostat for fan coils 2/4 pipes of the FCZI series with brushless motor, complete with water probe and air probe to be positioned in the dedicated housings. The thermostat in 2-pipe systems it can control standard fan coils or those equipped with electrical resistors, with purification devices (Cold Plasma and germicidal lamp) with the radiating plate or with double flow FCZI-D (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19I: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe, it controls systems with 2 pipes, 4 pipes, 2 pipes + Cold Plasma, 2 pipes + UV lamps, 2 pipes + Heating element. Equipped with an external contact to be used as a remote ON-OFF at low voltage. By means of 2-wire serial communication, this thermostat allows for the creation of a single fan coil area (1 master + maximum 5 slaves). Compared to the previous model, thanks to a different dip switch configuration, it allows implementing new features:In systems with two pipes and a heating element - the latter can be activated as a complete replacement - allowing you to warm the environment exclusively with this accessory - Dualjet features are available in standard software and can be set via dip switch - Economy contact/presence sensor - Additional water sensor for overall control in 4-pipe systems (with VMF-SW1 accessory) - Serial RS485, ModBus RTU protocol, for centralised control - Possibility of inserting expansion boards for future developments. The VMF-E19 accessory must be therefore used in masters in the presence of multiple zones, or for communication with the chiller/heat pump - Compatibility with the VMF-IO accessory - Compatibility with VMF-LON expansion board.The thermostat is protected by a fuse.
VMF-E2Z: User interface on the fan coil, with two selectors, one for temperature and the other for speed control; to be combined with accessories VMF-E19 and VMF-E19I.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4X: A wall-mounted user interface to be combined with VMF-E19, VMF-E19I, VMF-E24 ed VMF-E24I accessories. Featuring an innovative, extremely slim and cost-effective design, it allows running functions via a capacitive touchscreen keyboard with LCD display. You can choose to adjust the environment temperature with a panel-mounted sensor probe (standard), or with the VMF-E19/E19I probe, or through mediated reading. It also enables the activation of an air purifier (Cold Plasma/ UV lamp) and a heating element. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-LON: Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.
VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.
VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

Additional coil

BV: Hot water heat exchanger with 1 row.

Installation accessories

PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.
GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.
FIKIT: Structural bracket in floor installation.
DSCZ4: Condensate drainage device.
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.
AMP: Wall mounting kit
ZXZ: Pair of stylish and structural feet.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
AER503IR (1)	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
PRO503	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
SA5 (2)	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
SW3 (2)	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
SW5 (2)	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
T-TOUCH-I	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
TX (3)	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
TXBI (4)	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
AER503IR (1)	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
PRO503	AF,UF	•			•	•			•	•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
SA5 (2)	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
SW3 (2)	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
SW5 (2)	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
T-TOUCH-I	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
TX (3)	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
TXBI (4)	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.
(4) Installation on the fan coil.

VMF system

For more information about VMF system, refer to the dedicated documentation.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
DI24	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E19I (1)	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E2Z	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E3	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4X	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-IO	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-IR	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-LON	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW1	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
VMHI	AF,UF	•			•	•			•	•			•
	AS,U	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
DI24	AF,UF	•			•	•			•	•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
VMF-E19I (1)	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
VMF-E2Z	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
VMF-E3	AF,UF	•			•	•			•	•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
VMF-E4X	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
VMF-IO	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
VMF-IR	AF,UF	•			•	•			•	•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
VMF-LON	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
VMF-SW	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
VMF-SW1	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•
VMHI	AF,UF	•			•					•		•
	AS,U	•	•	•	•	•	•	•	•	•	•	•

(1) Mandatory accessory.

Water valves

3 way valve kit

	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224
Secondary coil	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-
Additional coil "BV"	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-

	500	501	502	550	700	701	702	750	900	901	950
Main coil	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ43 VCZ4324	VCZ43 VCZ4324	VCZ43 VCZ4324
Secondary coil	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF45 VCF4524	-
Additional coil "BV"	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF45 VCF4524	-	-

VCZ41 - 42 - 43; VCF44 - 45 (230V~50Hz)
VCZ4124 - 4224 - 4324; VCF4224 - 4524 (24V)

2 way valve kit

	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224
Secondary coil	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-
Additional coil "BV"	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-

	500	501	502	550	700	701	702	750	900	901	950
Main coil	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324
Secondary coil	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	-
Additional coil "BV"	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-

VCZD1 - 2 - 3; VCFD4 (230V~50Hz)
VCZD124 - 224 - 324; VCFD424 (24V)

Valve Kit for 4 pipe systems

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
VCZ1X4L (1)	AF,AS,U,UF	•			•								
VCZ1X4R (1)	AF,AS,U,UF	•			•								
VCZ2X4L (1)	AF,AS,U,UF					•			•	•			•
VCZ2X4R (1)	AF,AS,U,UF					•			•	•			•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
VCZ2X4L (1)	AF,UF	•			•							
	AS,U	•			•	•			•			
VCZ2X4R (1)	AF,UF	•			•							
	AS,U	•			•	•			•			
VCZ3X4L (1)	AF,AS,U,UF									•		•
VCZ3X4R (1)	AF,AS,U,UF									•		•

(1) The valves can be combined with the units if there is a control panel for managing them.

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
VJP060 (1)	ACT,AS,U	•	•	•	•	•	•	•	•				
	AF,UF	•			•	•			•				
VJP060M (2)	ACT,AS,U	•	•	•	•	•	•	•	•				
	AF,UF	•			•	•			•				
VJP090 (1)	ACT,AS,U									•	•	•	•
	AF,UF									•			•
VJP090M (2)	ACT,AS,U									•	•	•	•
	AF,UF									•			•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
VJP090 (1)	ACT,AS,U	•	•	•	•							
	AF,UF	•			•							
VJP090M (2)	ACT,AS,U	•	•	•	•							
	AF,UF	•			•							
VJP150 (1)	ACT,AS,U					•	•	•	•	•	•	•
	AF,UF									•		•
VJP150M (2)	ACT,AS,U					•	•	•	•	•	•	•
	AF,UF									•		•

(1) 230V~50Hz
(2) 24V

(Heating only) additional coil

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
BV122 (1)	ACT,AF,AS,U,UF	•											
BV132 (1)	ACT,AF,AS,U,UF					•							
BV142 (1)	ACT,AF,AS,U,UF									•			

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
BV142 (1)	ACT,AF,AS,U,UF	•										
BV162 (1)	ACT,AF,AS,U,UF									•		
BVZ800 (1)	ACT,AS,U					•						

(1) Not available for sizes with oversized main coil.

Installation accessories

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
AMP20	U	•	•	•	•	•	•	•	•	•	•	•	•
AMPZ	U	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
AMP20	U	•	•	•	•							
AMPZ	U	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
DSCZ4 (1)	ACT,AS,U	•	•	•	•	•	•	•	•	•	•	•	•
	AF,UF	•			•	•			•	•			•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
DSCZ4 (1)	ACT,AS,U	•	•	•	•	•	•	•	•	•	•	•
	AF,UF	•			•					•		•

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
BCZ4 (1)	ACT,AS,U	•	•	•	•	•	•	•	•	•	•	•	•
	AF,UF	•			•	•			•	•			•
BCZ5 (2)	ACT,AS,U	•	•	•	•	•	•	•	•	•	•	•	•
	AF,UF	•			•	•			•	•			•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
BCZ4 (1)	ACT,AS,U	•	•	•	•	•	•	•	•	•	•	•
	AF,UF	•			•					•		•
BCZ5 (2)	ACT,AS,U	•	•	•	•	•	•	•	•			
	AF,UF	•			•							
BCZ6 (2)	ACT,AS,U									•	•	•
	AF,UF									•		•

(1) For vertical installation.
(2) For horizontal installation.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
PCZ200	ACT,AS,U	•	•	•	•								
	AF,UF	•			•								
PCZ300	ACT,AS,U					•	•	•	•				
	AF,UF					•			•				
PCZ500	ACT,AS,U									•	•	•	•
	AF,UF									•			•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
PCZ1000	ACT,AS,U									•	•	•
	AF,UF									•		•
PCZ500	ACT,AS,U	•	•	•	•							
	AF,UF	•			•							
PCZ800	ACT,AS,U					•	•	•	•			

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
GA200	AF,UF	•			•								
	AS,U	•	•	•	•								
GA300	AF,UF					•			•				
	AS,U					•	•	•	•				
GA500	AF,UF									•			•
	AS,U									•	•	•	•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
GA500	AF,UF	•			•							
	AS,U	•	•	•	•							
GA800	AF,UF									•		•
	AS,U					•	•	•	•	•	•	•

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
FIKIT200	AF,UF	•			•								
	AS,U	•	•	•	•								
FIKIT300	AF,UF					•			•				
	AS,U					•	•	•	•				
FIKIT500	AF,UF									•			•
	AS,U									•	•	•	•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
FIKIT500	AF,UF	•			•							
	AS,U	•	•	•	•							
FIKIT800	AF,UF									•		•
	AS,U					•	•	•	•	•	•	•

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
ZXZ	ACT,AS,U	•	•	•	•	•	•	•	•	•	•	•	•
	AF,UF	•			•	•			•	•			•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
ZXZ	ACT,AS,U	•	•	•	•	•	•	•	•	•	•	•
	AF,UF	•			•					•		•

PERFORMANCE SPECIFICATIONS

Technical data - 2-pipe systems (main coil)

2-pipe

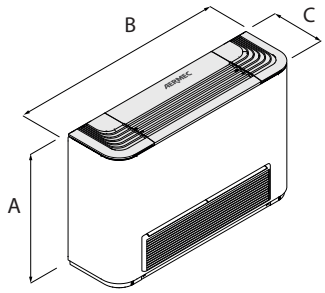
		FCZI200			FCZI250			FCZI300			FCZI350			FCZI400			FCZI450			FCZI500			FCZI550		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	2,02	2,95	3,70	2,20	3,18	4,05	3,47	4,46	5,50	3,77	4,92	6,15	4,32	5,74	7,15	4,57	6,29	7,82	5,27	7,31	8,50	5,82	8,34	9,75
Water flow rate system side	l/h	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685	462	641	745	510	731	855
Pressure drop system side	kPa	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16	12	21	28	10	20	26
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	1,00	1,46	1,84	1,09	1,58	2,01	1,72	2,21	2,73	1,87	2,44	3,06	2,14	2,85	3,55	2,27	3,12	3,88	2,62	3,63	4,22	2,89	4,14	4,85
Water flow rate system side	l/h	174	254	319	190	274	350	299	385	475	325	425	531	373	495	617	394	543	675	455	631	734	502	720	842
Pressure drop system side	kPa	6	12	18	8	15	22	8	12	18	9	14	21	10	16	24	6	11	16	12	21	28	10	20	26
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	0,89	1,28	1,60	1,06	1,55	1,94	1,68	2,17	2,65	1,89	2,46	3,02	2,20	2,92	3,60	2,41	3,21	4,03	2,68	3,69	4,25	2,91	4,13	4,79
Sensible cooling capacity	kW	0,71	1,05	1,33	0,79	1,20	1,52	1,26	1,65	2,04	1,33	1,76	2,18	1,59	2,14	2,67	1,69	2,30	2,90	1,94	2,73	3,18	2,07	2,98	3,49
Water flow rate system side	l/h	153	221	275	182	267	334	288	374	456	350	460	560	379	503	619	414	552	694	460	634	731	501	711	824
Pressure drop system side	kPa	6	12	18	8	17	25	8	13	18	11	18	25	10	17	24	9	15	22	13	23	29	12	22	28
Fan																									
Type	type	Centrifugal																							
Fan motor	type	Inverter																							
Number	no.	1			1			2			2			2			2			2			2		
Air flow rate	m^3/h	140	220	290	140	220	290	260	350	450	260	350	450	330	460	600	330	460	600	400	600	720	400	600	720
Input power	W	5	8	14	5	8	14	5	7	13	5	7	13	5	10	18	5	10	18	7	18	34	7	18	38
Signal 0-10V	%	44	68	90	44	68	90	52	70	90	52	70	90	49	68	90	49	68	90	50	74	90	50	74	90
Fan coil sound data (3)																									
Sound power level	dB(A)	35,0	46,0	51,0	35,0	46,0	51,0	34,0	41,0	48,0	34,0	41,0	48,0	37,0	44,0	51,0	37,0	44,0	51,0	42,0	51,0	56,0	42,0	51,0	56,0
Sound pressure level	dB(A)	27,0	38,0	43,0	27,0	38,0	43,0	26,0	33,0	40,0	26,0	33,0	40,0	29,0	36,0	43,0	29,0	36,0	43,0	34,0	43,0	48,0	34,0	43,0	48,0
Diametre hydraulic fittings																									
Main heat exchanger	Ø	1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Power supply																									
Power supply		230V~50Hz																							

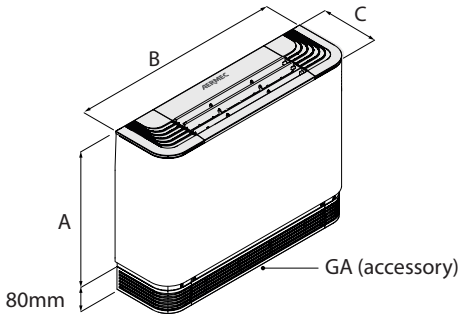
		FCZI700			FCZI750			FCZI900			FCZI950		
		1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)													
Heating capacity	kW	8,10	9,80	11,00	9,10	11,30	12,50	10,77	13,35	15,14	11,20	14,42	17,10
Water flow rate system side	l/h	710	860	964	798	991	1096	945	1171	1328	982	1264	1500
Pressure drop system side	kPa	17	23	29	10	15	18	12	17	22	16	25	33
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	4,03	4,87	5,47	4,50	5,60	6,20	5,35	6,64	7,53	5,57	7,17	8,50
Water flow rate system side	l/h	699	846	950	786	975	1079	930	1152	1307	967	1245	1476
Pressure drop system side	kPa	17	24	29	10	15	18	12	17	22	15	24	33
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	3,92	4,89	5,50	4,27	5,34	6,14	4,29	5,00	6,91	5,77	7,32	8,60
Sensible cooling capacity	kW	2,99	3,76	4,30	3,20	4,05	4,72	2,97	3,78	5,68	3,80	4,87	5,78
Water flow rate system side	l/h	675	841	946	734	918	1056	738	860	1189	992	1259	1479
Pressure drop system side	kPa	17	25	30	10	15	19	10	13	22	15	23	30
Fan													
Type	type	Centrifugal											
Fan motor	type	Inverter											
Number	no.	3			3			3			3		
Air flow rate	m^3/h	700	930	1140	700	930	1140	700	930	1140	700	930	1140
Input power	W	30	40	80	30	40	80	30	40	80	30	40	80
Signal 0-10V	%	56	72	90	56	72	90	56	72	90	56	72	90
Fan coil sound data (3)													
Sound power level	dB(A)	50,0	57,0	62,0	50,0	57,0	62,0	51,0	57,0	62,0	51,0	57,0	62,0
Sound pressure level	dB(A)	42,0	49,0	54,0	42,0	49,0	54,0	43,0	49,0	54,0	43,0	49,0	54,0
Diametre hydraulic fittings													
Main heat exchanger	Ø	3/4"											
Power supply													
Power supply		230V~50Hz											

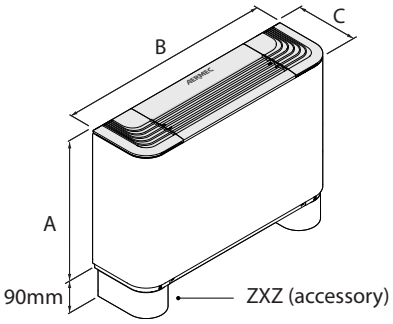
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

Technical data - 4-pipe systems (main coil + secondary coil)

DIMENSIONS







		FCZI200	FCZI201	FCZI250	FCZI300	FCZI301	FCZI350	FCZI400	FCZI401	FCZI450
Dimensions and weights										
A	mm	486	486	486	486	486	486	486	486	486
B	mm	750	750	750	980	980	980	1200	1200	1200
C	mm	220	220	220	220	220	220	220	220	220
Empty weight	kg	15	15	16	17	17	18	22	23	24

		FCZI500	FCZI501	FCZI550	FCZI700	FCZI701	FCZI750	FCZI900	FCZI901	FCZI950
Dimensions and weights										
A	mm	486	486	486	486	486	486	591	591	591
B	mm	1200	1200	1200	1320	1320	1320	1320	1320	1320
C	mm	220	220	220	220	220	220	220	220	220
Empty weight	kg	22	23	24	29	30	31	34	34	34

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

FCZ-D

Fan coil for vertical wall-mounting or free-standing installation

Cooling capacity 0,89 ÷ 4,25 kW
Heating capacity 2,02 ÷ 8,50 kW

- **Fully silent operation**
- **Backlit touch command with programming via a smart device**
- **Total comfort in every season**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

The perception of uneven temperature distribution in various settings, especially in the vertical direction, is one of the main factors leading to a drastic reduction in the well-being perceived by occupants.
FCZ D are able to provide a pleasant sensation of comfort by directing the air in a way that ensures uniform temperature distribution throughout the setting. In winter, hot air is direct downwards; in summer, cool air is directed upwards.
Air supply switching at the front or from the top by operating directly on the orientable grille.
They can be installed in any type of 2 / 4 pipe system and in combination with any heat generator even at low temperatures. Thanks to the availability of several versions and configurations, it is easy to choose the optimal solution for every requirement.

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

Ventilation group

Consisting of double suction centrifugal fans that are particularly silent, statically and dynamically balanced, and directly coupled with the motor shaft.
The motor is wired for single phase and has three speeds, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings.
Extractable shrouds for easy, effective cleaning

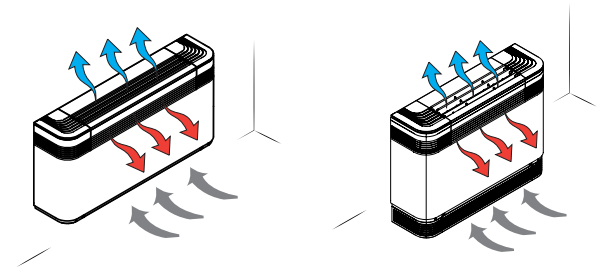
Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
The hydraulic connections can be inverted during installation.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean.

VERSION WITH DOUBLE SUPPLY



FCZ_D
— With on-board thermostat.
FCZ_DS
— Compatibility with VMF system.
— Without installed switch

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field		Description
1,2,3		**FCZ**
4		**Size** 2, 3, 4, 5
5		**main heat exchanger**
	0	Standard
6		**Secondary heat exchanger**
	0	Without coil
7		**Version**
	D	Dualjet with thermostat TXB on-board the system
	DS	Dualjet without on-board thermostat

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air puri-

fying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
T-TOUCH: Touch control on board the machine, for controlling fan coils with asynchronous motors. In 2-pipe systems, it can control standard fan coils or those equipped with an electric heater, with air purifying devices or with FCZ-D twin delivery (Dualjet). In 4-pipe systems, only standard fan coils.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.
VMF-E2Z: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.
VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

Installation accessories

PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.
GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.
FIKIT: Structural bracket in floor installation.
DSCZ4: Condensate drainage device.
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	200	300	400	500
AER503IR (1)	DS	•	•	•	•
PRO503	DS	•	•	•	•
SA5 (2)	DS	•	•	•	•
SW3 (2)	DS	•	•	•	•
SW5 (2)	DS	•	•	•	•
T-TOUCH (3)	DS	•	•	•	•
TX (4)	DS	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Installation on the fan coil.
(4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

For more information about VMF system, refer to the dedicated documentation.

Model	Ver	200	300	400	500
DI24	DS	•	•	•	•
VMF-E19 (1)	DS	•	•	•	•
VMF-E2Z	DS	•	•	•	•
VMF-E3	DS	•	•	•	•
VMF-E4DX	DS	•	•	•	•
VMF-E4X	DS	•	•	•	•
VMF-IO	DS	•	•	•	•
VMF-IR	DS	•	•	•	•
VMHI	DS	•	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Water valves

3 way valve kit

Model	Ver	200	300	400	500
VCZ41 (1)	D,DS	•			
VCZ4124 (2)	D,DS	•			
VCZ42 (1)	D,DS		•	•	•
VCZ4224 (2)	D,DS		•	•	•

(1) 230V~50Hz
(2) 24V

2 way valve kit

Model	Ver	200	300	400	500
VCZD1 (1)	D,DS	•			
VCZD124 (2)	D,DS	•			
VCZD2 (1)	D,DS		•	•	•
VCZD224 (2)	D,DS		•	•	•

(1) 230V~50Hz
(2) 24V

Valve Kit for 4 pipe systems - Requires a thermostat with valve management

Model	Ver	200	300	400	500
VCZ1X4L (1)	D,DS	•			
VCZ1X4R (1)	D,DS	•			
VCZ2X4L (1)	D,DS		•	•	•
VCZ2X4R (1)	D,DS		•	•	•

(1) The valves can be combined with the units if there is a control panel for managing them.

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	300	400	500
VJP060 (1)	D,DS	•	•		
VJP060M (2)	D,DS	•	•		
VJP090 (1)	D,DS			•	•
VJP090M (2)	D,DS			•	•

(1) 230V~50Hz
(2) 24V

Installation accessories

Condensate recirculation device

Model	Ver	200	300	400	500
DSCZ4 (1)	D,DS	•	•	•	•

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Condensate drip

Model	Ver	200	300	400	500
BCZ4 (1)	D,DS	•	•	•	•

(1) For vertical installation.

Panel closing the rear of the unit

Model	Ver	200	300	400	500
PCZ200	D,DS	•			
PCZ300	D,DS		•		
PCZ500	D,DS			•	•

Ornamental grille

Model	Ver	200	300	400	500
GA200	D,DS	•			
GA300	D,DS		•		
GA500	D,DS			•	•

Supports to be combined with the ornamental grille (GA) for floor installation of the fan coil

Model	Ver	200	300	400	500
FIKIT200	D,DS	•			

Model	Ver	200	300	400	500
FIKIT300	D,DS		•		
FIKIT500	D,DS			•	•

Pair of stylish structural feet

Model	Ver	200	300	400	500
ZXZ	D,DS	•	•	•	•

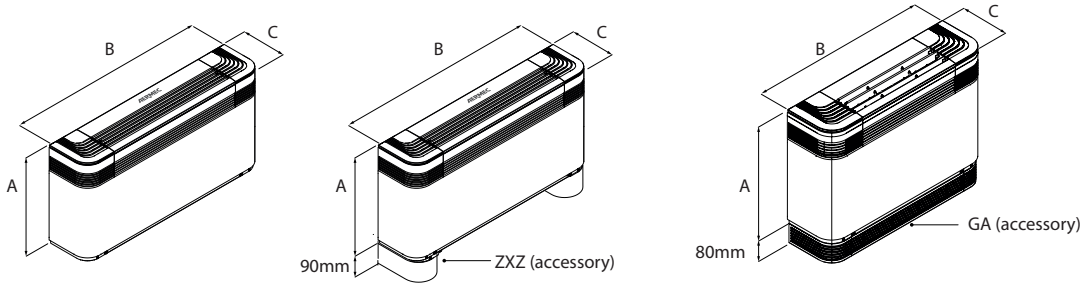
PERFORMANCE SPECIFICATIONS

2-pipe

		FCZ200D			FCZ300D			FCZ400D			FCZ500D		
		1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)													
Heating capacity	kW	2,02	2,95	3,70	3,47	4,46	5,50	4,32	5,74	7,15	5,27	7,31	8,50
Water flow rate system side	l/h	177	258	324	304	391	482	379	503	627	462	641	745
Pressure drop system side	kPa	6	12	18	7	12	18	9	16	24	12	21	28
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	1,00	1,46	1,84	1,72	2,21	2,73	2,14	2,85	3,55	2,62	3,63	4,22
Water flow rate system side	l/h	174	254	319	299	385	475	373	495	617	455	631	734
Pressure drop system side	kPa	6	12	18	8	12	18	10	16	24	12	21	28
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25
Sensible cooling capacity	kW	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18
Water flow rate system side	l/h	153	221	275	288	374	456	379	503	619	460	634	731
Pressure drop system side	kPa	7	13	18	8	13	18	10	17	24	13	23	29
Fan													
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			2			2			2		
Air flow rate	cfm	-	220	290	-	350	450	-	460	600	-	600	720
Input power	W	13	25	35	25	33	44	30	43	57	38	52	76
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)													
Sound power level	dB(A)	35,0	46,0	51,0	34,0	41,0	48,0	37,0	44,0	51,0	42,0	51,0	56,0
Sound pressure level	dB(A)	27,0	38,0	43,0	26,0	33,0	40,0	29,0	36,0	43,0	34,0	43,0	48,0
Finned pack heat exchanger													
Water content main heat exchanger	l	0,5			0,8			1,0			1,0		
Diametre hydraulic fittings													
Main heat exchanger	Ø	1/2"			3/4"			3/4"			3/4"		
Power supply													
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		FCZ200D	FCZ300D	FCZ400D	FCZ500D
Dimensions and weights					
A	mm	486	486	486	486
B	mm	750	980	1200	1200
C	mm	220	220	220	220
Empty weight	kg	15	17	23	22

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

FCZI-D

Fan coil for vertical wall-mounting or free-standing installation

Cooling capacity 0,89 ÷ 4,25 kW
Heating capacity 2,02 ÷ 8,50 kW

- **Total comfort in every season**
- **Electric saving equal to 50% with respect to a fan coil with 3-speed motor**
- **Fully silent operation**
- **Backlit Touch command with programming via a smart device (DT vesion)**

DESCRIPTION

The perception of uneven temperature distribution in various settings, especially in the vertical direction, is one of the main factors leading to a drastic reduction in the well-being perceived by occupants.
FCZI D are able to provide a pleasant sensation of comfort by directing the air in a way that ensures uniform temperature distribution throughout the setting. In winter, hot air is direct downwards; in summer, cool air is directed upwards.
Air supply switching at the front or from the top by operating directly on the orientable grille.
They can be installed in any type of 2 / 4 pipe system and in combination with any heat generator even at low temperatures. Thanks to the availability of several versions and configurations, it is easy to choose the optimal solution for every requirement.

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Their characteristics permit energy savings compared to conventional fans.
They are statically and dynamically balanced and directly coupled to the motor shaft.
The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

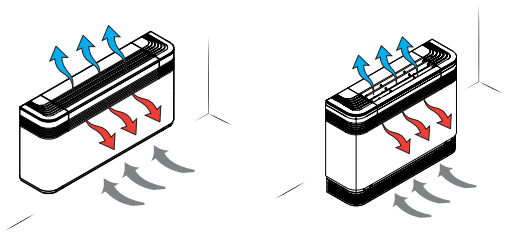
Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
The hydraulic connections can be inverted during installation.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean.

VERSION WITH DOUBLE SUPPLY



FCZI_D
— With on-board thermostat.
FCZI_DT
— With thermostat T-TOUCH-I on-board the system
— Compatibility with VMF system.
FCZI_DS
— Without installed switch
— Compatibility with VMF system.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field		Description
1,2,3,4		**FCZI**
5		**Size** 2, 3, 4, 5
6		**main heat exchanger**
	0	Standard
7		**Secondary heat exchanger**
	0	Without coil
8		**Version**
	D	Dualjet with thermostat TXBI on-board the system
	DS	Dualjet without on-board thermostat
	DT	Dualjet with T-Touch-I thermostat

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: Water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E2Z: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.
VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

Installation accessories

PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.
GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.
FIKIT: Structural bracket in floor installation.
DSCZ4: Condensate drainage device.
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.
ZXZ: Pair of stylish and structural feet

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	200	300	400	500
AER503IR (1)	DS	•	•	•	•
PRO503	DS	•	•	•	•
SA5 (2)	DS	•	•	•	•
SW3 (2)	DS	•	•	•	•
SW5 (2)	DS	•	•	•	•
TX (3)	DS	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

For more information about VMF system, refer to the dedicated documentation.

Model	Ver	200	300	400	500
DI24	DS	•	•	•	•
VMF-E19I (1)	DS	•	•	•	•
VMF-E2Z	DS	•	•	•	•
VMF-E3	DS,DT	•	•	•	•
VMF-E4DX	DS,DT	•	•	•	•
VMF-E4X	DS,DT	•	•	•	•
VMF-IO	DS	•	•	•	•
VMF-IR	DS	•	•	•	•
VMF-SW	DS	•	•	•	•
VMHI	DS	•	•	•	•

(1) Mandatory accessory.

Water valves

3 way valve kit

Model	Ver	200	300	400	500
VCZ41 (1)	D,DS,DT	•			
VCZ4124 (2)	D,DS,DT	•			
VCZ42 (1)	D,DS,DT		•	•	•
VCZ4224 (2)	D,DS,DT		•	•	•

(1) 230V~50Hz
(2) 24V

2 way valve kit

Model	Ver	200	300	400	500
VCZD1 (1)	D,DS,DT	•			
VCZD124 (2)	D,DS,DT	•			
VCZD2 (1)	D,DS,DT		•	•	•
VCZD224 (2)	D,DS,DT		•	•	•

(1) 230V~50Hz
(2) 24V

Valve Kit for 4 pipe systems

Model	Ver	200	300	400	500
VCZ1X4L (1)	D,DS,DT	•			
VCZ1X4R (1)	D,DS,DT	•			
VCZ2X4L (1)	D,DS,DT		•	•	•
VCZ2X4R (1)	D,DS,DT		•	•	•

(1) The valves can be combined with the units if there is a control panel for managing them.

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	300	400	500
VJP060 (1)	D,DS,DT	•	•		
VJP060M (2)	D,DS,DT	•	•		
VJP090 (1)	D,DS,DT			•	•
VJP090M (2)	D,DS,DT			•	•

(1) 230V~50Hz
(2) 24V

Installation accessories

Condensate recirculation device

Model	Ver	200	300	400	500
DSCZ4 (1)	D,DS,DT	•	•	•	•

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Condensate drip

Model	Ver	200	300	400	500
BCZ4 (1)	D,DS,DT	•	•	•	•

(1) For vertical installation.

Panel closing the rear of the unit

Model	Ver	200	300	400	500
PCZ200	D,DS,DT	•			
PCZ300	D,DS,DT		•		
PCZ500	D,DS,DT			•	•

Ornamental grille

Model	Ver	200	300	400	500
GA200	D,DS,DT	•			
GA300	D,DS,DT		•		
GA500	D,DS,DT			•	•

Supports to be combined with the ornamental grille (GA) for floor installation of the fan coil

Model	Ver	200	300	400	500
FIKIT200	D,DS,DT	•			
FIKIT300	D,DS,DT		•		
FIKIT500	D,DS,DT			•	•

Pair of stylish structural feet

Model	Ver	200	300	400	500
ZXZ	D,DS,DT	•	•	•	•

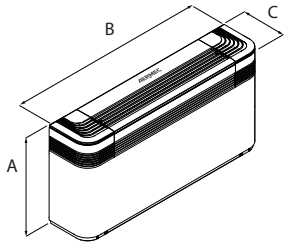
PERFORMANCE SPECIFICATIONS

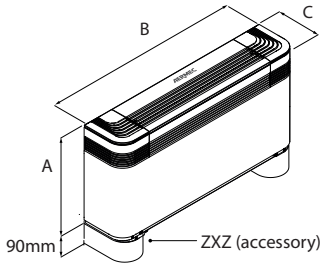
2-pipe

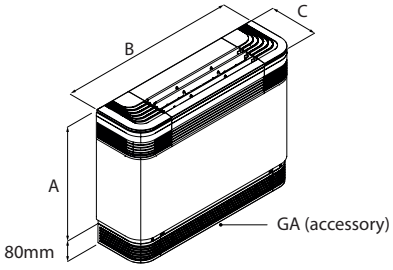
		FCZI200D			FCZI300D			FCZI400D			FCZI500D		
		1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)													
Heating capacity	kW	2,02	2,95	3,70	3,47	4,46	5,50	4,32	5,74	7,15	5,27	7,31	8,50
Water flow rate system side	l/h	177	258	324	304	391	482	379	503	627	462	641	745
Pressure drop system side	kPa	6	12	18	7	12	18	9	16	24	12	21	28
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	1,00	1,46	1,84	1,72	2,21	2,73	2,14	2,85	3,55	2,62	3,63	4,22
Water flow rate system side	l/h	174	254	319	299	385	475	373	495	617	455	631	734
Pressure drop system side	kPa	6	12	18	8	12	18	10	16	24	12	21	28
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25
Sensible cooling capacity	kW	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18
Water flow rate system side	l/h	153	221	275	288	374	456	379	503	619	460	634	731
Pressure drop system side	kPa	7	13	18	8	13	18	10	17	24	13	23	29
Fan													
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Inverter			Inverter			Inverter			Inverter		
Number	no.	1			2			2			2		
Air flow rate	m^3/h	140	220	290	260	350	450	330	460	600	400	600	720
Input power	W	5	8	14	5	7	13	5	10	18	8	18	34
Signal 0-10V	%	44	68	90	52	70	90	49	68	90	50	74	90
Fan coil sound data (3)													
Sound power level	dB(A)	31,0	43,0	50,0	34,0	41,0	48,0	37,0	44,0	41,0	42,0	51,0	56,0
Sound pressure level	dB(A)	23,0	35,0		26,0	33,0		29,0	36,0		34,0	43,0	
Finned pack heat exchanger													
Water content main heat exchanger	l	0,5			0,8			1,0			1,0		
Diametre hydraulic fittings													
Main heat exchanger	Ø	1/2"			3/4"			3/4"			3/4"		
Power supply													
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS







		FCZI200D	FCZI300D	FCZI400D	FCZI500D
Dimensions and weights					
A	mm	486	486	486	486
B	mm	750	980	1200	1200
C	mm	220	220	220	220
Empty weight	kg	15	17	23	22

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

FCZ-H

Fan coil with the photocatalytic device, for universal and floor installation

- **Photocatalytic device**
- **Tested effectiveness against viruses, bacteria and allergens**
- **Active against the SARS-CoV-2 virus, even on surfaces**
- **Certifications VDI 6022**

DESCRIPTION

Fan coil with built-in **photocatalytic device**.

Active against the airborne Sars-CoV-2 virus (95%-99% abatement efficacy after 20 minutes of operation tested at the Virostatics laboratory in Alghero).

Active against the SARS-CoV-2 virus, even on surfaces - 84% effectiveness after 12 h (tests carried out in collaboration with the Department of Microbiology of the University of Padua).

Suitable for air conditioning in places requiring optimum hygiene levels, such as:
— Hospitals
— Dentists' surgeries
— Doctors' and vets' surgeries
— Analysis laboratories
— Waiting rooms
— Public premises

They can be installed in any type of 2-pipe system (version for 4-pipe systems available upon request) and in combination with any heat generator, even at low temperatures. Thanks to the availability of several versions and configurations, it's easy to find the right solution for every need.

VERSIONS

— **H** Unit with shell without thermostat - vertical and horizontal installation.
— **HP** Unit without shell and without thermostat - vertical and horizontal installation. Can also be supplied in a configuration equipped with a boosted asynchronous motor (HPO).
— **HT** Unit with shell and thermostat - vertical installation.

FEATURES

Case

Metallic protective cabinet with rustproofing polyester paint RAL 9003. The head with adjustable air distribution grille is made of plastic RAL 7047. When the grille closes, the fan coil automatically switches off.

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.
The electric motor is single-phase and asynchronous, mounted on anti-vibration supports, and has a permanently engaged condenser.
The scroll that protects the fan can be extracted and inspected, for easy and effective cleaning.

■ *Apart from the traditional asynchronous motor, each unit can also be supplied with an inverter (brushless) motor. Refer to the relative FCZI - H datasheet*

Finned pack heat exchanger

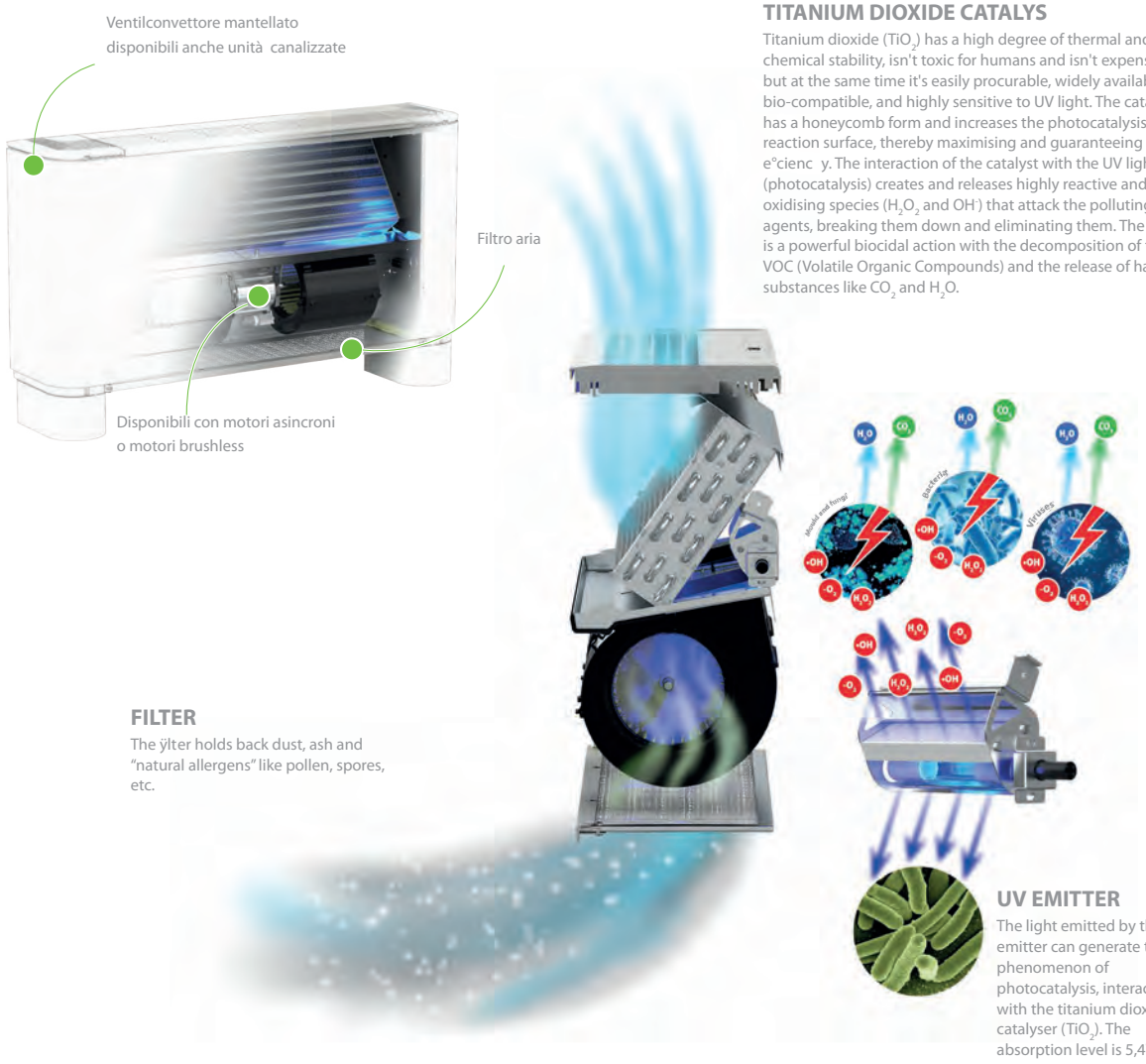
With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The coil is not reversible during installation but, when ordering, you can choose units with the coil water connections on the right (at no extra charge).*

Air filter

Air filter class **COARSE 25%** for all versions; easy to pull out and clean. Shrouds can be pulled out and inspected for easy and effective cleaning.

PHOTOCATALYTIC DEVICE AT THE HEART OF THE FAN COIL



TITANIUM DIOXIDE CATALYS

Titanium dioxide (TiO_2) has a high degree of thermal and chemical stability, isn't toxic for humans and isn't expensive, but at the same time it's easily procurable, widely available, bio-compatible, and highly sensitive to UV light. The catalyst has a honeycomb form and increases the photocatalysis reaction surface, thereby maximising and guaranteeing system e°cienc y. The interaction of the catalyst with the UV light (photocatalysis) creates and releases highly reactive and oxidising species (H_2O_2 and OH^-) that attack the polluting agents, breaking them down and eliminating them. The result is a powerful biocidal action with the decomposition of the VOC (Volatile Organic Compounds) and the release of harmless substances like CO_2 and H_2O.

FILTER

The ÿlter holds back dust, ash and "natural allergens" like pollen, spores, etc.

UV EMITTER

The light emitted by the emitter can generate the phenomenon of photocatalysis, interacting with the titanium dioxide catalyser (TiO_2). The absorption level is 5,4W.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Configuration options FCZ - H

Field		Description
1,2,3		**FCZ**
4		**Size** 2, 3, 4, 5, 6, 9
5		**main heat exchanger**
	0	Standard
	5	Oversized
6		**Secondary heat exchanger**
	0	Without coil
7		**Version**
	H	Unit with shell without thermostat - vertical and horizontal mount
	HP	Unit without shell and thermostat - vertical and horizontal mount
	HPO	Unit without shell and thermostat with upgraded motor - vertical and horizontal mount
	HPOR	Unit without shell and thermostat with upgraded motor - vertical and horizontal installation - water connections on the right
	HPR	Unit without shell and thermostat - vertical and horizontal installation - water connections on the right
	HR	Unit with shell without thermostat - vertical and horizontal installation - water connections on the right
	HT	Unit with shell with thermostat - vertical mount
	HTR	Unit with shell with thermostat - vertical mount - water connections on the right

ACCESSORIES

Control panels and dedicated accessories - FCZ-H

AER503IR: Flush-mounting thermostat with backlit display, capacitive key-pad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air puri-

fying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SA503: Wall-mountable ambient sensor, compatible with AER503IR.
SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.
SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
TXB: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

VMF system

The fan coil can also be teamed up with the VMF system; please contact headquarters about compatibility with the various system components.

Common accessories

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.
VCF41 - 42 - 43 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit.
AMP: Wall mounting kit
DSC: Condensate drainage device.
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.
PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.
GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.
FIKIT: Structural bracket in floor installation.
ZXZ: Pair of stylish and structural feet
BC: Condensate drip.
Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.
SPCZ: Brackets to fix the fan coil to the floor.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories - FCZ-H

Model	Ver	200	300	400	500	600	900	950
AER503IR (1)	H,HP	•	•	•	•	•	•	•
PRO503	H,HP	•	•	•	•	•	•	•
SA5 (2)	H,HP,HT	•	•	•	•	•	•	•
SA503 (3)	H,HP	•	•	•	•	•	•	•
SIT3 (4)	H,HP,HT	•	•	•	•	•	•	•
SIT5 (5)	H,HP,HT	•	•	•	•	•	•	•
SW3 (2)	H,HP,HT	•	•	•	•	•	•	•
SW5 (2)	H,HP,HT	•	•	•	•	•	•	•
TX (6)	H,HP	•	•	•	•	•	•	•
TXB (7)	H,HP	•	•	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Thermostat probe for AER503IR if available.
(4) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
(5) Probe for AER503IR-TX thermostats, if fitted.
(6) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.
(7) Installation on the fan coil.

Common accessories

3 way valve kit

Model	Ver	200	300	400	500	600	900	950
VCZ41 (1)	H,HP,HT	•						
VCZ4124 (2)	H,HP,HT	•						
VCZ42 (1)	H,HP,HT		•	•	•	•		
VCZ4224 (2)	H,HP,HT		•	•	•	•		
VCZ43 (1)	H,HP,HT						•	•
VCZ4324 (2)	H,HP,HT						•	•

(1) 230V~50Hz
(2) 24V

2 way valve kit

Model	Ver	200	300	400	500	600	900	950
VCZD1 (1)	H,HP,HT	•						
VCZD124 (2)	H,HP,HT	•						

Model	Ver	200	300	400	500	600	900	950
VCZD2 (1)	H,HP,HT		•	•	•	•		
VCZD224 (2)	H,HP,HT		•	•	•	•		
VCZD3 (1)	H,HP,HT						•	•
VCZD324 (2)	H,HP,HT						•	•

(1) 230V~50Hz
(2) 24V

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	300	400	500	600	900	950
VJP060 (1)	H,HP,HT	•	•					
VJP060M (2)	H,HP,HT	•	•					
VJP090 (1)	H,HP,HT			•	•	•		
VJP090M (2)	H,HP,HT			•	•	•		
VJP150 (1)	H,HP,HT						•	•
VJP150M (2)	H,HP,HT						•	•

(1) 230V~50Hz
(2) 24V

Wall mounting kit

Ver	200	300	400	500	600	900	950
H	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20
HP	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20

Condensate drainage

Model	Ver	200	300	400	500	600	900	950
DSCZ4 (1)	HP	•	•	•	•	•	•	•

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Condensate drip

Ver	200	300	400	500	600	900	950
H, HP, HT	BCZ4 (1), BCZ5 (2)	BCZ4 (1), BCZ5 (2)	BCZ4 (1), BCZ5 (2)	BCZ4 (1), BCZ5 (2)	BCZ4 (1), BCZ5 (2)	BCZ6 (2)	BCZ6 (2)

(1) For vertical installation.
(2) For horizontal installation.

Ver	200	300	400	500	600	900	950
HP	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC9 (1)	BC9 (1)

(1) For horizontal installation.

Panel closing the rear of the unit

Ver	200	300	400	500	600	900	950
H, HT	PCZ200	PCZ300	PCZ500	PCZ500	PCZ800	PCZ1000	PCZ1000

Grille also applicable for floor installation

Ver	200	300	400	500	600	900	950
H, HP, HT	GA200	GA300	GA500	GA500	GA800	GA800	GA800

Metal supports for GA grille

Ver	200	300	400	500	600	900	950
H, HP, HT	FIKIT200	FIKIT300	FIKIT500	FIKIT500	FIKIT800	FIKIT800	FIKIT800

Ventilcassaforma

Ver	200	300	400	500	600	900	950
HP	CHF22	CHF32	CHF42	CHF42	CHF62	CHF62	CHF62

Brackets to fix the fan coil to the floor.

Ver	200	300	400	500	600	900	950
H, HT	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ

Pair of stylish structural feet

Ver	200	300	400	500	600	900	950
H, HP, HT	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ

PERFORMANCE SPECIFICATIONS

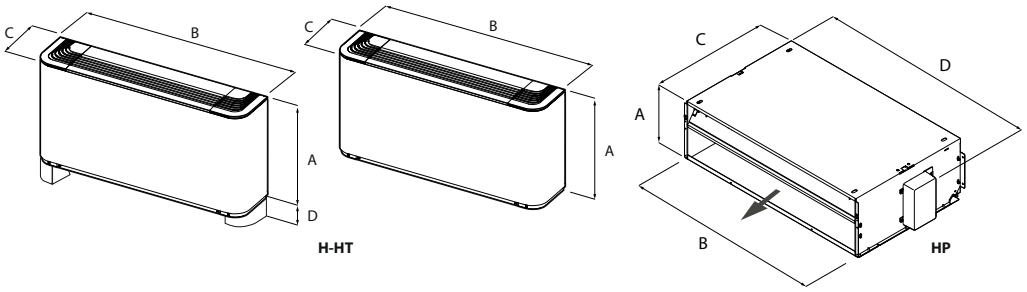
2-pipe

		FCZ200H			FCZ250H			FCZ300H			FCZ350H			FCZ400H			FCZ450H		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	2,02	2,95	3,70	2,20	3,18	4,05	3,47	4,46	5,50	3,77	4,92	6,15	4,32	5,74	7,15	4,57	6,29	7,82
Water flow rate system side	l/h	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685
Pressure drop system side	kPa	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,00	1,46	1,84	1,09	1,58	2,01	1,72	2,21	2,73	1,87	2,44	3,06	2,14	2,85	3,55	2,27	3,12	3,88
Water flow rate system side	l/h	174	254	319	190	274	350	299	385	475	325	425	531	373	495	617	394	543	675
Pressure drop system side	kPa	6	12	18	8	15	22	8	12	18	8	14	20	10	16	24	6	11	16
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	0,89	1,28	1,60	1,06	1,55	1,94	1,68	2,17	2,65	1,89	2,46	3,02	2,20	2,92	3,60	2,41	3,21	4,03
Sensible cooling capacity	kW	0,71	1,05	1,33	0,79	1,20	1,52	1,26	1,65	2,04	1,33	1,76	2,18	1,59	2,14	2,67	1,69	2,30	2,90
Water flow rate system side	l/h	153	221	275	182	267	334	288	374	456	350	460	560	379	503	619	414	552	694
Pressure drop system side	kPa	7	13	18	8	17	25	8	13	18	11	18	25	10	17	24	9	15	22
Fan																			
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			1			2			2			2			2		
Air flow rate	m^3/h	140	220	290	140	220	290	260	350	450	260	350	450	330	460	600	330	460	600
Input power	W	25	29	33	25	29	33	25	33	44	25	33	44	30	43	57	30	43	57
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Diametre hydraulic fittings																			
Type	type	Gas - F			Gas - F			Gas - F			Gas - F			Gas - F			Gas - F		
Main heat exchanger	Ø	1/2"			1/2"			3/4"			3/4"			3/4"			3/4"		
Fan coil sound data (3)																			
Sound power level	dB(A)	35,0	46,0	51,0	35,0	46,0	51,0	34,0	41,0	48,0	34,0	41,0	48,0	37,0	44,0	51,0	37,0	44,0	51,0
Sound pressure level	dB(A)	27,0	38,0	43,0	27,0	38,0	43,0	26,0	33,0	40,0	26,0	33,0	40,0	29,0	36,0	43,0	29,0	36,0	43,0
Power supply																			
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

		FCZ500H			FCZ550H			FCZ600H			FCZ650H			FCZ900H			FCZ950H		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	5,27	7,31	8,50	5,82	8,34	9,75	6,50	8,10	10,00	7,19	9,15	11,50	10,77	13,35	15,14	11,20	14,42	17,10
Water flow rate system side	l/h	462	641	745	510	731	855	570	710	877	631	802	1008	945	1171	1328	982	1264	1500
Pressure drop system side	kPa	12	21	28	10	20	26	12	18	26	14	21	31	12	17	22	16	25	33
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	2,62	3,63	4,22	2,89	4,14	4,85	3,32	4,03	4,97	3,57	4,55	5,72	5,35	6,64	7,53	5,57	7,17	8,50
Water flow rate system side	l/h	455	631	734	502	720	842	561	699	863	621	790	993	930	1152	1307	967	1245	1476
Pressure drop system side	kPa	12	21	28	10	20	26	12	18	26	14	20	31	12	17	22	15	24	33
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	2,68	3,69	4,25	2,91	4,13	4,79	3,22	3,90	4,65	3,95	4,80	5,67	4,29	5,00	6,91	5,77	7,32	8,60
Sensible cooling capacity	kW	1,94	2,73	3,18	2,07	2,98	3,49	2,56	3,17	3,92	2,78	3,43	4,12	2,97	3,78	5,68	3,80	4,87	5,78
Water flow rate system side	l/h	460	634	731	501	711	824	554	671	800	595	825	975	738	860	1189	992	1259	1479
Pressure drop system side	kPa	13	23	29	12	22	28	14	19	26	15	21	28	10	13	22	15	23	30
Fan																			
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	2			2			3			3			3			3		
Air flow rate	m^3/h	400	600	720	400	600	720	520	720	900	520	720	900	700	930	1140	700	930	1140
Input power	W	38	52	76	38	52	76	38	60	91	38	60	91	59	80	106	59	80	106
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Diametre hydraulic fittings																			
Type	type	Gas - F			Gas - F			Gas - F			Gas - F			Gas - F			Gas - F		
Main heat exchanger	Ø	3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Fan coil sound data (3)																			
Sound power level	dB(A)	42,0	51,0	56,0	42,0	51,0	56,0	42,0	51,0	57,0	42,0	51,0	57,0	51,0	57,0	62,0	51,0	57,0	61,0
Sound pressure level	dB(A)	34,0	43,0	48,0	34,0	43,0	48,0	34,0	43,0	49,0	34,0	43,0	49,0	43,0	49,0	54,0	43,0	49,0	53,0
Power supply																			
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



Size			200	300	400	500	600	900	950
Dimensions and weights									
A	H,HT	mm	486	486	486	486	486	591	591
	HP	mm	216	216	216	216	216	216	216
B	H,HT	mm	750	980	1200	1200	1320	1320	1320
	HP	mm	562	793	1013	1013	1147	1147	1147
C	H,HT	mm	220	220	220	220	220	220	220
	HP	mm	453	453	453	453	453	558	558
D	H,HT	mm	90	90	90	90	90	90	90
	HP	mm	522	753	973	973	1122	1122	1122
Empty weight	H,HT	kg	15	17	23	22	29	34	34
	HP	kg	12	14	20	23	29	32	32

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
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www.aermec.com

FCZI-H

Fan coil with the photocatalytic device, for universal and floor installation

- **Photocatalytic device**
- **Tested effectiveness against viruses, bacteria and allergens**
- **Active against the SARS-CoV-2 virus, even on surfaces**
- **Certifications VDI 6022**

DESCRIPTION

Fan coil with built-in **photocatalytic device**.

Active against the airborne Sars-CoV-2 virus (95%-99% abatement efficacy after 20 minutes of operation tested at the Virostatics laboratory in Alghero).

Active against the SARS-CoV-2 virus, even on surfaces - 84% effectiveness after 12 h (tests carried out in collaboration with the Department of Microbiology of the University of Padua).

Suitable for air conditioning in places requiring optimum hygiene levels, such as:
— Hospitals
— Dentists' surgeries
— Doctors' and vets' surgeries
— Analysis laboratories
— Waiting rooms
— Public premises

They can be installed in any type of 2-pipe system (version for 4-pipe systems available upon request) and in combination with any heat generator, even at low temperatures. Thanks to the availability of several versions and configurations, it's easy to find the right solution for every need.

VERSIONS

— **H** Unit with shell without thermostat - vertical and horizontal installation.
— **HP** Unit without shell and without thermostat - vertical and horizontal installation.
— **HT** Unit with shell and thermostat - vertical installation.

FEATURES

Case

Metallic protective cabinet with rustproofing polyester paint RAL 9003. The head with adjustable air distribution grille is made of plastic RAL 7047. When the grille closes, the fan coil automatically switches off.

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.
The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.
Continuous air flow rate variation is made possible by a 0-10V signal generated by Aermec adjustment and control commands or by independent regulation systems.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).
The scroll that protects the fan can be extracted and inspected, for easy and effective cleaning.

■ *Apart from the brushless motor, each unit can also be supplied with a single-phase asynchronous motor. Refer to the relative FCZ - H datasheet*

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The coil is not reversible during installation but, when ordering, you can choose units with the coil water connections on the right (at no extra charge).*

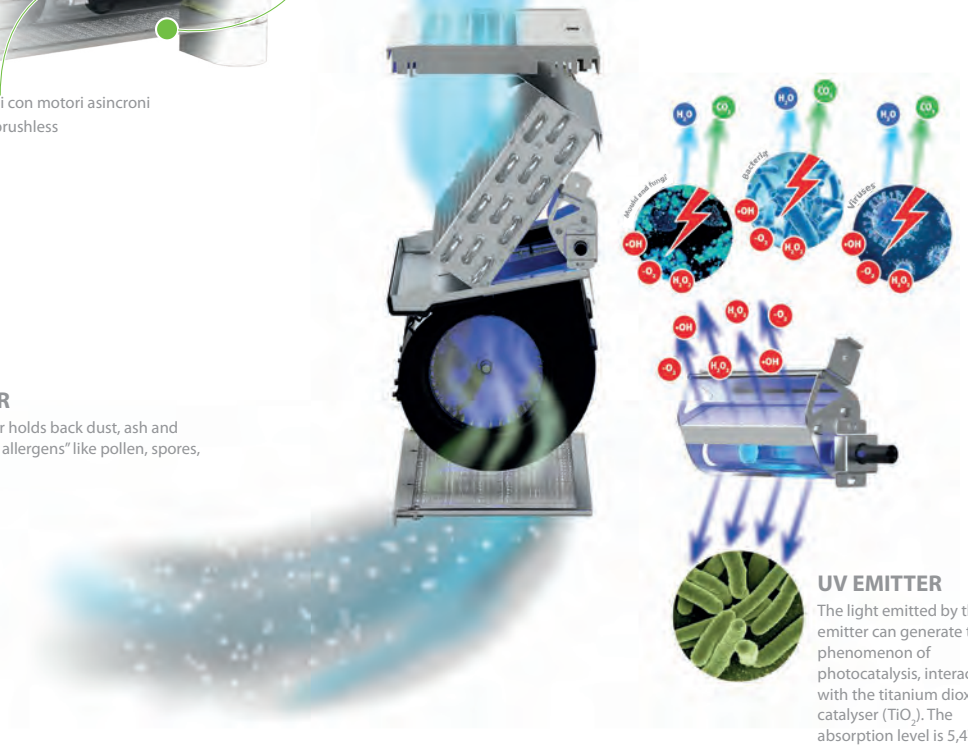
Air filter

Air filter class **COARSE 25%** for all versions; easy to pull out and clean. Shrouds can be pulled out and inspected for easy and effective cleaning.

PHOTOCATALYTIC DEVICE AT THE HEART OF THE FAN COIL

TITANIUM DIOXIDE CATALYS

Titanium dioxide (TiO_2) has a high degree of thermal and chemical stability, isn't toxic for humans and isn't expensive, but at the same time it's easily procurable, widely available, bio-compatible, and highly sensitive to UV light. The catalyst has a honeycomb form and increases the photocatalysis reaction surface, thereby maximising and guaranteeing system e°cienc y. The interaction of the catalyst with the UV light (photocatalysis) creates and releases highly reactive and oxidising species (H_2O_2 and OH^-) that attack the polluting agents, breaking them down and eliminating them. The result is a powerful biocidal action with the decomposition of the VOC (Volatile Organic Compounds) and the release of harmless substances like CO_2 and H_2O.



FILTER

The ÿlter holds back dust, ash and "natural allergens" like pollen, spores, etc.

UV EMITTER

The light emitted by the emitter can generate the phenomenon of photocatalysis, interacting with the titanium dioxide catalyser (TiO_2). The absorption level is 5,4W.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3,4	**FCZI**
5	**Size** 2, 3, 4, 5, 7, 9
6	**main heat exchanger**
0	Standard
5	Oversized
7	**Secondary heat exchanger**
0	Without coil
8	**Version**
H	Unit with shell without thermostat - vertical and horizontal mount
HP	Unit without shell and thermostat - vertical and horizontal mount
HPR	Unit without shell and thermostat - vertical and horizontal installation - water connections on the right
HR	Unit with shell without thermostat - vertical and horizontal installation - water connections on the right
HT	Unit with shell with thermostat - vertical mount
HTR	Unit with shell with thermostat - vertical mount - water connections on the right

ACCESSORIES

Control panels and dedicated accessories - FCZI-H

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E2Z: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-LON: Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

VMF system

■ *The fan coil can also be teamed up with the VMF system; please contact headquarters about compatibility with the various system components.*

Common accessories

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit.
AMP: Wall mounting kit
DSC: Condensate drainage device.
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.
PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.
GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.
FIKIT: Structural bracket in floor installation.
ZXZ: Pair of stylish and structural feet
BC: Condensate drip.
Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.
SPCZ: Brackets to fix the fan coil to the floor.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	200	250	300	350	400	450	500
AER503IR (1)	H,HP	•	•	•	•	•	•	•
PRO503	H,HP	•	•	•	•	•	•	•
SA5 (2)	H,HP	•	•	•	•	•	•	•
SW3 (2)	H,HP,HT	•	•	•	•	•	•	•
SW5 (2)	H,HP	•	•	•	•	•	•	•
	HT		•		•		•	
TX (3)	H,HP,HT	•	•	•	•	•	•	•

Model	Ver	550	700	750	900	950
AER503IR (1)	H,HP	•	•	•	•	•
PRO503	H,HP	•	•	•	•	•
SA5 (2)	H,HP	•	•	•	•	•
SW3 (2)	H,HP,HT	•	•	•	•	•
SW5 (2)	H,HP	•	•	•	•	•
	HT	•		•		
TX (3)	H,HP,HT	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
DI24	H,HP	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
VMF-E19I (1)	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E2Z	H	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E3	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4DX	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4X	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
VMF-IO	H	•	•	•	•	•	•	•	•	•	•	•	•
VMF-IR	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
VMF-LON	H	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW1	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
VMHI	H,HP	•	•	•	•	•	•	•	•	•	•	•	•

(1) Mandatory accessory.

Common accessories

3 way valve kit

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
VCZ41 (1)	H,HP,HT	•	•										
VCZ4124 (2)	H,HP,HT	•	•										
VCZ42 (1)	H,HP,HT			•	•	•	•	•	•	•	•		
VCZ4224 (2)	H,HP,HT			•	•	•	•	•	•	•	•		
VCZ43 (1)	H,HP,HT											•	•
VCZ4324 (2)	H,HP,HT											•	•

(1) 230V~50Hz
(2) 24V

2 way valve kit

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
VCZD1 (1)	H,HP,HT	•	•										
VCZD124 (2)	H,HP,HT	•	•										
VCZD2 (1)	H,HP,HT			•	•	•	•	•	•	•	•		
VCZD224 (2)	H,HP,HT			•	•	•	•	•	•	•	•		
VCZD3 (1)	H,HP,HT											•	•
VCZD324 (2)	H,HP,HT											•	•

(1) 230V~50Hz
(2) 24V

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
VJP060 (1)	H,HP,HT	•	•	•	•								
VJP060M (2)	H,HP,HT	•	•	•	•								
VJP090 (1)	H,HP,HT					•	•	•	•				
VJP090M (2)	H,HP,HT					•	•	•	•				
VJP150 (1)	H,HP,HT									•	•	•	•
VJP150M (2)	H,HP,HT									•	•	•	•

(1) 230V~50Hz
(2) 24V

Wall mounting kit

Ver	200	250	300	350	400	450	500	550	700	750	900	950
H, HP	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20

Condensate drainage

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
DSC4 (1)	HP	•	•	•	•	•	•	•	•	•	•	•	•

(1) DSC4 cannot be mounted if even just one of these accessories is also installed: AMP - AMPZ valve VCZ1-2-3-4 X4L/R and all the condensate collection trays.

Condensate drip

Ver	200	250	300	350	400	450	500	550	700	750	900	950
HP	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)

(1) For vertical installation.

Ver	200	250	300	350	400	450	500	550	700	750	900	950
HP	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC9 (1)	BC9 (1)

(1) For horizontal installation.

Panel closing the rear of the unit

Ver	200	250	300	350	400	450	500	550	700	750	900	950
H, HT	PCZ200	PCZ200	PCZ300	PCZ300	PCZ500	PCZ500	PCZ500	PCZ500	PCZ800	PCZ800	PCZ1000	PCZ1000

Grille also applicable for floor installation

Ver	200	250	300	350	400	450	500	550	700	750	900	950
H, HP, HT	GA200	GA200	GA300	GA300	GA500	GA500	GA500	GA500	GA800	GA800	GA800	GA800

Metal supports for GA grille

Ver	200	250	300	350	400	450	500	550	700	750	900	950
H, HP, HT	FIKIT200	FIKIT200	FIKIT300	FIKIT300	FIKIT500	FIKIT500	FIKIT500	FIKIT500	FIKIT800	FIKIT800	FIKIT800	FIKIT800

Ventilcassaforma

Ver	200	250	300	350	400	450	500	550	700	750	900	950
HP	CHF22	CHF22	CHF32	CHF32	CHF42	CHF42	CHF42	CHF42	CHF62	CHF62	CHF62	CHF62

Brackets to fix the fan coil to the floor.

Ver	200	250	300	350	400	450	500	550	700	750	900	950
H, HT	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ

Pair of stylish structural feet

Ver	200	250	300	350	400	450	500	550	700	750	900	950
H, HP, HT	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ

PERFORMANCE SPECIFICATIONS

2-pipe

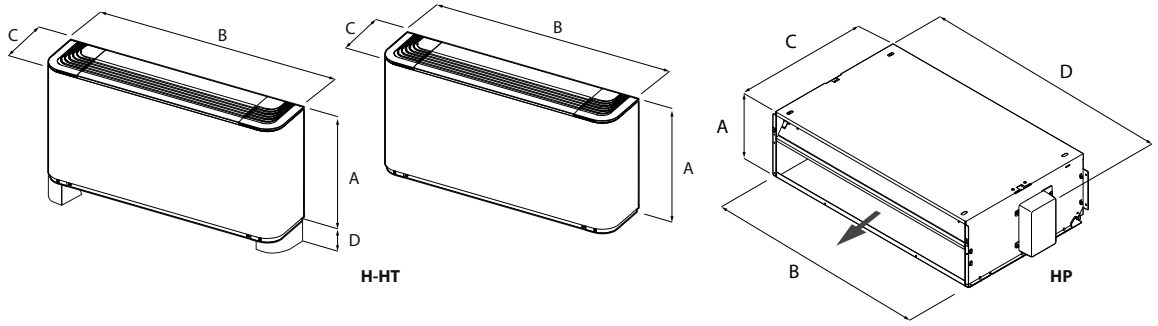
		FCZI200H			FCZI250H			FCZI300H			FCZI350H			FCZI400H			FCZI450H		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	2,02	2,95	3,70	2,20	3,18	4,05	3,47	4,46	5,50	3,77	4,92	6,15	4,32	5,74	7,15	4,57	6,29	7,82
Water flow rate system side	l/h	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685
Pressure drop system side	kPa	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,00	1,46	1,84	1,09	1,58	2,01	1,72	2,21	2,73	1,87	2,44	3,06	2,14	2,85	3,55	2,27	3,12	3,88
Water flow rate system side	l/h	174	254	319	190	274	350	299	385	475	325	425	531	373	495	617	394	543	675
Pressure drop system side	kPa	6	12	18	8	15	22	8	12	18	8	14	20	10	16	24	6	11	16
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	0,89	1,28	1,60	1,06	1,55	1,94	1,68	2,17	2,65	1,89	2,46	3,02	2,20	2,92	3,60	2,41	3,21	4,03
Sensible cooling capacity	kW	0,71	1,05	1,33	0,79	1,20	1,52	1,26	1,65	2,04	1,33	1,76	2,18	1,59	2,14	2,67	1,69	2,30	2,90
Water flow rate system side	l/h	153	221	275	182	267	334	288	374	456	350	460	560	379	503	619	414	552	694
Pressure drop system side	kPa	7	13	18	8	17	25	8	13	18	11	18	25	10	17	24	9	15	22
Fan																			
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Inverter			Inverter			Inverter			Inverter			Inverter			Inverter		
Number	no.	1			1			2			2			2			2		
Air flow rate	m^3/h	140	220	290	140	220	290	260	350	450	260	350	450	330	460	600	330	460	600
Input power	W	5	8	14	5	8	14	5	7	13	5	7	13	5	10	18	5	10	18
Signal 0-10V	%	44	68	90	44	68	90	52	70	90	52	70	90	49	68	90	49	68	90
Diametre hydraulic fittings																			
Type	type	Gas - F			Gas - F			Gas - F			Gas - F			Gas - F			Gas - F		
Fan coil sound data (3)																			
Sound power level	dB(A)	35,0	46,0	51,0	35,0	46,0	51,0	34,0	41,0	48,0	34,0	41,0	48,0	37,0	44,0	51,0	37,0	44,0	51,0
Sound pressure level	dB(A)	27,0	38,0	43,0	27,0	38,0	43,0	26,0	33,0	40,0	26,0	33,0	40,0	29,0	36,0	43,0	29,0	36,0	43,0
Power supply																			
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

		FCZI500H			FCZI550H			FCZI700H			FCZI750H			FCZI900H			FCZI950H		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	5,27	7,31	8,50	5,82	8,34	9,75	6,50	8,10	10,00	7,19	9,15	11,50	10,77	13,35	15,14	11,20	14,42	17,10
Water flow rate system side	l/h	462	641	745	510	731	855	570	710	877	631	802	1008	945	1171	1328	982	1264	1500
Pressure drop system side	kPa	12	21	28	10	20	26	12	18	26	14	21	31	12	17	22	16	25	33
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	2,62	3,63	4,22	2,89	4,14	4,85	3,32	4,03	4,97	3,57	4,55	5,72	5,35	6,64	7,53	5,57	7,17	8,50
Water flow rate system side	l/h	455	631	734	502	720	842	561	699	863	621	790	993	930	1152	1307	967	1245	1476
Pressure drop system side	kPa	12	21	28	10	20	26	12	18	26	14	20	31	12	17	22	15	24	33
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	2,68	3,69	4,25	2,91	4,13	4,79	3,22	3,90	4,65	3,95	4,80	5,67	4,29	5,00	6,91	5,77	7,32	8,60
Sensible cooling capacity	kW	1,94	2,73	3,18	2,07	2,98	3,49	2,56	3,17	3,92	2,78	3,43	4,12	2,97	3,78	5,68	3,80	4,87	5,78
Water flow rate system side	l/h	460	634	731	501	711	824	554	671	800	595	825	975	738	860	1189	992	1259	1479
Pressure drop system side	kPa	13	23	29	12	22	28	14	19	26	15	21	28	10	13	22	15	23	30
Fan																			
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Inverter			Inverter			Inverter			Inverter			Inverter			Inverter		
Number	no.	2			2			3			3			3			3		
Air flow rate	m^3/h	400	600	720	400	600	720	520	720	900	520	720	900	700	930	1140	700	930	1140
Input power	W	7	18	34	7	18	34	30	40	80	30	40	80	30	40	80	30	40	80
Signal 0-10V	%	50	74	90	50	74	90	56	72	90	56	72	90	56	72	90	56	72	90

		FCZI500H			FCZI550H			FCZI700H			FCZI750H			FCZI900H			FCZI950H		
Diametre hydraulic fittings																			
Type	type	Gas - F			Gas - F			Gas - F			Gas - F			Gas - F			Gas - F		
Fan coil sound data (3)																			
Sound power level	dB(A)	42,0	51,0	56,0	42,0	51,0	56,0	42,0	51,0	57,0	42,0	51,0	57,0	51,0	57,0	62,0	51,0	57,0	61,0
Sound pressure level	dB(A)	34,0	43,0	48,0	34,0	43,0	48,0	34,0	43,0	49,0	34,0	43,0	49,0	43,0	49,0	54,0	43,0	49,0	53,0
Power supply																			
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



Size			200	250	300	350	400	450	500	550	700	750	900	950
Dimensions and weights														
A	H,HT	mm	486	486	486	486	486	486	486	486	486	486	591	591
	HP	mm	216	216	216	216	216	216	216	216	216	216	216	216
B	H,HT	mm	750	750	980	980	1200	1200	1200	1200	1320	1320	1320	1320
	HP	mm	522	522	753	753	973	973	973	973	1122	1122	1122	1122
C	H,HT	mm	220	220	220	220	220	220	220	220	220	220	220	220
	HP	mm	453	453	453	453	453	453	453	453	453	453	558	558
D	H,HT	mm	90	-	90	-	90	-	90	-	90	-	90	90
	HP	mm	562	-	793	-	1013	-	1013	-	1147	-	1147	1147
Empty weight	H,HT	kg	15	16	17	18	22	24	22	24	29	31	34	34
	HP	kg	12	14	14	16	20	22	23	24	26	31	32	32

Aermec S.p.A.
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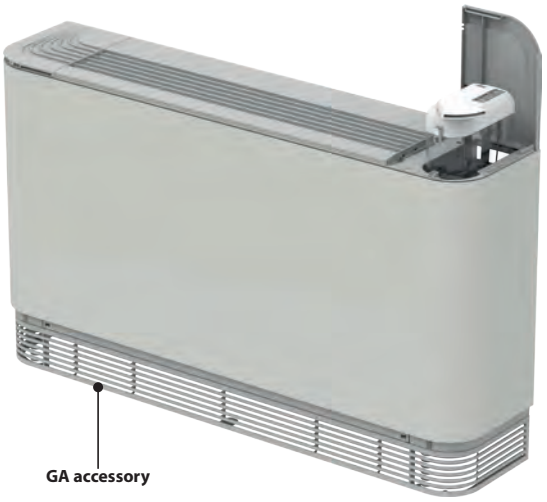
Tel. 0442633111 - Telefax 044293577
www.aermec.com

FCZ-ASW

Fan coil for vertical wall-mounting or free-standing installation

Cooling capacity 0,65 ÷ 7,62 kW
Heating capacity 1,45 ÷ 17,02 kW

- **Adiabatic "retractable stand-alone" ultrasonic humidifier**
- **Fully silent operation**
- **Total comfort in every season**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

The FCZ-ASW series adds winter air humidity control to the typical functions of a fan coil, guaranteeing the best degree of thermo-hygrometric comfort without any impact on acoustic performance and with extremely low electricity consumption.

INTEGRATED ULTRASONIC HUMIDIFIER: EFFICIENCY AND SILENCE

Our "stand-alone" adiabatic ultrasonic humidifier, which disappears from view because it is perfectly integrated into the fan coil cabinet, guarantees precise and silent humidification of the environment.
It consists of a transparent tank, a feeding unit with a three-speed micro-fan and a piezoelectric transducer.
The latter, thanks to ultrasonic technology, nebulizes the demineralised water into microparticles, creating a fine mist that evaporates quickly once in contact with the ambient air.
The electronic control makes it possible to set three humidity levels, adapting to any need, the integrated level sensor promptly signals the need to top up **only demineralised water.**

Case

Metallic micro-perforated cabinet with rustproofing polyester paint RAL 9003. Head with plastic air distribution grille RAL 7047.

Ventilation group

Consisting of double suction centrifugal fans that are particularly silent, statically and dynamically balanced, and directly coupled with the motor shaft.
The motor is wired for single phase and has three speeds, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings.
Extractable shrouds for easy, effective cleaning

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
Specify the position of the water connections at the time of ordering.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean.

DATA AND ACCESSORIES

For performance data and accessory compatibility, please refer to the commercial documentation of the FCZ series.

Please note that only wall-mounted control panels are compatible with this unit, so it cannot be used in units with on-board thermostats

Aermec S.p.A.
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Tel. 0442633111 - Telefax 044293577
www.aermec.com

Omnia UL

Fan coil for universal installation

- **Fully silent functioning**
- **Ideal for residential or office solutions**

DESCRIPTION

fan coil can be installed in any 2 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

VERSIONS

C Vertical installation, intake at base, electronic thermostat
PC Vertical installation, intake at base, electronic thermostat, Cold Plasma purifier
S Vertical and horizontal installation, intake at base, without commands
UL Standard - Vertical installation, bottom intake, manual switch-over

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.
The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.
The plastic augers are extractable for easy and efficient cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

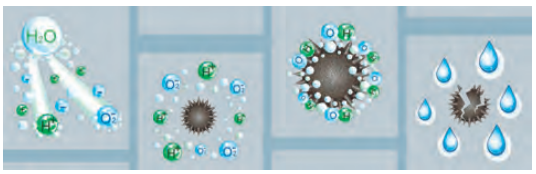
Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

The fan coil units are equipped with a standard air filter. For specific details, please refer to the unit's documentation.
APC versions equipped with Coldplasma Air purifier.

The purifier is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionized air, free of foul odours.



ACCESSORIES

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.
WMT16: Electronic thermostat with thermostated ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
DI24CP: Complete flush-mounted interface plate with support for DI24, Vimar brand, Arké series, graphite gray color.
VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.
VMF-E2U: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory. It has 2 selector switches, one for temperature and the other for speed control.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

AMP: Wall mounting kit
DSC: Condensate drainage device.
VCH: 3-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.
BC: Condensate drip.
GU: Intake grid covers the front space between the ornamental feet and does not interfere with the filter.
PCU: Sheet metal panel closing the rear of the unit.
ZU1: Pair of stylish and structural feet.
GU: Intake grid covers the front space between the ornamental feet and does not interfere with the filter.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	UL12C	UL12PC	UL12S	UL17C	UL17PC	UL17S	UL27C	UL27PC	UL27S	UL37C	UL37PC	UL37S
AER503IR			•			•			•			•
PRO503			•			•			•			•
SA5			•			•			•			•
SW3	•	•	•	•	•	•	•	•	•	•	•	•
SW5			•			•			•			•
TX			•			•			•			•
WMT10			•			•			•			•
WMT16			•			•			•			•

VMF system

Accessory	UL12S	UL17S	UL27S	UL37S
DI24	•	•	•	•
DI24CP	•	•	•	•
VMF-E19	•	•	•	•
VMF-E2U	•	•	•	•
VMF-E3	•	•	•	•
VMF-E4DX	•	•	•	•
VMF-E4X	•	•	•	•
VMF-IR	•	•	•	•
VMHI	•	•	•	•

3 way valve kit

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
VCH	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

2 way valve kit

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
VCHD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Condensate drip

Accessory	UL17	UL17C	UL17PC	UL17S	UL27	UL27C
BC10 (1)	•	•	•	•	•	•
BC20 (2)	•	•	•	•	•	•

Accessory	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
BC10 (1)	•	•	•	•	•	•
BC20 (2)	•	•	•	•	•	•

(1) For vertical installation.
(2) For horizontal installation.

Condensate drainage

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
DSC5 (1)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) The accessory cannot be fit if the accessory BC10 or BC20 is installed.

Wall mounting kit

Accessory	UL12C	UL17C	UL17PC	UL27C	UL27PC	UL37C	UL37PC
AMP10	•	•	•	•	•	•	•

Panel closing the rear of the unit

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
PCU12	•	•	•	•												
PCU17					•	•	•	•								
PCU27									•	•	•	•				
PCU37													•	•	•	•

Intake grids

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
GU12 (1)	•	•	•	•												
GU17 (1)					•	•	•	•								
GU27 (1)									•	•	•	•				
GU37 (1)													•	•	•	•

(1) The combination with a pair of stylish and structural feet is mandatory.

Pair of stylish structural feet

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
ZU1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Configuration

Configuration options

Field	Description
1,2	**UL**
3,4	**Size** 12, 17, 27, 37
5	**Version**
C	Vertical installation, intake at base, electronic thermostat
PC	Vertical installation, intake at base, electronic thermostat, Cold Plasma purifier
S	Vertical and horizontal installation, intake at base, without commands
UL	Standard - Vertical installation, bottom intake, manual switch-over

PERFORMANCE SPECIFICATIONS

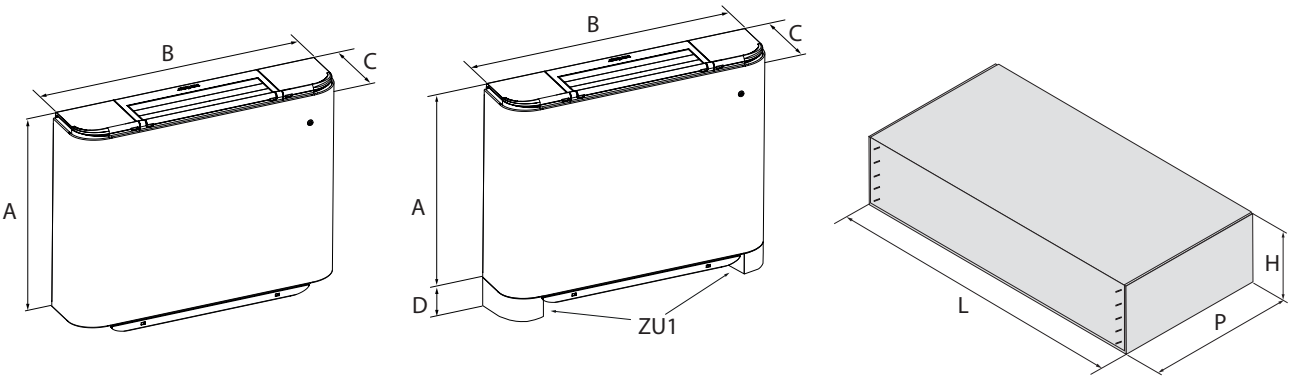
Technical data

2-pipe

		UL17			UL27			UL37		
		1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)										
Heating capacity	kW	1,54	2,12	2,91	2,89	3,83	4,62	3,63	4,87	5,94
Water flow rate system side	l/h	135	186	255	254	336	405	310	427	521
Pressure drop system side	kPa	1	2	4	5	8	11	3	5	7
Heating performance 45 °C / 40 °C (2)										
Heating capacity	kW	0,76	1,05	1,44	1,44	1,90	2,29	1,75	2,42	2,95
Water flow rate system side	l/h	133	183	251	249	331	399	305	420	513
Pressure drop system side	kPa	2	3	3	5	8	11	7	13	18
Cooling performance 7 °C / 12 °C										
Cooling capacity	kW	0,69	0,87	1,17	1,26	1,65	1,99	1,63	2,26	2,79
Sensible cooling capacity	kW	0,52	0,69	0,96	0,97	1,30	1,61	1,13	1,59	2,00
Water flow rate system side	l/h	122	153	206	220	289	349	286	394	487
Pressure drop system side	kPa	2	3	5	5	8	11	7	13	19
Fan										
Type	type	Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	On-Off			On-Off			On-Off		
Number	no.	1			2			2		
Air flow rate	m^3/h	110	160	240	190	270	350	240	350	460
Input power	W	23	25	32	24	27	35	30	35	42
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)										
Sound power level	dB(A)	34,0	43,0	48,0	35,0	43,0	48,0	34,0	43,0	50,0
Sound pressure level	dB(A)	26,0	35,0	40,0	27,0	35,0	40,0	26,0	33,0	40,0
Finned pack heat exchanger										
Water content main heat exchanger	l	0,4			0,6			0,8		
Diametre hydraulic fittings										
Main heat exchanger	Ø	1/2"			1/2"			1/2"		
Power supply										
Power supply		230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



Dimensions and weights

		UL12	UL12C	UL12S	UL17	UL17S	UL17C	UL17PC	UL27	UL27S	UL27C	UL27PC	UL37	UL37S	UL37C	UL37PC
Dimensions and weights																
A	mm	485	485	485	485	485	485	485	485	485	485	485	485	485	485	485
B	mm	640	640	640	750	750	750	750	980	980	980	980	1200	1200	1200	1200
C	mm	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173
D	mm	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94
Empty weight	kg	12	12	12	13	13	13	13	17	17	18	18	20	20	20	20
Dimensions and weights for transport																
H	mm	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275
L	mm	710	710	710	820	820	820	820	1050	1050	1050	1050	1270	1270	1270	1270
P	mm	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590
Weight for transport	kg	12,5	13,0	12,5	14,5	14,5	15,0	15,0	19,0	19,0	19,5	19,5	22,5	22,5	23,0	23,0

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www.aermec.com

Omnia ULI

Fan coil for universal and floor installation

- **Electric saving equal to 50% compared to a fancoil with 3-speed motor.**
- **Fully silent functioning**
- **Ideal for residential or office solutions**

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

DESCRIPTION

Fan coils with inverter technology for heating, cooling, and dehumidifying. Equipped with a state of the art ventilation unit with continuous modulation of the air flow rate, which allows for precise adaptation of the actual indoor ambient requirements without temperature oscillations, for increased comfort, also in terms of noise, and electrical savings.
It can be installed on 2-pipe systems and combined with any heat generator even at low temperatures. Choosing the optimal solution for any requirement is easy thanks to the various versions available and to the possibility of horizontal or vertical installation, depending on the version.

VERSIONS

C Vertical installation, intake at base, electronic thermostat
PC Vertical installation, intake at base, electronic thermostat, Cold Plasma purifier
S Vertical and horizontal installation, intake at base, without commands

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.
Brushless motor with continuous speed variation 0-100%.
The scroll that protects the fan can be extracted and inspected, for easy and effective cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

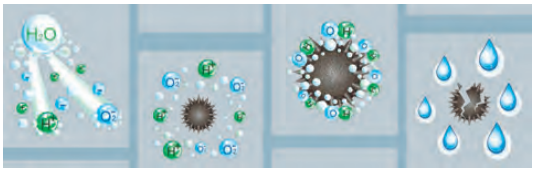
■ *The hydraulic connections can be inverted during installation.*

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

The fan coil units are equipped with a standard air filter. For specific details, please refer to the unit's documentation.
APC versions equipped with Coldplasma Air purifier.
The purifier is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionized air, free of foul odours.



ACCESSORIES

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
DI24CP: Complete flush-mounted interface plate with support for DI24, Vimar brand, Arké series, graphite gray color.
VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E2U: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory. It has 2 selector switches, one for temperature and the other for speed control.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

AMP: Wall mounting kit
DSC: Condensate drainage device.
VCH: 3-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.
BC: Condensate drip.
GU: Intake grid covers the front space between the ornamental feet and does not interfere with the filter.
PCU: Sheet metal panel closing the rear of the unit.
ZU1: Pair of stylish and structural feet.

ACCESSORIES COMPATIBILITY

Model	Ver	17	27	37
AER503IR (1)	S	•	•	•
PRO503	S	•	•	•
SA5 (2)	S	•	•	•
SW3 (2)	C,PC,S	•	•	•
SW5 (2)	S	•	•	•
TX (3)	S	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	17	27	37
DI24	S	•	•	•
DI24CP	S	•	•	•
VMF-E19I (1)	S	•	•	•
VMF-E2U	S	•	•	•
VMF-E3	S	•	•	•
VMF-E4DX	S	•	•	•
VMF-E4X	S	•	•	•
VMF-IR	S	•	•	•
VMHI	S	•	•	•

(1) Mandatory accessory.

Condensate drip

Model	Ver	17	27	37
BC10 (1)	C,PC,S	•	•	•
BC20 (2)	C,PC,S	•	•	•

(1) For vertical installation.
(2) For horizontal installation.

Condensate drainage

Model	Ver	17	27	37
DSC5 (1)	C,PC	•	•	•

(1) The accessory cannot be fit if the accessory BC10 or BC20 is installed.

3 way valve kit

Model	Ver	17	27	37
VCH	C,PC	•	•	•

2 way valve kit

Model	Ver	17	27	37
VCHD	C,PC	•	•	•

Panel closing the rear of the unit

Model	Ver	17	27	37
PCU17	C,PC,S	•		
PCU27	C,PC,S		•	
PCU37	C,PC,S			•

Intake grids

Model	Ver	17	27	37
GU17 (1)	C,PC,S	•		
GU27 (1)	C,PC,S		•	
GU37 (1)	C,PC,S			•

(1) The combination with a pair of stylish and structural feet is mandatory.

Wall mounting kit

Model	Ver	17	27	37
AMP10	S	•	•	•

Pair of stylish structural feet

Model	Ver	17	27	37
ZU1	C,PC,S	•	•	•

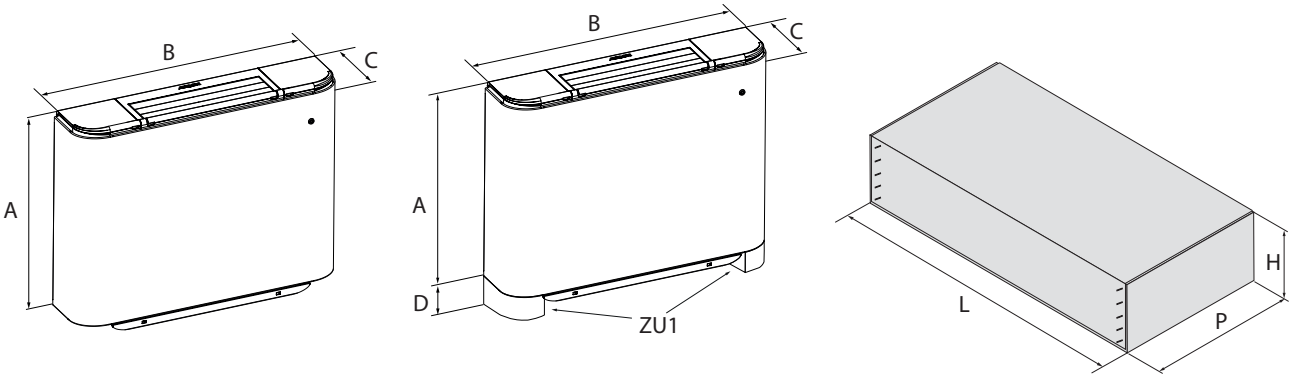
PERFORMANCE SPECIFICATIONS

2-pipe

		ULI17			ULI27			ULI37		
		1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)										
Heating capacity	kW	1,54	2,12	2,91	2,89	3,83	4,62	3,53	4,87	5,94
Water flow rate system side	l/h	135	186	255	254	336	405	310	427	521
Pressure drop system side	kPa	1	2	4	5	8	11	3	5	7
Heating performance 45 °C / 40 °C (2)										
Heating capacity	kW	0,76	1,05	1,44	1,44	1,90	2,29	1,75	2,42	2,95
Water flow rate system side	l/h	133	183	251	249	331	399	305	420	513
Pressure drop system side	kPa	2	2	2	5	8	11	7	12	18
Cooling performance 7 °C / 12 °C										
Cooling capacity	kW	0,69	0,87	1,17	1,26	1,65	1,99	1,63	2,26	2,79
Sensible cooling capacity	kW	0,52	0,69	0,96	0,97	1,30	1,61	1,13	1,59	2,00
Water flow rate system side	l/h	122	153	206	220	289	349	286	394	487
Pressure drop system side	kPa	2	3	5	6	8	11	7	13	19
Fan										
Type	type					Centrifugal				
Fan motor	type					Inverter				
Number	no.		1			2			2	
Air flow rate	m^3/h	110	160	240	190	270	350	240	350	460
Input power	W	23	25	32	24	27	35	30	35	42
Signal 0-10V	%	38	56	83	49	70	90	48	70	90
Sound power level	dB(A)	34,0	43,0	48,0	35,0	43,0	48,0	34,0	43,0	50,0
Sound pressure level (10 m)	dB(A)	26,0	35,0	40,0	27,0	35,0	40,0	26,0	33,0	42,0
Finned pack heat exchanger										
Water content	l		0,4			0,6			0,8	
Diametre hydraulic fittings										
Main heat exchanger	Ø					1/2"				
Power supply										
Power supply						230V~50Hz				

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT

DIMENSIONS



Size			17	27	37
Dimensions and weights					
A	C,PC,S	mm	513	513	513
B	C,PC,S	mm	750	980	1200
C	C,PC,S	mm	173	173	173
D	C,PC,S	mm	93	93	93
Empty weight	C,PC	kg	13	18	20
	S	kg	13	17	20
Dimensions and weights for transport					
H	C,PC,S	mm	275	275	275
L	C,PC,S	mm	820	1050	1270
P	C,PC,S	mm	590	590	590
Weight for transport	C,PC	kg	15,0	19,5	23,0
	S	kg	14,5	19,0	22,5

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Omnia Radiant

Fan coils with radiant panel for residential use

- Low temperature radiation *
- Ventilated heating
- Cooling - dehumidification
- Energy saving
- Low operating temperature

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

*** Radiant technology under licence.**

Omnia Radiant and Omnia Radiant Plus Aermec innovative solutions. In this particular worldwide market evolution, we are pleased to present to you OMNIA Radiant, which represents the innovation of the OMNIA AERMEC series, fan coils especially designed for residential comfort.

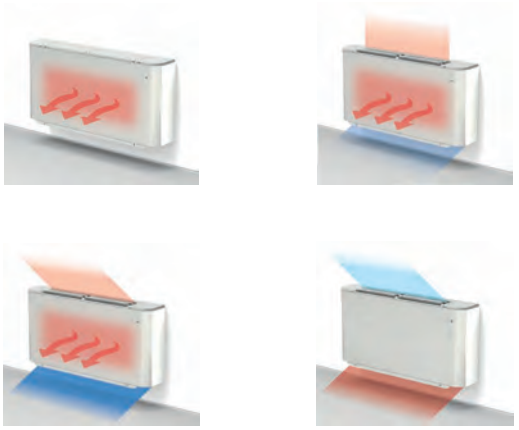
OMNIA Radiant inherits all the advantages of the OMNIA UL series, and is characterized by the introduction of the frontal plate for radiant heating.

OMNIA Radiant Plus is provided with the DC Brushless electric engine, equipped with the latest Inverter technology, granting the highest energy efficiency and able to regulate the air flow through the continuous fan speed modulation. This allows to achieve up to 60% in energy saving when compared to the traditional On-Off fan system, in both air conditioning and heating.

OMNIA Radiant and Radiant Plus offer the following advantages when compared to the traditional systems:

— The radiant plate combination – the finned coil allows the best winter comfort with the lower energy consumption because it provides heating with lower water temperature: only 45°C against the about 65°C needed for the traditional radiator. This not only increases the comfort for the user, but also significantly increases the overall efficiency in case of heat pumps usage;
— The fan system allows to quickly reach the desired temperature, meeting the requirement of a fast start-up;
— The unit can be combined other than the boiler, also to energy saving heat pumps: air to water, water to water and geothermic type;
— During summer Omnia Radiant and Radiant Plus provide air conditioning and dehumidification in a fast and efficient way in every room.

THE FOUR DIFFERENT WORKING MODES OF OMNIA RADIANT ANNUAL FUNCTIONING



Radiant

Heating through radiation, comfortable and noiseless, is granted by the radiant plate placed on the front of the fan coil cover; if necessary, the triple-fins delivery head can be closed to increases the heating of the plate, thus maximizing the radiant effect.

Radiant + Natural Convection

With the triple-fins open, heating through natural convection, obtained thanks to the bigger coil exchange surface, is added to the radiant heating. As for the radiant-only mode (see above), the fan groups are in off mode. This results in acoustic comfort and energy saving.

Radiant + Forced Convection

The electronic regulation, precise and reliable, continuously compares the effective indoor temperature with the desired temperature: whenever the difference between the two should prove to be too high (e.g. during the heating system start-up) the software will lead the fan system start-up.

Start-up is fast and efficient and grants significant energy savings especially in rooms that are occasionally used.

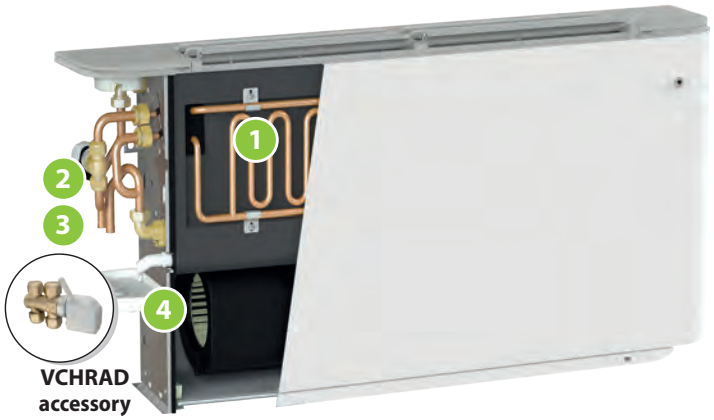
Omnia Radiant during summer provides air conditioning and dehumidification

Forced Convection

During summer, Omnia Radiant and Radiant Plus provide air conditioning and dehumidification for each room of the house in a fast and efficient way. Efficiency and quietness benefit from the quality that has always characterized the Omnia series.

FEATURES

1. Radiant plate
2. Switching valve
3. Water probe
4. Condensate storage container, hydraulic hoses



OMNIA Radiant (UL_R) standard features:

— Radiant plate
— Centrifugal fan
— Three-speed cross flow fan
— Condensate storage container, hydraulic hoses
— Two way valve
— Water temperature probe
— VMF-thermostat for asynchronous motor
— Compatibility with VMF system

OMNIA Radiant (UL_RI) standard features:

— Radiant plate
— Centrifugal fan
— Electric DC Brushless motor with Inverter
— Condensate storage container, hydraulic hoses
— Two way valve
— Water temperature probe
— VMF thermostat for DC Brushless motor
— Compatibility with VMF system

Ventilation group

Thanks to special centrifugal fans, Omnia Radiant fan coils are incredibly silent, making them the best buy when it comes to acoustic comfort, given the total lack of peak noise.

"The heating by radiation at top speed ensures total silence regime"

The fan blades on the Omnia Radiant are easy to clean. As a matter of fact, the new versions now offer the possibility of opening the worm screw of the fan (the casing that encloses the blades) to perform routine cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The heat exchanger is not reversible.*

ACCESSORIES

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.

DI24CP: Complete flush-mounted interface plate with support for DI24, Vimar brand, Arké series, graphite gray color.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-E6: Wall user interface.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC sys-

tem. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.
For compatibility of the VMF-E6 with sizes 27R-37R contact the office.

Common accessories

AMP: Wall mounting kit
GU: Intake grid covers the front space between the ornamental feet and does not interfere with the filter.
PCU: Sheet metal panel closing the rear of the unit.
ZU1: Pair of stylish and structural feet.
VCHRAD: Kit consisting of motor-driven 3-way valve copper couplings and pipes.

ACCESSORIES COMPATIBILITY

VMF system

Accessory	UL27R	UL27RI	UL37R	UL37RI
DI24	•	•	•	•
DI24CP	•	•	•	•
VMF-E4DX	•	•	•	•
VMF-E4X	•	•	•	•
VMF-E6		•		•
VMHI	•	•	•	•

3 way valve kit

Accessory	UL27R	UL27RI	UL37R	UL37RI
VCHRAD	•	•	•	•

Accessory	UL27R	UL27RI	UL37R	UL37RI
PCU27	•	•		
PCU37			•	•

Intake grids

Accessory	UL27R	UL27RI	UL37R	UL37RI
GU27	•	•		
GU37			•	•

Wall mounting kit

Accessory	UL27R	UL27RI	UL37R	UL37RI
AMP10	•	•	•	•

Pair of stylish structural feet

Accessory	UL27R	UL27RI	UL37R	UL37RI
ZU1	•	•	•	•

PERFORMANCE SPECIFICATIONS

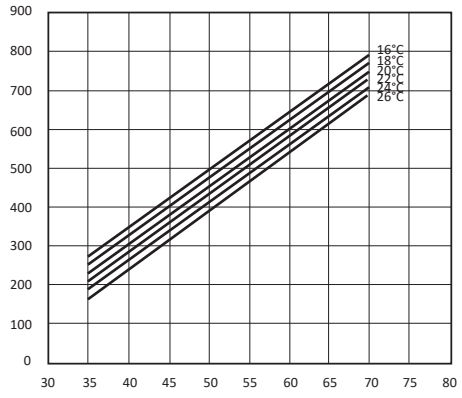
2-pipe

		UL27R			UL27RI			UL37R			UL37RI		
		1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performances													
Heating capacity (70 °C) (1)	kW	2,89	3,83	4,62	2,89	3,83	4,62	3,53	4,87	5,94	3,53	4,87	5,94
Heating capacity (50 °C) (2)	kW	2,75	2,75	2,75	2,75	2,75	2,75	3,54	3,54	3,54	3,54	3,54	3,54
Water flow rate system side	l/h	397	397	397	397	397	397	511	511	511	511	511	511
Pressure drop system side	kPa	17	17	17	17	17	17	21	21	21	21	21	21
Static heating power (70 °C) (3)	kW	0,65	0,65	0,65	0,65	0,65	0,65	0,75	0,75	0,75	0,75	0,75	0,75
Static heating power (50 °C) (4)	kW	0,39	0,39	0,39	0,39	0,39	0,39	0,45	0,45	0,45	0,45	0,45	0,45
Static heating power (35 °C) (5)	kW	0,20	0,20	0,20	0,20	0,20	0,20	0,23	0,23	0,23	0,23	0,23	0,23
Cooling performance 7 °C / 12 °C (6)													
Cooling capacity	kW	1,42	1,78	2,03	1,42	1,78	2,03	1,73	2,31	2,83	1,73	2,31	2,83
Sensible cooling capacity	kW	1,05	1,37	1,64	1,05	1,37	1,64	1,28	1,79	2,04	1,28	1,79	2,04
Water flow rate system side	l/h	349	349	349	349	349	349	487	487	487	487	487	487
Pressure drop system side	kPa	18	18	18	18	18	18	22	22	22	22	22	22
Fan													
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Inverter			Asynchronous			Inverter		
Number	no.	2			2			2			2		
Air flow rate	m^3/h	190	270	350	190	270	350	240	350	460	240	350	460
Fan coil sound data (7)													
Sound power level	dB(A)	35,0	43,0	48,0	35,0	43,0	48,0	34,0	43,0	50,0	34,0	43,0	50,0
Sound pressure level	dB(A)	27,0	35,0	40,0	27,0	35,0	40,0	26,0	33,0	40,0	26,0	33,0	40,0
Fan													
Input power	W	35	35	35	12	12	12	42	42	42	16	16	16
Electrical wiring		V1	V2	V1	-	-	-	V1	V2	V3	-	-	-
Signal 0-10V	%	-	-	-	5	7	9	-	-	-	5	7	9
Diametre hydraulic fittings													
Main heat exchanger	Ø	1/2"			1/2"			1/2"			1/2"		
Finned pack heat exchanger													
Water content main heat exchanger	l	0,8			0,8			1,1			1,1		
Power supply													
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

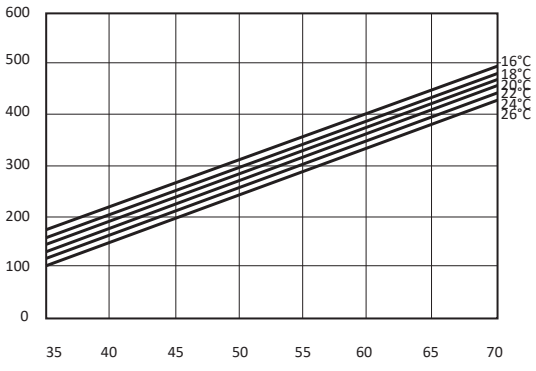
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air 20 °C b.s.; Water (in) 50 °C; Water flow rate as in cooling mode (EUROVENT)
(3) Radiant power + natural convection; Hot water (in) 70 °C (water flow same as in heating cycle)
(4) Radiant power + natural convection.; Hot water (in/*) 50°C/*°C (water flow same as in heating cycle)
(5) Radiant power + natural convection; Hot water (in/*) 35°C/*°C (water flow same as in heating cycle)
(6) Room air temperature 27°C d.b./19°C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT
(7) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

HEATING CAPACITY WITH FAN OFF

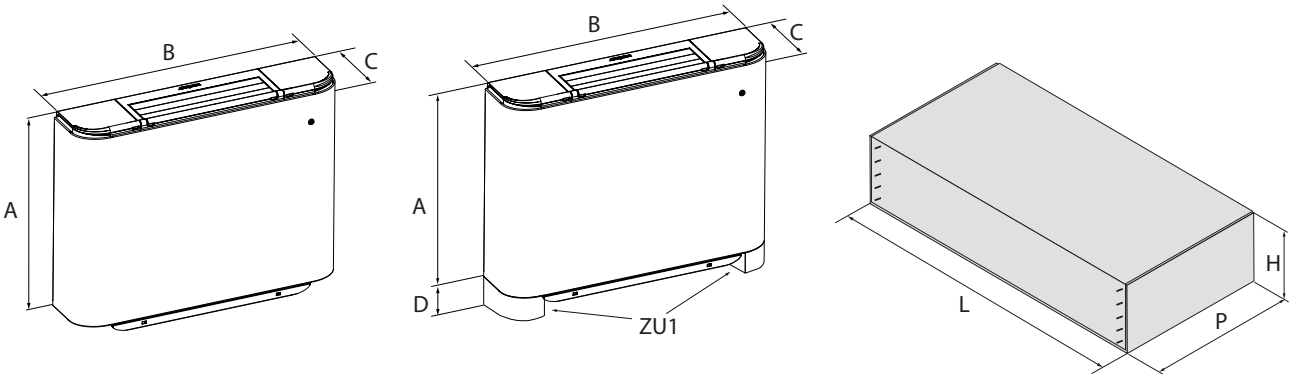
UL 37R - UL37RI



UL 27R - UL27RI



DIMENSIONS



		UL27R	UL27RI	UL37R	UL37RI
Dimensions and weights					
A	mm	513	513	513	513
B	mm	980	980	1200	1200
C	mm	173	173	173	173
D	mm	93	93	93	93
Empty weight	kg	20	20	24	24
Dimensions and weights for transport					
H	mm	275	275	275	275
L	mm	1050	1050	1270	1270
P	mm	590	590	590	590
Weight for transport	kg	22,0	22,0	27,0	27,0

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Omnia ULSI_B

Vertical wall-mounting or free-standing installation

- **Compact dimensions, thickness 130 mm**
- **Low operating temperature**
- **Cooling, heating, and dehumidification**

DESCRIPTION

The Omnia Slim fan coils have been designed to meet the need to combine the typical features of a classic radiator - namely reduced depth and quiet operation - with the ability of a fan coil to air-condition rooms throughout the year.
They can be installed on any system with a 2-pipe system and it fits with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

VERSIONS

ULSI_B Inverter without control board
ULSI_BR Inverter without control with hydraulic connections on the right

FEATURES

Case

Structure in sheet metal, 12/10 and 8/10 mm.
Front cover in 8/10 mm galvanised sheet metal with RAL9003 white epoxy powder coating and thermal-acoustic insulation of 13 mm thickness.

Ventilation group

These fan coils have extremely silent ventilation by using special tangential fans, which guarantees maximum acoustic comfort.
The electric motor is a new generation Brushless with built-in driver and IP66 protection rating, continuously variable speed

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Control

Both versions are supplied without on-board control, however, various thermostats or control panels are available as accessories to be installed on board the fan coil unit or on the wall.

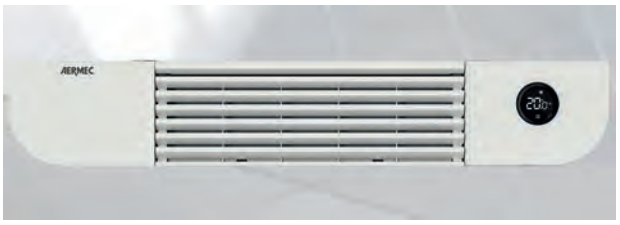
ACCESSORIES

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
DSKTS: Thermostat with an easy-to-read light display that provides clear information on room temperature, programming settings and more. Thanks to the ergonomic ring nut switch, adjusting the desired temperature is very easy. The knob allows precise and immediate adjustments, offering a classic but highly effective control mode. Not only functional, but also aesthetically pleasing. Our thermostat features a modern, compact design that fits perfectly in any environment, adding a touch of style to your home or office.
EC-DSKT: Electric cable for use with DSKT control panel. Mandatory accessory when combined with ULSI_BR versions.
EC-TXBI: Electric cable for use with TXBI control panel. Mandatory accessory when combined with ULSI_BR versions.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
TXBIS: Thermostat installation on the fan coil.

ULSI_B + DSKTS



AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
KITSV: Kit for installing the VMF-E19/19I.
VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E2S: User interface on the fan coil, with two selectors - one for temperature and the other for speed control. For operation, the installation of either the VMF-E19 or VMF-E19I accessory is required.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

BCSV: Condensate collection tray, for valve kit.
DSC7: Condensate drainage device.
VCS2: 2-way motorised valve kit without insulating shell. The kit is made up of a valve, actuator and relative hydraulic fittings.
VCS3: 3-way motorised valve kit without insulating shell for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings.
ZXS: Pair of stylish and structural feet.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	10	20	30	40	50
AER503IR (1)	ULSI_B,ULSI_BR	•	•	•	•	•
DSKTS (2)	ULSI_B,ULSI_BR	•	•	•	•	•
EC-DSKT	ULSI_BR	•	•	•	•	•
EC-TXBI	ULSI_BR	•	•	•	•	•
PRO503	ULSI_B,ULSI_BR	•	•	•	•	•
SA5 (3)	ULSI_B,ULSI_BR	•	•	•	•	•
SW5 (3)	ULSI_B,ULSI_BR	•	•	•	•	•
TX (4)	ULSI_B,ULSI_BR	•	•	•	•	•
TXBIS (5)	ULSI_B,ULSI_BR	•	•	•	•	•

(1) Wall-mount installation.
(2) For ULSI_BR units add the mandatory EC_DSKT accessory.
(3) Probe for AER503IR-TX thermostats, if fitted.
(4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.
(5) For ULSI_BR units add the mandatory ULSI_BR accessory.

VMF system

Model	Ver	10	20	30	40	50
DI24	ULSI_B,ULSI_BR	•	•	•	•	•
KITSV (1)	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-E19I (2)	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-E2S (3)	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-E3	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-E4X	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-IR	ULSI_B,ULSI_BR	•	•	•	•	•

Model	Ver	10	20	30	40	50
VMHI	ULSI_B,ULSI_BR	•	•	•	•	•

(1) Mandatory when the VMF-E19/19I thermostat is required.
(2) Mandatory accessory.
(3) Installation on the fan coil.

3 way valve kit

Model	Ver	10	20	30	40	50
VCS3 (1)	ULSI_B,ULSI_BR	•	•	•	•	•

(1) Power supply 230V - Hydraulic connections Ø 1/2"

2 way valve kit

Model	Ver	10	20	30	40	50
VCS2 (1)	ULSI_B,ULSI_BR	•	•	•	•	•

(1) Power supply 230V - Hydraulic connections Ø 1/2"

Condensate drip

Model	Ver	10	20	30	40	50
BCSV	ULSI_B,ULSI_BR	•	•	•	•	•

Condensate drainage

Model	Ver	10	20	30	40	50
DSC7	ULSI_B,ULSI_BR	•	•	•	•	•

Pair of stylish structural feet

Model	Ver	10	20	30	40	50
ZXS	ULSI_B,ULSI_BR	•	•	•	•	•

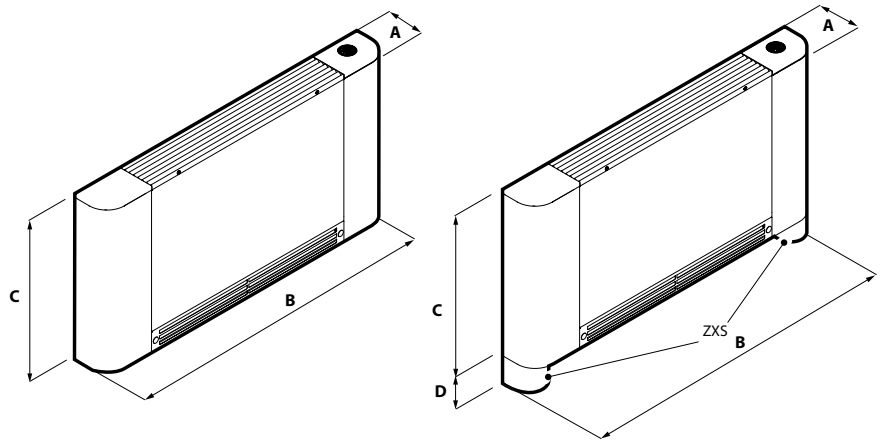
PERFORMANCE SPECIFICATIONS

2-pipe

		ULSI10B			ULSI20B			ULSI30B			ULSI40B			ULSI50B		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																
Heating capacity	kW	0,70	1,14	1,53	1,27	1,88	2,86	1,88	2,91	3,72	2,32	3,55	4,77	2,49	3,85	5,73
Water flow rate system side	l/h	61	100	134	111	165	251	165	254	326	203	311	418	218	337	501
Pressure drop system side	kPa	2	4	7	5	10	20	6	14	22	6	13	22	5	10	21
Heating performance 45 °C / 40 °C (2)																
Heating capacity	kW	0,35	0,57	0,76	0,63	0,94	1,43	0,94	1,45	1,85	1,15	1,77	2,38	1,24	1,92	2,85
Water flow rate system side	l/h	61	99	132	110	163	248	163	251	322	201	307	413	216	333	495
Pressure drop system side	kPa	2	4	7	5	9	20	6	14	22	6	13	22	5	10	21
Cooling performance 7 °C / 12 °C																
Cooling capacity	kW	0,37	0,60	0,80	0,67	0,98	1,50	0,98	1,52	1,95	1,22	1,86	2,50	1,30	2,02	3,00
Sensible cooling capacity	kW	0,25	0,42	0,57	0,46	0,68	1,08	0,68	1,06	1,39	0,84	1,30	1,79	0,90	1,40	2,15
Water flow rate system side	l/h	63	103	137	114	169	257	169	261	335	209	319	429	224	346	515
Pressure drop system side	kPa	3	6	10	7	13	28	9	19	30	9	18	30	7	14	29
Fan																
Type	type	Tangential														
Fan motor	type	Inverter														
Number	no.		1			1			1			2			2	
Air flow rate	m^3/h	46	82	134	78	128	241	109	188	301	126	218	370	127	225	427
Input power	W	5	8	10	6	9	15	7	12	17	7	14	20	7	13	21
Signal 0-10V	%	40	70	90	40	70	90	40	70	90	40	70	90	40	70	90
Fan coil sound data (3)																
Sound power level	dB(A)	39,0	47,0	51,0	39,0	47,0	51,0	40,0	48,0	53,0	41,0	49,0	54,0	42,0	52,0	56,0
Sound pressure level	dB(A)	31,0	39,0	43,0	31,0	39,0	43,0	32,0	40,0	45,0	33,0	41,0	46,0	34,0	44,0	48,0
Finned pack heat exchanger																
Water content main heat exchanger	l		0,5			0,9			1,2			1,5			1,8	
Diametre hydraulic fittings																
Main heat exchanger	Ø	1/2"														
Power supply																
Power supply		230V~50Hz														

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



Size			10	20	30	40	50
Dimensions and weights							
A	ULSI_B,ULSI_BR	mm	130	130	130	130	130
B	ULSI_B,ULSI_BR	mm	745	940	1134	1328	1524
C	ULSI_B,ULSI_BR	mm	580	580	580	580	580
D	ULSI_B,ULSI_BR	mm	80	80	80	80	80
Empty weight	ULSI_B,ULSI_BR	kg	11	13	15	19	17

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FCY

Fan coil unit for ducted installations

- **Plug and play installation only in horizontal**
- **Reduced dimensions**
- **Inspectable ventilation group**

DESCRIPTION

Monobloc duct type fan coils for heating and/or cooling small and medium-sized environments for civil and commercial use.
They were designed and built for flush horizontal installation in any type of 2/4 pipe system and in combination with any heat generator, also at low temperatures.
Thanks to the availability of various versions and configurations, with a standard or oversized coil, it is easy to select the optimal solution for any requirement.

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Their characteristics permit energy savings compared to conventional fans.
They are statically and dynamically balanced and directly coupled to the motor shaft.
The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.
The plastic augers are extractable for easy and efficient cleaning.

Heat exchanger coil

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.

■ *Reversibility of the water connections during installation only for units with a main standard or oversized coil or standard with BV accessory. Not reversible in all other configurations.*

Air filter

Where present, **the Coarse 25% Class according to ISO16890 (G2 according to EN779)** air filter, which is easy to remove and clean.

Condensate drip

In addition to the internal tray, all units are equipped with a **configurable external condensate collection tray** during installation.

Control

The unit's electrical box is reversible, with the option of mounting it also on the same side of the water connections.
The standard equipment includes a single 10-pin control board as an interface for the electrical connections, the preparation for the VMF series thermostat fastener and the included supply of a DIN guide for the installation of a third-party control.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field		Description
1,2,3		**FCY**
4		**Size** 2, 3, 4, 5, 6, 7
5		**main heat exchanger (1)**
	0	Standard
	5	Oversized
6		**Secondary heat exchanger**
	0	Without coil
	1	Standard (2)
7		**Version**
	C	Compact
	U	Universal (3)
8		**Connections**
	D	Water connections and electrical panel on the right
	G	Water connections and electrical panel on the left
	L	Hydraulic connections on the left and electric connections on the opposite side
	R	Hydraulic connections on the right and electric connections on the opposite side
9		**Options**
	H	Electric heater (500W) (4)
	P	With the photocatalytic device (4)
	X	No present
10		**Filter**
	F	With air filter (5)
	G	On the GKY accessory (6)
	X	No present

(1) Reversibility of the water connections during installation only for units with a main standard or oversized coil. They are not reversible for units with a secondary coil.
(2) Only for the standard main coil
(3) Only for sizes from 2 to 5
(4) Options "P and H" are available only in units for 2-pipe systems.
(5) The DFA kit must mandatorily be installed on the units The DFA kit must mandatorily be installed on the units in option 'F'.
(6) Only for sizes 2 and 3, without secondary heat exchanger (0), in U version, D connections, without RX or photocatalytic device (X).

SIZE AVAILABLE FOR VERSION

C version

Size	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
Versions produced (by size)																		
Versions available (by size)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

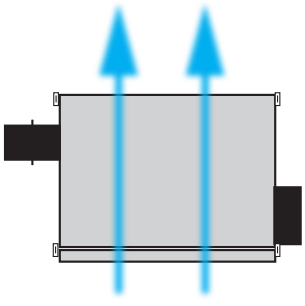
Version U

Size	200	201	250	300	301	350	400	401	450	500	501	550
Versions produced (by size)												
Versions available (by size)	•	•	•	•	•	•	•	•	•	•	•	•

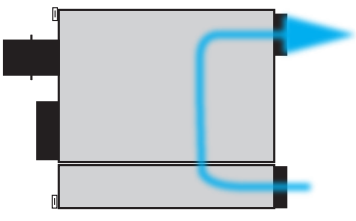
INSTALLATION VERSIONS AND EXAMPLES

C: Compact version.
Compact structure with opposed intake and delivery lines, for an "H"-shaped configuration.
The unit is provided without openings and without flanges, which can be purchased separately as an accessory.
The delivery and intake part of the structure is designed to house flanges of Ø 200 mm (or Ø 160 mm) and one of the intake flanges can be replaced by a Ø 125 or 100 mm flange for the intake of outside air.
On the side, it can house Ø 125 or 100 mm flanges for the intake of outside air for delivery.

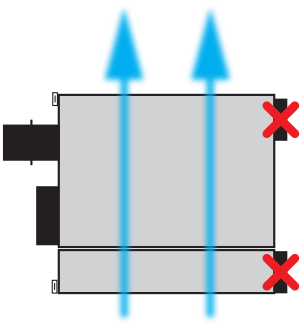
U: Universal version.
Structure for the "U" configuration with intake and delivery on the same side, opposite of the side with the water connections and the electrical box. The delivery and intake part of the structure is designed to house flanges of Ø 200 mm (or Ø 160 mm) and one of the intake or delivery flanges can be replaced by a Ø 125 or 100 mm flange for the intake of outside air.
This version is called universal because it guarantees the possible installations permitted by the C version and adds additional possibilities.



Version C:
Conÿguration H

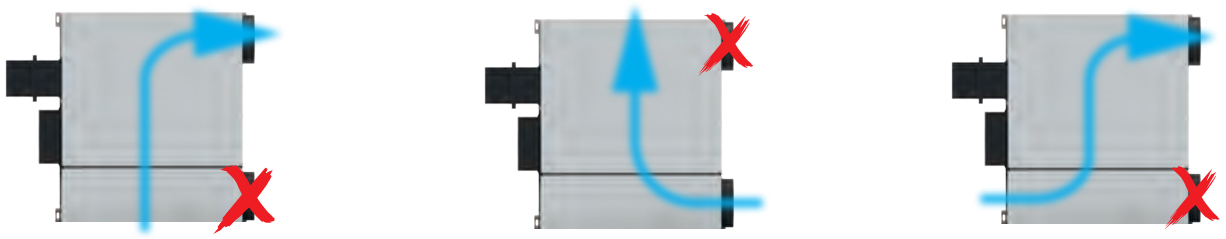


Version U:
Conÿguration U



Version U:
Conÿguration H

POSSIBLE ALTERNATIVE CONFIGURATIONS OF THE U VERSION

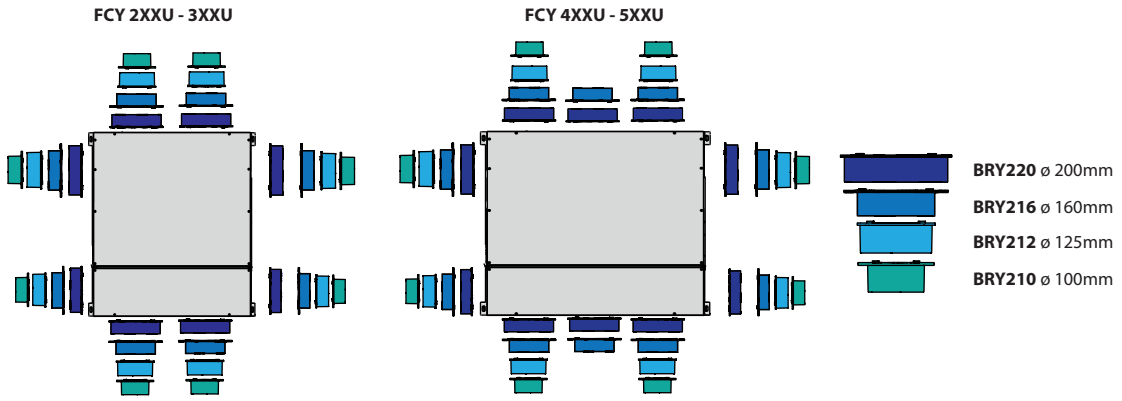


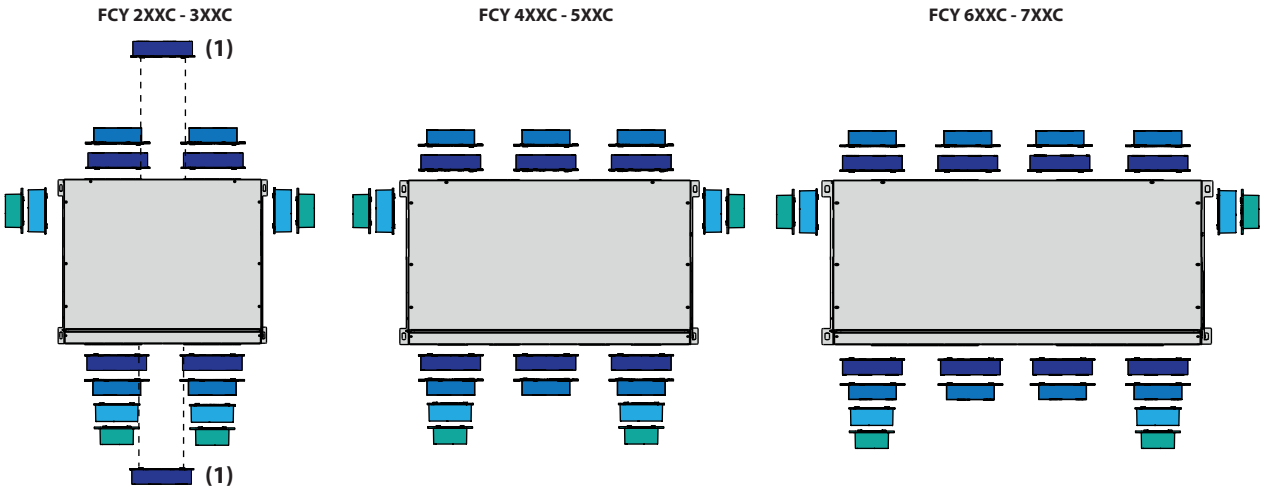
The performance data for the configurations shown here are equal to those for the U version in the U configuration.

POSSIBLE POSITIONS FOR THE INSTALLATION OF THE BRY ACCESSORIES

In every unit it is possible to use a maximum of one flange accessory for the intake of outside air (BRY210 or BRY212). The number and position of the preparations for the installation of the BRY accessories varies based on the unit size and version.

The standard **C version unit is supplied without flanges**, which can be purchased separately as an accessory.





1 There is a central preparation for the installation of an accessory BRY220 as an alternative to using the two more external preparations.

For the C version: it is necessary to use a number of recirculation air preparations **at least equal to the maximum number possible for the size selected less 1.**
Example: for FCY6xxC it is necessary to open at least 3 flange preparations for intake recirculation air and 3 flange preparations for delivery recirculation air (= maximum number - 1).

If the number of intake/delivery flanges used is less than the maximum possible for the considered size, their diameter must be 200 mm (BRY220).
For more information about the possible configurations for both versions, refer to the unit's selection software.

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.
SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19Y: Thermostat to be fixed on the side of the fan coil, fitted as standard with an air and water probe. Depending on the option chosen (P - X - H), VMF-E19Y must be completed with the mandatory electrical completion unit accessory (VMF-YCC, VMF-YCCH or VMF-YCCK / VMF-YICCK).
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMF-YCC: Electric on/off completion unit for the VMF-E19Y accessory (mandatory for the unit with options P and X).
VMF-YCCH: Electric on/off completion unit for the VMF-E19Y accessory (mandatory for the unit with option H).
VMF-YCCK: Electric on/off completion unit for the VMF-E19Y accessory, mandatory for FCY units with GKY accessory.

Valves for main coil

VCY41 - 42 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left hydraulic connections.
VCYD for main and secondary coil: The 2-way motorised valve kit for the primary or secondary coil or an additional optional heat only coil. The kit consists of a valve, the actuator and the corresponding hydraulic fittings. It can be installed both on fan coils with right-hand and left-hand connections.
VDP15HF: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 230 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.
VDP15HF24: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 24 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.
VDP15HFM: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 24 V powered actuator with modulating function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

Valves for secondary coil

VCY44 - for secondary heat exchanger: 3-way motorized valve kit for hot only coil. The kit consists of a valve, actuator and relative hydraulic fittings, it is suitable for installation on both fan coils with hydraulic connections on the right and left.
VCYD for main and secondary coil: The 2-way motorised valve kit for the primary or secondary coil or an additional optional heat only coil. The kit consists of a valve, the actuator and the corresponding hydraulic fittings. It can be installed both on fan coils with right-hand and left-hand connections.

Additional hot water coil.

BV: Hot water heat exchanger with 1 row.

Valve support kit

KITVPI: Main coil VDP valve support kit. The kit consists of a bracket for supporting the valve and the corresponding hydraulic fittings.
KITVPI12H: VDP valve support kit for the secondary coil. The kit consists of a bracket for supporting the valve and the corresponding hydraulic fittings.

Installation accessories

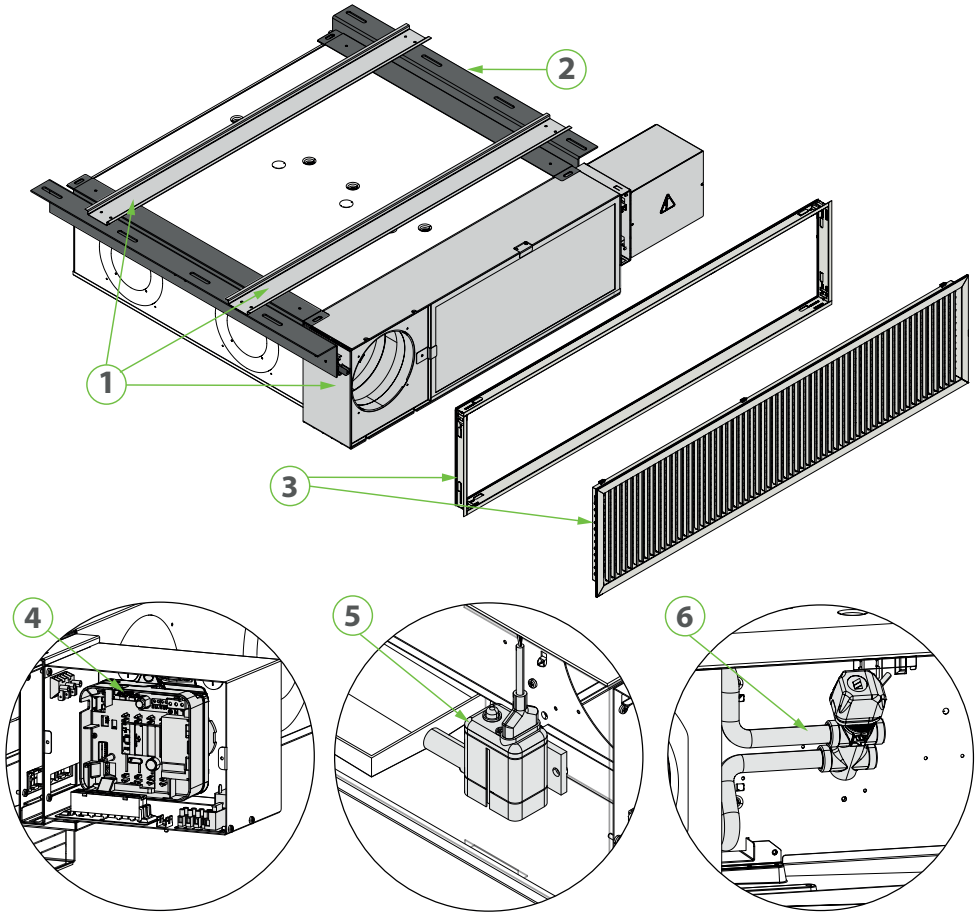
BDP: 200 mm plug.
BRY: Flange with hydraulic "spigot" connection.
GMYC: Plate flange that makes it possible to install the accessory GM either in the intake section or in the delivery section. The accessory is comprised of a plate flange with gasket and 4 screws to fasten it to the unit.
AFY: the kit is comprised of a Coarse 25% class filter according to ISO16890 (G2 according to EN779) and four fastening brackets to insert in the grille GM17. To be used together with fan coils supplied without a filter installed in unit "X".

GMYU: Plate flange that makes it possible to install the accessory GM17 either in the intake section or in the delivery section. The accessory is comprised of a plate flange with gasket and 4 screws to fasten it to the unit.
DSC: Condensate drainage device.
DAYKIT: Air deflector for U versions. To be installed in the delivery plenum, on the side opposite the air outlet, to facilitate the flow towards the delivery opening.
AMPY: Additional brackets for ceiling mount. Only for "U" version.

Accessories in multiple packages

DFA: Size of filter halved on the short side. The kit is comprised of two filters with a length equal to the standard filter and with half the height. This facilitates filter cleaning and/or replacement operations if there is a reduced space for vertical extraction. 20 piece package.
PPB: Protection for flanges to be used during installation to prevent dust from entering the unit before connecting the ducts. To be removed when making the connection. 100 piece package.
CHR12: Hydraulic connection kit for Ø 1/2" two-way valves, with soft coil side O-ring seal and with a flat plate and system side gasket, which can also be used for installing flat seal two-way valves. 50 piece package.
CHR34: Hydraulic connection kit for Ø 3/4" two-way valves, with soft coil side O-ring seal and with a flat plate and system side gasket, which can also be used for installing flat seal two-way valves. 30 piece package.
FLK60: Filter locking kit, allows the filter to be locked and unlocked from below instead of from the side. Pack of 60 pcs.

New GKY equipped flange



1 GKY
2 GKY2GT- GKY3GT (mandatory accessory)
3 GKYG (mandatory accessory)
4 VMF-E19Y + VMF-YICCK (FCYI) / VMF-YCCK (FCY) (optional accessory)
5 DSC6 (optional accessory)
6 2 pipes with 2/3-way valve (optional accessory)

GKY: Extractable galvanised sheet metal equipped flange with electric box, allows for routine and extraordinary maintenance without the need for an inspection hatch underneath. The accessory is only compatible for units in UDXG configuration and recirculation air openings on the right side.
GKY2GT: Accessory mandatory for the installation of the GKY plenum, consisting of telescopic guides compatible with size 2.
GKY3GT: Accessory mandatory for the installation of the GKY plenum, consisting of telescopic guides compatible with size 3.
GKYG: grille kit in RAL9010 colour with counterframe, mandatory accessory compatible with GKY equipped flange accessory.

Extractable equipped flange

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
GKY	U	•		•	•		•												

Telescopic guides

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
GKY2GT (1)	U	•		•															

(1) Accessory mandatory for the installation of the GKY plenum

Telescopic guides

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
GKY3GT (1)	U				•		•												

(1) Accessory mandatory for the installation of the GKY plenum

Grid kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
GKYG	U	•		•	•		•												

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
AER503IR (1)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
SA5 (2)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
SIT3 (3)	C,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIT5 (4)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
SW3 (2)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
SW5 (2)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
TX (5)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
(4) Probe for AER503IR-TX thermostats, if fitted.
(5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
DI24	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
VMF-E19Y	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
VMF-E3	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
VMF-E4DX	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
VMF-E4X	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
VMF-IR	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
VMF-SW	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
VMF-SW1	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
VMF-YCC	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
VMF-YCCH	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
VMF-YCCK	U	•		•	•		•												

Additional heat only coil for only option "X" (without an electric heater and without a photocatalytic device)

Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
C	BV122	-	-	BV132	-	-	BV142	-	-	BV142	-	-	BVZ800	-	-	BVZ800	-	-
U	BV122	-	-	BV132	-	-	BV142	-	-	BV142	-	-	-	-	-	-	-	-

Combined adjustment and balancing valve

	200	201	250	300	301	350	400	401	450
Main coil	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM
Secondary coil	-	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-
Additional coil "BV"	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-	-

	500	501	550	600	601	650	700	701	750
Main coil	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM
Secondary coil	-	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-
Additional coil "BV"	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-	-

Valves combinations for main and secondary coil

3-way valve kit - main and secondary coil or accessory BV coil

	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
Main coil	VCY41 VCY4124	VCY41 VCY4124	VCY41 VCY4124	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224
Secondary coil	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-
Additional coil "BV"	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-

2-way valve kit - main and secondary coil or accessory BV coil

	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
Main coil	VCYD1 VCYD124	VCYD1 VCYD124	VCYD1 VCYD124	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224	VCYD2 VCYD224
Secondary coil	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-
Additional coil "BV"	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-

Valve support kit

Main coil VDP valve support kit.

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
KITVPI12 (1)	C,U	•	•	•															
KITVPI34 (2)	C				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•						

(1) Connections Ø 1/2"
(2) Connections Ø 3/4"

Secondary coil VDP valve support kit.

	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650
Main coil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Secondary coil	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-
Additional coil "BV"	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-

	700	701	750
Main coil	-	-	-
Secondary coil	-	KITVPI12H	-
Additional coil "BV"	KITVPI12H	-	-

Connections ø 1/2"

Installation accessories

Plastic caps

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
BDP200	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						

Flange

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
BRY210 (1)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
BRY212 (2)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
BRY216 (3)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						
BRY220 (4)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						

(1) Ø 100 mm
(2) Ø 125 mm
(3) Ø 160 mm
(4) Ø 200 mm

Flange for the installation of the delivery grille GM

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
GMY200C (1)	C	•	•	•															
GMY300C (1)	C				•	•	•												
GMY400C (1)	C							•	•	•	•	•	•						
GMY600C (1)	C													•	•	•	•	•	•

(1) only for "C" version.

Flange for the installation of the grille GM17

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
GMYU (1)	U	•	•	•	•	•	•	•	•	•	•	•	•						

(1) Only for "U" version with connections "G and D".

Coarse 25% class air filter kit according to ISO16890 (G2 according to EN779)

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
AFY100 (1)	U	•	•	•	•	•	•	•	•	•	•	•	•						

(1) To be used with fan coils supplied without a filter installed in unit "X" and in association with GM17 and GMYU.

Air deflector

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
DAYKIT	U	•	•	•	•	•	•	•	•	•	•	•	•						

Brackets for ceiling mount.

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
AMPY (1)	U	•	•	•	•	•	•	•	•	•	•	•	•						

(1) Only for "U" version.

Condensate discharge device kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
DSC6 (1)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						

(1) Only for "L and R" connections.

Delivery grille

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
GM17	U	•	•	•	•	•	•	•	•	•	•	•	•						
GM22	C	•	•	•															
GM32	C				•	•	•												
GM42	C							•	•	•	•	•	•						
GM62	C													•	•	•	•	•	•

Accessories in multiple packages

Hydraulic connection kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
CHR12 (1)	C,U	•	•	•															
CHR34 (2)	C				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•						

(1) Hydraulic connections Ø 1/2"
(2) Hydraulic connections Ø 3/4"

Half-size filter kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
DFA2	C,U	•	•	•															
DFA3	C,U				•	•	•												
DFA5	C,U							•	•	•	•	•	•						
DFA7	C													•	•	•	•	•	•

Protection for flange

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
PPB	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•						

PERFORMANCE DATA - FCY_C AND FCY_U (CONFIGURATION OF THE H NOZZLES) - 2 PIPES

2-pipe

		FCY200C			FCY250C			FCY300C			FCY350C			FCY400C			FCY450C		
		2	4	6	2	4	6	1	4	6	1	4	6	1	3	6	1	3	6
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	2,11	3,00	3,32	2,29	3,24	3,60	3,50	5,03	5,45	3,80	5,59	6,10	4,49	6,02	6,74	4,79	6,62	7,40
Water flow rate system side	l/h	182	258	285	197	179	310	301	433	469	327	481	524	386	517	580	412	569	637
Pressure drop system side	kPa	7	12	15	9	16	19	8	15	18	9	18	21	11	18	22	7	12	15
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,05	1,49	1,65	1,14	1,61	1,79	1,74	2,50	2,71	1,89	2,78	3,03	2,23	2,99	3,35	2,38	3,29	3,68
Water flow rate system side	l/h	160	224	248	196	277	308	299	430	466	325	478	521	383	514	576	409	566	633
Pressure drop system side	kPa	7	12	15	9	16	19	8	15	18	9	17	20	11	18	22	7	12	15
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	0,93	1,30	1,44	1,11	1,59	1,74	1,70	2,40	2,63	1,91	2,77	3,00	2,29	3,06	3,41	2,51	3,37	3,79
Sensible cooling capacity	kW	0,74	1,14	1,18	0,83	1,23	1,36	1,27	1,86	2,03	1,34	1,99	2,16	1,66	2,24	2,52	1,76	2,42	2,73
Water flow rate system side	l/h	160	224	248	191	273	299	292	413	452	328	476	516	394	526	586	432	580	652
Pressure drop system side	kPa	8	13	15	10	18	21	9	16	18	11	21	25	11	18	22	11	16	20
Fan																			
Type	type	Centrifugal																	
Fan motor	type	Asynchronous																	
Air flow rate	m^3/h	148	226	254	148	226	254	263	404	446	263	404	446	346	487	559	346	487	559
High static pressure	Pa	21	50	63	21	50	63	21	50	61	21	50	61	25	50	66	25	50	66
Sound power level (inlet + radiated)	dB(A)	41,0	56,0	59,0	41,0	56,0	59,0	39,0	51,0	54,0	39,0	51,0	54,0	44,0	54,0	55,0	44,0	54,0	55,0
Sound power level (outlet)	dB(A)	37,0	52,0	55,0	37,0	52,0	55,0	35,0	47,0	49,0	35,0	47,0	49,0	40,0	50,0	52,0	40,0	50,0	52,0
Input power	W	28	41	74	28	41	74	38	55	78	38	55	78	53	63	102	53	63	102
Finned pack heat exchanger																			
Water content	l		0,5			0,7			0,8			1,0			1,0			1,4	
Diametre hydraulic fittings																			
Main heat exchanger	Ø		1/2"			1/2"			3/4"			3/4"			3/4"			3/4"	
Power supply																			
Power supply		230V~50Hz																	

		FCY500C			FCY550C			FCY600C			FCY650C			FCY700C			FCY750C		
		1	5	6	1	5	6	1	4	7	1	4	7	2	5	7	2	5	7
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	5,27	7,22	7,59	5,81	8,25	8,67	6,86	8,55	10,00	7,63	9,72	11,51	8,77	10,10	10,52	10,02	11,65	12,09
Water flow rate system side	l/h	453	621	652	500	709	746	590	735	860	656	836	990	754	868	905	862	1002	1040
Pressure drop system side	kPa	12	21	23	10	19	21	13	20	26	15	23	31	19	25	27	12	15	16
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	2,62	3,59	3,77	2,89	4,10	4,31	3,41	4,25	4,97	3,79	4,83	5,72	4,36	5,02	5,23	4,98	5,79	6,01
Water flow rate system side	l/h	451	617	648	497	705	741	586	731	855	652	831	984	750	863	899	856	996	1034
Pressure drop system side	kPa	12	21	23	10	19	21	13	19	25	15	23	31	19	25	27	12	15	16
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	2,68	3,65	3,82	2,91	4,08	4,28	3,37	4,08	4,65	4,15	5,02	5,67	4,24	4,97	5,18	4,69	5,53	5,80
Sensible cooling capacity	kW	1,94	2,70	2,83	2,07	2,94	3,09	2,70	3,34	3,92	2,93	3,60	4,12	3,24	3,83	4,02	3,53	4,20	4,41
Water flow rate system side	l/h	461	628	657	500	702	736	580	702	800	714	863	975	729	855	891	807	951	997
Pressure drop system side	kPa	13	22	24	12	21	23	15	21	26	16	23	28	20	26	28	12	16	17
Fan																			
Type	type	Centrifugal																	
Fan motor	type	Asynchronous																	
Air flow rate	m^3/h	400	592	627	400	592	627	567	770	920	567	770	920	785	978	1050	785	978	1050
High static pressure	Pa	22	50	56	22	50	56	27	50	71	27	50	71	32	50	58	32	50	58
Sound power level (inlet + radiated)	dB(A)	45,0	55,0	57,0	45,0	55,0	57,0	46,0	56,0	61,0	46,0	56,0	61,0	54,0	60,0	62,0	54,0	60,0	62,0
Sound power level (outlet)	dB(A)	41,0	51,0	53,0	41,0	51,0	53,0	44,0	54,0	60,0	44,0	54,0	60,0	52,0	59,0	61,0	52,0	59,0	61,0
Input power	W	49	80	96	49	80	96	66	89	118	66	89	118	92	117	138	92	117	138
Finned pack heat exchanger																			
Water content	l		1,0			1,4			1,2			1,6			1,2			1,6	
Diametre hydraulic fittings																			
Main heat exchanger	Ø	3/4"																	
Power supply																			
Power supply		230V~50Hz																	

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT

Refer to the selection software for performance data related to the different configurations.

PERFORMANCE DATA FCY_C AND FCY_U (CONFIGURATION OF THE H NOZZLES) - 4 PIPES

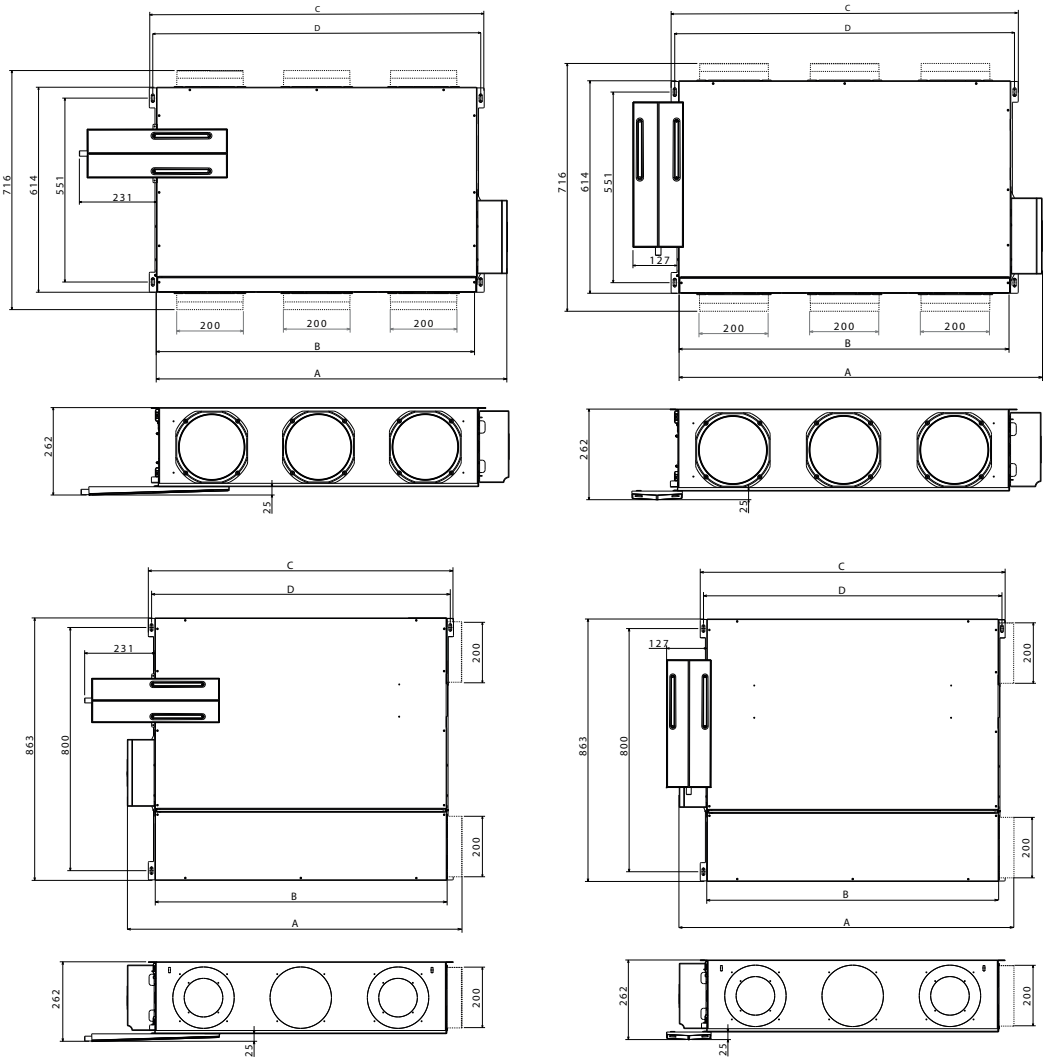
4-pipe

		FCY201C			FCY301C			FCY401C			FCY501C			FCY601C			FCY701C		
		2	4	6	1	4	6	1	3	6	1	5	6	1	4	7	2	5	7
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)																			
Heating capacity	kW	1,06	1,37	1,48	1,82	2,39	2,55	2,19	2,75	2,99	2,59	3,30	3,34	3,13	3,85	4,35	4,13	4,40	4,60
Water flow rate system side	l/h	93	120	130	159	210	223	192	240	262	226	290	301	274	336	381	361	385	403
Pressure drop system side	kPa	5	8	9	8	12	14	5	7	8	6	9	9	9	13	16	16	15	17
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	0,93	1,30	1,44	1,70	2,40	2,63	2,29	3,06	3,41	2,68	3,65	3,82	3,37	4,08	4,65	4,24	4,97	5,18
Sensible cooling capacity	kW	0,74	1,14	1,18	1,27	1,86	2,03	1,66	2,24	2,52	1,94	2,70	2,83	2,70	3,34	3,92	3,24	3,83	4,02
Water flow rate system side	l/h	160	224	248	292	413	452	394	526	586	461	628	657	580	702	800	729	855	891
Pressure drop system side	kPa	8	13	15	9	16	18	11	18	22	13	22	24	15	21	26	20	26	28
Fan																			
Type	type	Centrifugal																	
Fan motor	type	Asynchronous																	
Air flow rate	m^3/h	148	226	254	263	404	446	346	487	559	400	592	627	567	770	920	785	978	1050
High static pressure	Pa	21	50	63	21	50	61	25	50	66	22	50	56	27	50	71	32	50	58
Sound power level (inlet + radiated)	dB(A)	41,0	56,0	59,0	39,0	51,0	54,0	44,0	54,0	55,0	45,0	55,0	57,0	46,0	56,0	61,0	54,0	60,0	62,0
Sound power level (outlet)	dB(A)	37,0	52,0	55,0	35,0	47,0	49,0	40,0	50,0	52,0	41,0	51,0	53,0	44,0	54,0	60,0	52,0	59,0	61,0
Input power	W	28	41	74	38	55	78	53	63	102	49	80	96	66	89	118	92	117	138
Diametre hydraulic fittings																			
Main heat exchanger	Ø	1/2"			3/4"			3/4"			3/4"			3/4"			3/4"		
Secondary heat exchanger	Ø	1/2"																	
Power supply																			
Power supply		230V~50Hz																	

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT

Refer to the selection software for performance data related to the different configurations.

DIMENSIONS



FCY - C

Size		200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
Dimensions and weights																			
A	mm	598	598	598	829	829	829	1050	1050	1050	1050	1050	1050	1171	1171	1171	1171	1171	1171
B	mm	507	507	507	735	735	735	960	960	960	960	960	960	1080	1080	1080	1080	1080	1080
C	mm	550	550	550	781	781	781	1003	1003	1003	1003	1003	1003	1122	1122	1122	1122	1122	1122
D	mm	529	529	529	760	760	760	982	982	982	982	982	982	1100	1100	1100	1100	1100	1100
Empty weight	kg	19	20	21	23	24	26	31	32	33	31	32	33	41	43	46	41	43	46

FCY - U

Size		200	201	250	300	301	350	400	401	450	500	501	550
Dimensions and weights													
A	mm	647	647	647	878	878	878	1100	1100	1100	1100	1100	1100
B	mm	508	508	508	739	739	739	960	960	960	960	960	960
C	mm	550	550	550	781	781	781	1003	1003	1003	1003	1003	1003
D	mm	529	529	529	760	760	760	982	982	982	982	982	982
Empty weight	kg	22	23	24	26	27	29	35	36	37	35	36	37

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FCYI

Fan coil unit for ducted installations

- **Plug and play installation only in horizontal**
- **Reduced dimensions**
- **Inspectable ventilation group**

DESCRIPTION

Monobloc duct type fan coils for heating and/or cooling small and medium-sized environments for civil and commercial use.
They were designed and built for flush horizontal installation in any type of 2/4 pipe system and in combination with any heat generator, also at low temperatures.
Thanks to the availability of various versions and configurations, with a standard or oversized coil, it is easy to select the optimal solution for any requirement.

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Their characteristics permit energy savings compared to conventional fans.
They are statically and dynamically balanced and directly coupled to the motor shaft.
The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.
The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).
The plastic augers are extractable for easy and efficient cleaning.

Heat exchanger coil

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.

■ *Reversibility of the water connections during installation only for units with a main standard or oversized coil or standard with BV accessory. Not reversible in all other configurations.*

Air filter

Where present, **the Coarse 25% Class according to ISO16890 (G2 according to EN779)** air filter, which is easy to remove and clean.

Condensate drip

In addition to the internal tray, all units are equipped with a **configurable external condensate collection tray** during installation.

Control

The unit's electrical box is reversible, with the option of mounting it also on the same side of the water connections.
The standard equipment includes a single 10-pin control board as an interface for the electrical connections, the preparation for the VMF series thermostat fastener and the included supply of a DIN guide for the installation of a third-party control.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3,4	**FCYI**
5	**Size** 2, 3, 4, 5, 7
6	**main heat exchanger (1)**
0	Standard
5	Oversized
7	**Secondary heat exchanger**
0	Without coil
1	Standard (2)
8	**Version**
C	Compact
U	Universal (3)
9	**Connections**
D	Water connections and electrical panel on the right
G	Water connections and electrical panel on the left
L	Hydraulic connections on the left and electric connections on the opposite side
R	Hydraulic connections on the right and electric connections on the opposite side
10	**Options**
H	Electric heater (500W) (4)
P	With the photocatalytic device (4)
X	No present
11	**Filter**
F	With air filter (5)
G	On the GKY accessory (6)
X	No present

(1) Reversibility of the water connections during installation only for units with a main standard or oversized coil. They are not reversible for units with a secondary coil.
(2) Only for the standard main coil
(3) Only for sizes from 2 to 5
(4) Options "P and H" are available only in units for 2-pipe systems.
(5) The DFA kit must mandatorily be installed on the units The DFA kit must mandatorily be installed on the units in option 'F'.
(6) Only for sizes 2 and 3, without secondary heat exchanger (0), in U version, D connections, without RX or photocatalytic device (X).

SIZE AVAILABLE FOR VERSION

C version

Size	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
Versions produced (by size)															
Versions available (by size)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

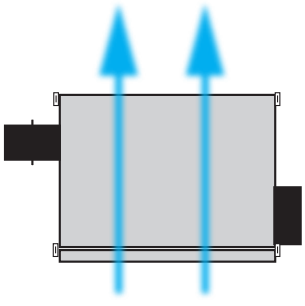
Version U

Size	200	201	250	300	301	350	400	401	450	500	501	550
Versions produced (by size)												
Versions available (by size)	•	•	•	•	•	•	•	•	•	•	•	•

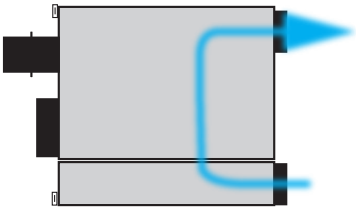
INSTALLATION VERSIONS AND EXAMPLES

C: Compact version.
Compact structure with opposed intake and delivery lines, for an "H"-shaped configuration.
The unit is provided without openings and without flanges, which can be purchased separately as an accessory.
The delivery and intake part of the structure is designed to house flanges of Ø 200 mm (or Ø 160 mm) and one of the intake flanges can be replaced by a Ø 125 or 100 mm flange for the intake of outside air.
On the side, it can house Ø 125 or 100 mm flanges for the intake of outside air for delivery.

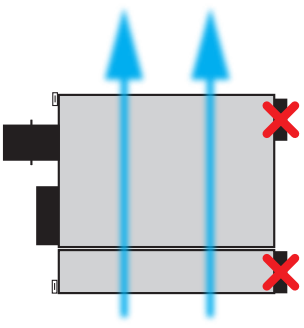
U: Universal version.
Structure for the "U" configuration with intake and delivery on the same side, opposite of the side with the water connections and the electrical box. The delivery and intake part of the structure is designed to house flanges of Ø 200 mm (or Ø 160 mm) and one of the intake or delivery flanges can be replaced by a Ø 125 or 100 mm flange for the intake of outside air.
This version is called universal because it guarantees the possible installations permitted by the C version and adds additional possibilities.



Version C:
Conÿguration H

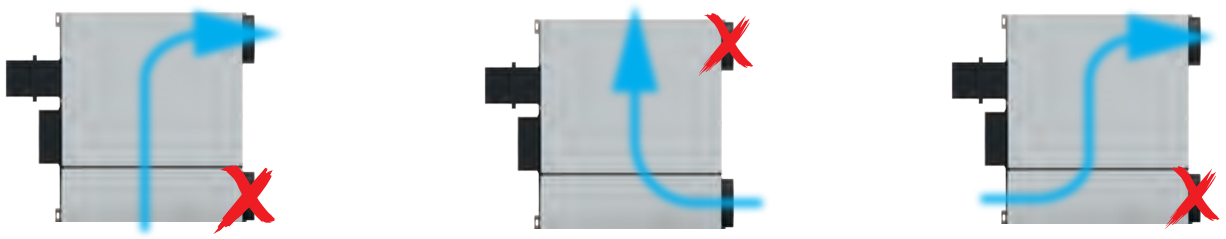


Version U:
Conÿguration U



Version U:
Conÿguration H

POSSIBLE ALTERNATIVE CONFIGURATIONS OF THE U VERSION

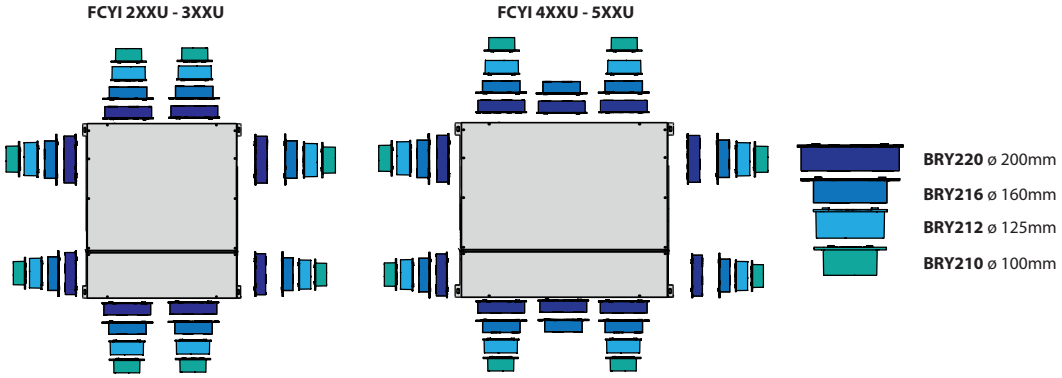


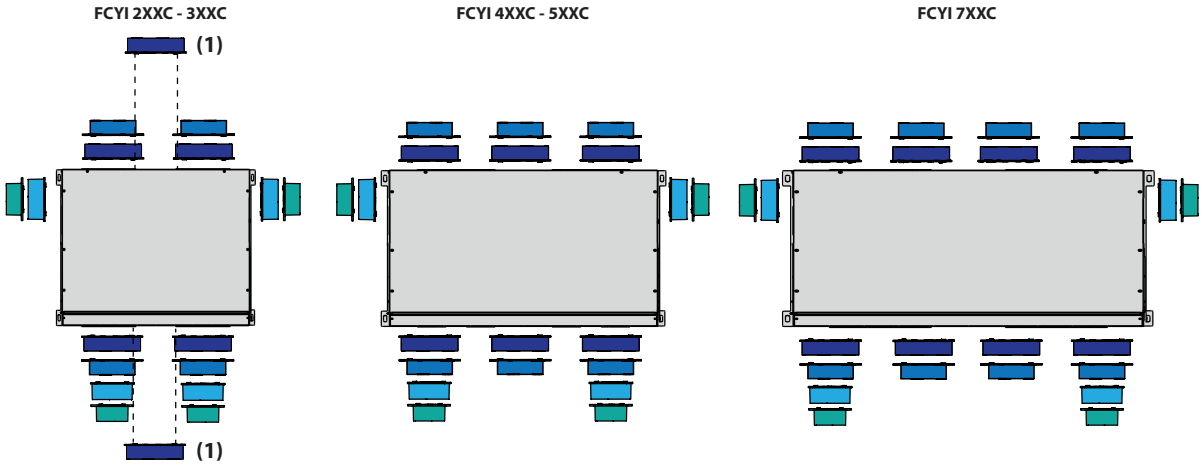
The performance data for the configurations shown here are equal to those for the U version in the U configuration.

POSSIBLE POSITIONS FOR THE INSTALLATION OF THE BRY ACCESSORIES

In every unit it is possible to use a maximum of one flange accessory for the intake of outside air (BRY210 or BRY212). The number and position of the preparations for the installation of the BRY accessories varies based on the unit size and version.

The standard **C version unit is supplied without flanges**, which can be purchased separately as an accessory.





1 There is a central preparation for the installation of an accessory BRY220 as an alternative to using the two more external preparations.

For the C version:it is necessary to use a number of recirculation air preparations **at least equal to the maximum number possible for the size selected less 1.**
Example: for FCY6xxC it is necessary to open at least 3 flange preparations for intake recirculation air and 3 flange preparations for delivery recirculation air (= maximum number - 1).
In both versions if the number of intake/delivery flanges used is less than the maximum possible for the considered size, their diameter must be 200 mm (BRY220).

Example: for FCYI7xxC it is necessary to open at least 3 flange preparations for intake recirculation air and 3 flange preparations for delivery recirculation air (= maximum number - 1).
For more information about the possible configurations for both versions, refer to the unit's selection software.

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19Y: Thermostat to be fixed on the side of the fan coil, fitted as standard with an air and water probe. Depending on the option chosen (P - X - H), VMF-E19Y must be completed with the mandatory electrical completion unit accessory (VMF-YCC, VMF-YCCH or VMF-YCCK / VMF-YICCK).
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMF-YICC: Electric inverter completion unit for the VMF-E19Y accessory (mandatory for the unit with options P and X).
VMF-YICCH: Electric inverter completion unit for the VMF-E19Y accessory (mandatory for the unit with option H).
VMF-YICCK: Electric inverter completion unit for the VMF-E19Y accessory, mandatory for FCYI units with GKY accessory.

Valves for main coil

VCY41 - 42 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left hydraulic connections.
VCYD for main and secondary coil: The 2-way motorised valve kit for the primary or secondary coil or an additional optional heat only coil. The kit consists of a valve, the actuator and the corresponding hydraulic fittings. It can be installed both on fan coils with right-hand and left-hand connections.
VDP15HF: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 230 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.
VDP15HF24: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 24 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.
VDP15HFM: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 24 V powered actuator with modulating function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

Valves for secondary coil

VCY44 - for secondary heat exchanger: 3-way motorized valve kit for hot only coil. The kit consists of a valve, actuator and relative hydraulic fittings, it is suitable for installation on both fan coils with hydraulic connections on the right and left.
VCYD for main and secondary coil: The 2-way motorised valve kit for the primary or secondary coil or an additional optional heat only coil. The kit consists of a valve, the actuator and the corresponding hydraulic fittings. It can be installed both on fan coils with right-hand and left-hand connections.

Additional hot water coil.

BV: Hot water heat exchanger with 1 row.

Valve support kit

KITVPI: Main coil VDP valve support kit. The kit consists of a bracket for supporting the valve and the corresponding hydraulic fittings.
KITVPI12H: VDP valve support kit for the secondary coil. The kit consists of a bracket for supporting the valve and the corresponding hydraulic fittings.

Installation accessories

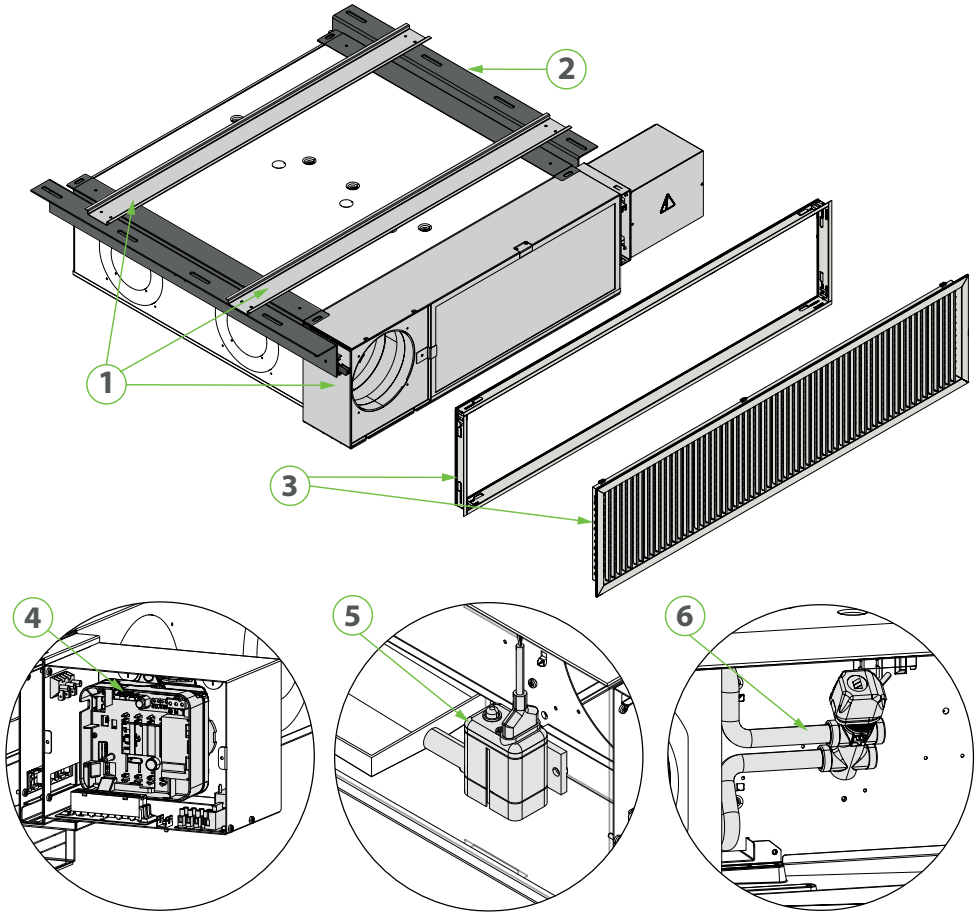
BDP: 200 mm plug.
BRY: Flange with hydraulic "spigot" connection.
GMYC: Plate flange that makes it possible to install the accessory GM either in the intake section or in the delivery section. The accessory is comprised of a plate flange with gasket and 4 screws to fasten it to the unit.
AFY: the kit is comprised of a Coarse 25% class filter according to ISO16890 (G2 according to EN779) and four fastening brackets to insert in the grille GM17. To be used together with fan coils supplied without a filter installed in unit "X".
GMYU: Plate flange that makes it possible to install the accessory GM17 either in the intake section or in the delivery section. The accessory is comprised of a plate flange with gasket and 4 screws to fasten it to the unit.
DSC: Condensate drainage device.
DAYKIT: Air deflector for U versions. To be installed in the delivery plenum, on the side opposite the air outlet, to facilitate the flow towards the delivery opening.
AMPY: Additional brackets for ceiling mount. Only for "U" version.

Accessories in multiple packages

DFA: Size of filter halved on the short side. The kit is comprised of two filters with a length equal to the standard filter and with half the height. This facilitates filter cleaning and/or replacement operations if there is a reduced space for vertical extraction. 20 piece package.
PPB: Protection for flanges to be used during installation to prevent dust from entering the unit before connecting the ducts. To be removed when making the connection. 100 piece package.

CHR12: Hydraulic connection kit for Ø 1/2" two-way valves, with soft coil side O-ring seal and with a flat plate and system side gasket, which can also be used for installing flat seal two-way valves. 50 piece package.
CHR34: Hydraulic connection kit for Ø 3/4" two-way valves, with soft coil side O-ring seal and with a flat plate and system side gasket, which can also be used for installing flat seal two-way valves. 30 piece package.

New GKY equipped flange



1 GKY
2 GKY2GT- GKY3GT (mandatory accessory)
3 GKYG (mandatory accessory)
4 VMF-E19Y + VMF-YICCK (FCYI) / VMF-YCCK (FCY) (optional accessory)
5 DSC6 (optional accessory)
6 2 pipes with 2/3-way valve (optional accessory)

GKY: Extractable galvanised sheet metal equipped flange with electric box, allows for routine and extraordinary maintenance without the need for an inspection hatch underneath. The accessory is only compatible for units in UDXG configuration and recirculation air openings on the right side.
GKY2GT: Accessory mandatory for the installation of the GKY plenum, consisting of telescopic guides compatible with size 2.

GKY3GT: Accessory mandatory for the installation of the GKY plenum, consisting of telescopic guides compatible with size 3.
GKYG: grille kit in RAL9010 colour with counterframe, mandatory accessory compatible with GKY equipped flange accessory.

Extractable equipped flange

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
GKY	U	•		•	•		•									

Telescopic guides

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
GKY2GT (1)	U	•		•												

(1) Accessory mandatory for the installation of the GKY plenum

Telescopic guides

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
GKY3GT (1)	U				•		•									

(1) Accessory mandatory for the installation of the GKY plenum

Grid kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
GKYG	U	•		•	•		•									

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
AER503IR (1)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
SA5 (2)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
SW3 (2)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
SW5 (2)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
TX (3)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
DI24	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
VMF-E19Y	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
VMF-E3	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
VMF-E4DX	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
VMF-E4X	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
VMF-IR	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
VMF-SW	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
VMF-SW1	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
VMF-YICC	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
VMF-YICCH	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
VMF-YICCK	U	•		•	•		•									

Additional heat only coil for only option "X" (without an electric heater and without a photocatalytic device)

Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
C	BV122	-	-	BV132	-	-	BV142	-	-	BV142	-	-	BVZ800	-	-
U	BV122	-	-	BV132	-	-	BV142	-	-	BV142	-	-	-	-	-

Combined adjustment and balancing valve

	200	201	250	300	301	350	400	401	450
Main coil	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM
Secondary coil	-	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-
Additional coil "BV"	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-	-

	500	501	550	700	701	750
Main coil	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM	VDP15HF VDP15HF24 VDP15HFM
Secondary coil	-	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-
Additional coil "BV"	VDP15HF VDP15HF24 VDP15HFM	-	-	VDP15HF VDP15HF24 VDP15HFM	-	-

Valves combinations for main and secondary coil

3-way valve kit - main and secondary coil or accessory BV coil

	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
Main coil	VCY41 VCY4124	VCY41 VCY4124	VCY41 VCY4124	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224	VCY42 VCY4224
Secondary coil	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-
Additional coil "BV"	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-	VCY44 VCY4424	-	-

2-way valve kit - main and secondary coil or accessory BV coil

	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
Main coil	VCYD1 VCYD124	VCYD1 VCYD124	VCYD1 VCYD124	VCYD2 VCY224	VCYD2 VCY224	VCYD2 VCY224	VCYD2 VCY224	VCYD2 VCY224	VCYD2 VCY224	VCYD2 VCY224	VCYD2 VCY224	VCYD2 VCY224	VCYD2 VCY224	VCYD2 VCY224	VCYD2 VCY224
Secondary coil	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-
Additional coil "BV"	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-	VCYD1 VCYD124	-	-

Valve support kit

Main coil VDP valve support kit.

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
KITVPI12 (1)	C,U	•	•	•												
KITVPI34 (2)	C				•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•			

(1) Connections Ø 1/2"
(2) Connections Ø 3/4"

Secondary coil VDP valve support kit.

	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
Main coil															
Secondary coil	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-
Additional coil "BV"	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-

Connections ø 1/2"

Installation accessories

Plastic caps

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
BDP200	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			

Flange

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
BRY210 (1)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
BRY212 (2)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
BRY216 (3)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			
BRY220 (4)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			

(1) Ø 100 mm
(2) Ø 125 mm
(3) Ø 160 mm
(4) Ø 200 mm

Flange for the installation of the delivery grille GM

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
GMY200C (1)	C	•	•	•												
GMY300C (1)	C				•	•	•									
GMY400C (1)	C							•	•	•	•	•	•			
GMY600C (1)	C													•	•	•

(1) only for "C" version.

Flange for the installation of the grille GM17

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
GMYU (1)	U	•	•	•	•	•	•	•	•	•	•	•	•			

(1) Only for "U" version with connections "G and D".

Coarse 25% class air filter kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
AFY100 (1)	U	•	•	•	•	•	•	•	•	•	•	•	•			

(1) To be used with fan coils supplied without a filter installed in unit "X" and in association with GM17 and GMYU.

Air deflector

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
DAYKIT	U	•	•	•	•	•	•	•	•	•	•	•	•			

Brackets for ceiling mount.

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
AMPY (1)	U	•	•	•	•	•	•	•	•	•	•	•	•			

(1) Only for "U" version.

Condensate discharge device kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
DSC6 (1)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			

(1) Only for "L and R" connections.

Condensate drip

Accessories in multiple packages

Hydraulic connection kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
CHR12 (1)	C,U	•	•	•												
CHR34 (2)	C				•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•			

(1) Hydraulic connections Ø 1/2"
(2) Hydraulic connections Ø 3/4"

Half-size filter kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
DFA2	C,U	•	•	•												
DFA3	C,U				•	•	•									
DFA5	C,U							•	•	•	•	•	•			
DFA7	C													•	•	•

Protection for flange

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
PPB	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U	•	•	•	•	•	•	•	•	•	•	•	•			

PERFORMANCE DATA - FCYI_C AND FCYI_U (H NOZZLES CONFIGURATION) 2 PIPES

2-pipe

		FCYI200C			FCYI250C			FCYI300C			FCYI350C			FCYI400C			FCYI450C		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	1,81	3,16	3,34	2,01	3,40	3,62	3,08	4,83	5,23	3,32	5,43	5,83	3,96	5,85	6,34	4,10	6,44	6,96
Water flow rate system side	l/h	156	272	287	173	292	311	265	415	450	285	467	502	341	503	545	353	554	599
Pressure drop system side	kPa	6	13	16	7	17	19	7	14	16	7	17	19	9	17	19	5	12	13
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	0,90	1,57	1,66	1,00	1,69	1,80	1,53	2,40	2,60	1,65	2,70	2,90	1,97	2,91	3,15	2,04	3,20	3,46
Water flow rate system side	l/h	155	270	288	172	291	308	263	413	447	284	464	499	339	501	542	351	550	595
Pressure drop system side	kPa	6	13	16	7	17	19	7	14	16	7	17	19	9	17	19	5	12	13
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	0,80	1,37	1,45	0,95	1,67	1,76	1,40	2,38	2,53	1,66	2,70	2,88	2,03	2,98	3,21	2,22	3,28	3,55
Sensible cooling capacity	kW	0,63	1,13	1,20	0,70	1,29	1,37	1,10	1,82	1,94	1,15	1,94	2,07	1,45	2,18	2,36	1,54	2,35	2,56
Water flow rate system side	l/h	138	236	249	163	287	303	241	409	435	285	464	495	349	512	552	382	564	610
Pressure drop system side	kPa	5	14	16	8	19	21	7	15	17	9	21	23	9	13	20	8	16	18
Fan																			
Air flow rate	m^3/h	123	240	257	123	240	257	225	390	424	225	390	424	300	470	515	300	470	515
High static pressure	Pa	13	50	57	13	50	57	16	50	59	16	50	59	20	50	60	20	50	60
Sound power level (inlet + radiated)	dB(A)	37,0	57,0	59,0	37,0	57,0	59,0	36,0	50,0	53,0	36,0	50,0	53,0	43,0	53,0	55,0	43,0	53,0	55,0
Sound power level (outlet)	dB(A)	33,0	53,0	55,0	33,0	53,0	55,0	32,0	47,0	49,0	32,0	47,0	49,0	39,0	49,0	52,0	39,0	49,0	52,0
Input power	W	7	27	31	7	27	31	10	30	40	10	30	40	14	38	48	14	38	48
Diametre hydraulic fittings																			
Main heat exchanger	Ø	1/2"			1/2"			3/4"			3/4"			3/4"			3/4"		
Power supply																			
Power supply		230V~50Hz																	

		FCYI500C			FCYI550C			FCYI700C			FCYI750C		
		1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)													

		FCYI500C			FCYI550C			FCYI700C			FCYI750C		
Heating capacity	kW	5,39	7,28	7,63	5,92	8,37	8,71	5,33	8,34	8,88	6,17	9,52	10,15
Water flow rate system side	l/h	464	626	656	509	720	749	468	732	779	541	835	890
Pressure drop system side	kPa	12	22	23	11	20	21	8	17	20	5	11	12
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	2,68	3,26	3,79	2,94	4,16	4,33	2,67	4,15	4,40	2,46	4,69	5,00
Water flow rate system side	l/h	461	623	652	506	715	745	460	720	767	418	806	860
Pressure drop system side	kPa	12	22	23	12	22	23	8	18	20	3	11	12
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	2,73	3,68	3,84	2,97	4,15	4,31	2,20	4,00	4,30	2,60	4,41	4,70
Sensible cooling capacity	kW	1,98	2,73	2,85	2,11	2,98	3,12	1,71	3,00	3,20	1,90	3,30	3,50
Water flow rate system side	l/h	469	633	660	511	714	741	378	688	739	447	760	818
Pressure drop system side	kPa	13	22	25	13	22	25	7	18	20	4	11	12
Fan													
Air flow rate	m^3/h	410	600	630	410	600	630	405	730	799	405	730	799
High static pressure	Pa	23	50	55	23	50	55	15	50	60	15	50	60
Sound power level (inlet + radiated)	dB(A)	45,0	56,0	57,0	45,0	56,0	57,0	38,0	55,0	58,0	41,0	55,0	58,0
Sound power level (outlet)	dB(A)	42,0	52,0	52,0	42,0	52,0	52,0	34,0	51,0	54,0	36,0	51,0	54,0
Input power	W	18	50	60	18	50	60	21	61	78	21	61	78
Diametre hydraulic fittings													
Main heat exchanger	Ø	3/4"											
Power supply													
Power supply		230V~50Hz											

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT

Refer to the selection software for performance data related to the different configurations.

PERFORMANCE DATA FCYI_C AND FCYI_U (H NOZZLES CONFIGURATION) 4 PIPES

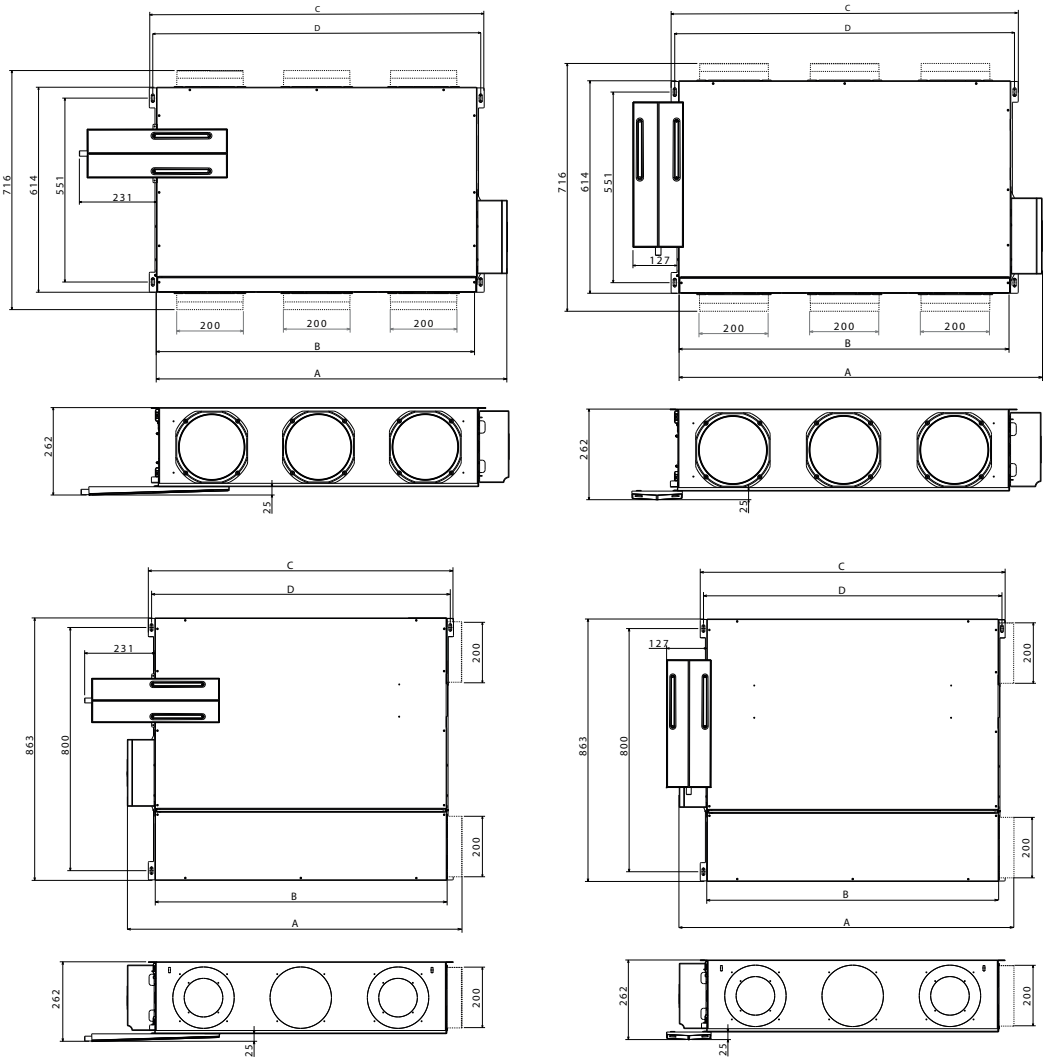
4-pipe

		FCYI201C			FCYI301C			FCYI401C			FCYI501C			FCYI701C		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)																
Heating capacity	kW	0,94	1,42	1,49	1,60	2,34	2,47	1,99	2,69	2,85	2,62	3,59	3,45	2,99	3,70	3,92
Water flow rate system side	l/h	81	122	128	138	201	212	171	231	245	225	309	297	257	318	337
Pressure drop system side	kPa	4	9	9	6	12	13	4	7	8	6	9	9	8	12	13
Cooling performance 7 °C / 12 °C																
Cooling capacity	kW	0,80	1,37	1,45	1,40	2,38	2,53	2,03	2,98	3,21	2,73	3,68	3,84	2,20	4,00	4,30
Sensible cooling capacity	kW	0,63	1,13	1,20	1,10	1,82	1,94	1,45	2,18	2,36	1,98	2,73	2,85	1,71	3,00	3,20
Water flow rate system side	l/h	138	236	249	241	409	435	349	512	552	469	633	660	378	688	739
Pressure drop system side	kPa	5	14	16	7	15	17	9	13	20	13	22	25	7	18	20
Fan																
Air flow rate	m^3/h	123	240	257	225	390	424	300	470	515	410	600	630	405	730	799
High static pressure	Pa	13	50	57	16	50	59	20	50	60	23	50	55	15	50	60
Sound power level (inlet + radiated)	dB(A)	37,0	57,0	59,0	36,0	50,0	53,0	43,0	53,0	55,0	45,0	56,0	57,0	38,0	55,0	58,0
Sound power level (outlet)	dB(A)	33,0	53,0	55,0	32,0	47,0	49,0	39,0	49,0	52,0	42,0	52,0	52,0	34,0	51,0	54,0
Input power	W	7	27	31	10	30	40	14	38	48	18	50	60	21	61	78
Diametre hydraulic fittings																
Main heat exchanger	Ø	1/2"			3/4"			3/4"			3/4"			3/4"		
Secondary heat exchanger	Ø	1/2"														
Power supply																
Power supply		230V~50Hz														

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT

Refer to the selection software for performance data related to the different configurations.

DIMENSIONS



FCYI - C

Size		200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
Dimensions and weights																
A	mm	598	598	598	829	829	829	1050	1050	1050	1050	1050	1050	1171	1171	1171
B	mm	507	507	507	735	735	735	960	960	960	960	960	960	1080	1080	1080
C	mm	550	550	550	781	781	781	1003	1003	1003	1003	1003	1003	1122	1122	1122
D	mm	529	529	529	760	760	760	982	982	982	982	982	982	1100	1100	1100
Empty weight	kg	19	20	21	23	24	26	31	32	33	31	32	33	41	43	46

FCYI - U

Size		200	201	250	300	301	350	400	401	450	500	501	550
Dimensions and weights													
A	mm	647	647	647	878	878	878	1100	1100	1100	1100	1100	1100
B	mm	508	508	508	739	739	739	960	960	960	960	960	960
C	mm	550	550	550	781	781	781	1003	1003	1003	1003	1003	1003
D	mm	529	529	529	760	760	760	982	982	982	982	982	982
Empty weight	kg	22	23	24	26	27	29	35	36	37	35	36	37

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

FCZ P - PO

Fan coil unit for ducted installations

Cooling capacity 0,65 ÷ 7,62 kW
Heating capacity 1,45 ÷ 17,02 kW

- **Very quiet**
- **Suitable for duct-type installations too**
- **Total comfort: reduced variations in temperature and relative humidity**
- **Vertical and horizontal installation**

DESCRIPTION

fan coil can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

FEATURES

Ventilation group

Consisting of double suction centrifugal fans that are particularly silent, statically and dynamically balanced, and directly coupled with the motor shaft.
The motor is wired for single phase and has three speeds, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings.
Extractable shrouds for easy, effective cleaning

Heat exchanger coil

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
Reversibility of the water connections during installation only for units with a standard or boosted main coil, or standard with BV accessory. Not reversible in all other configurations. In any case, units with the coil water connections on the right are available at the time of ordering.

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean.
In the PPC version, air purification is guaranteed by the Cold Plasma purifier.

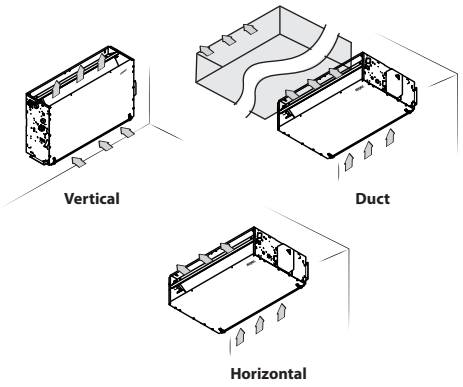
GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3	FCZ

The purifier is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionized air, free of foul odours.

VERSIONS

Flush-mounting and duct-type versions



FCZ_P
— Flush-mounting
FCZ_PPC
— Flush-mounting with Cold Plasma purifier
FCZ_PO
— Flush-mounting, duct-type
— With useful head.

Field	Description
4,5,6	**Size** 100, 101, 102, 150, 200, 201, 202, 250, 300, 301, 302, 350, 400, 401, 402, 450, 500, 501, 502, 550, 600, 601, 602, 650, 700, 701, 702, 750, 800, 801, 802, 850, 900, 901, 950, 1000, 1001
7	**main heat exchanger**
8	**Secondary heat exchanger**

Field		Description
9		**Version**
	P	Flush-mounting
	PO	Flush-mounting, with boosted motor
	POR	Flush-mounting, with boosted motor, with water connections on right-hand side
	PPC	Flush-mounting with Cold Plasma purifier
	PR	Flush-mounting with water connections on right-hand side

SIZE AVAILABLE FOR VERSION

Size		100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
Versions produced (by size)																					
Versions available (by size)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•	-	-	•	•	-	-	•	•	-	-	•	•	-	-	•	•	-	-	•

Size		600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
Versions produced (by size)																		
Versions available (by size)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•	-	-	-	-	•	•	•	-	-
	PPC	•	-	-	•	•	-	-	•	•	-	-	•	•	-	•	•	-

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
PXAI: Thermostat on the machine for controlling the fan coils (both with asynchronous and brushless motors), complete with water and air probes to be positioned in the relative seats, and a plastic support to fix it on the side of the unit. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, purifier devices (Cold Plasma and germicidal lamp), or radiant plate.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.
WMT16: Electronic thermostat with thermostated ventilation.
WMT16CV: Electronic thermostat with continuous ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.
VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.
VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

(Heating only) additional coil

BV: Hot water heat exchanger with 1 row.
RX: Armoured electric coil with safety thermostat.
PCR: Galvanised plate protection for the controls and the electrical element.

Installation accessories

AMP: Wall mounting kit
DSC: Condensate drainage device.
BC: Condensate drip.
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.
Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.
MZA: Cabinet housing with fixed fins.
MZU: Cabinet housing with adjustable fins.
GA: Intake grid with fixed louvers
GAF: Intake grid with filter and fixed louvers
GM: Flow grid with adjustable louvers.
PA: Intake plenum in galvanised sheet metal, complete with suction couplings for circular-section ducts.
PAF: Intake plenum providing recovery and delivery on the same side, for all installations where the machine needs to be positioned outside the air conditioned rooms to minimise the noise levels and facilitate maintenance.
PM: Galvanised sheet steel flow plenum, externally insulated, equipped with plastic flow fittings for ducts and circular sections.
RD: Straight delivery coupling for canalisation.
RDA: Straight suction coupling for canalisation.
RP: 90° delivery coupling.
RPA: 90° suction coupling.

Accessories for ducting

MZC: Plenum with motorised dampers.
RDA_V: Straight intake connection with rectangular flange.
RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
RDA_C: Straight intake connection with circular flanges.
PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.
PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.
RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
RDM_V: Straight delivery coupling in galvanised sheet metal.
RDM_C: Straight discharge internally insulated, with circular flanges.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AER503IR (1)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRO503	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PXAI	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SA5 (2)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW3 (2)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW5 (2)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TX (3)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WMT10 (3)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WMT16 (3)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WMT16CV (3)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
AER503IR (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
PRO503	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
PXAI	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
SA5 (2)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
SW3 (2)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
SW5 (2)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
TX (3)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
WMT10 (3)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
WMT16 (3)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
WMT16CV (3)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

For more information about VMF system, refer to the dedicated documentation.

VMF system

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
DI24	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
VMF-E19 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
VMF-E3	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
VMF-E4DX	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
VMF-E4X	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
VMF-IR	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
VMF-SW	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
VMF-SW1	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
VMHI	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
DI24	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
VMF-E19 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
VMF-E3	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
VMF-E4DX	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
VMF-E4X	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
VMF-IR	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
VMF-SW	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
VMF-SW1	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
VMHI	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Water valves

3 way valve kit

	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224
Secondary coil	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-
Additional coil "BV"	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-

	500	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850
Main coil	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224
Secondary coil	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-
Additional coil "BV"	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-

	900	901	950	1000	1001
Main coil	VCZ43 VCZ4324	VCZ43 VCZ4324	VCZ43 VCZ4324	VCZ43 VCZ4324	VCZ43 VCZ4324
Secondary coil	-	VCF45 VCF4524	-	-	VCF45 VCF4524
Additional coil "BV"	VCF45 VCF4524	-	-	VCF45 VCF4524	-

2 way valve kit

	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224
Secondary coil	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-
Additional coil "BV"	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-

	500	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850
Main coil	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224
Secondary coil	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-
Additional coil "BV"	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-

	900	901	950	1000	1001
Main coil	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324
Secondary coil	-	VCFD4 VCFD424	-	-	VCFD4 VCFD424
Additional coil "BV"	VCFD4 VCFD424	-	-	VCFD4 VCFD424	-

Valve Kit for 4 pipe systems - Requires a thermostat with valve management

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
VCZ1X4L (1)	P,PPC,PR	•			•	•			•												
	P0,POR					•			•												
VCZ1X4R (1)	P,PPC,PR	•			•	•			•												
	P0,POR					•			•												
VCZ2X4L (1)	P,P0,P0R,PPC,PR									•			•	•			•	•			•
VCZ2X4R (1)	P,P0,P0R,PPC,PR									•			•	•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
VCZ2X4L (1)	P,PPC,PR	•			•	•			•	•			•					
	P0,POR	•			•	•			•									
VCZ2X4R (1)	P,PPC,PR	•			•	•			•	•			•					
	P0,POR	•			•	•			•									
VCZ3X4L (1)	P,PPC,PR													•		•	•	
	P0,POR													•		•		
VCZ3X4R (1)	P,PPC,PR													•		•	•	
	P0,POR													•		•		

(1) The valves can be combined with the units if there is a control panel for managing them.

Combined Adjustment and Balancing Valve Kit

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
VJP060 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•								
	P0,POR					•	•	•	•	•	•	•	•								
	PPC	•			•	•			•	•			•								
VJP060M (2)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•								
	P0,POR					•	•	•	•	•	•	•	•								
	PPC	•			•	•			•	•			•								
VJP090 (1)	P,P0,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•
VJP090M (2)	P,P0,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
VJP090 (1)	P,P0,POR,PR	•	•	•	•													
	PPC	•			•													
VJP090M (2)	P,P0,POR,PR	•	•	•	•													
	PPC	•			•													
VJP150 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	P0,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
VJP150M (2)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	P0,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

(1) 230V~50Hz
(2) 24V

(Heating only) additional coil

Electric coil - Requires a thermostat with heater management. Not available for sizes with an oversized main coil.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500
RX17 (1)	P,PR	•																
RX22 (1)	P,PO,POR,PR					•												
RX32 (1)	P,PO,POR,PPC,PR									•								
RX42 (1)	P,PO,POR,PPC,PR													•				
RX52 (1)	P,PO,POR,PPC,PR																	•

Model	Ver	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850	900	901
RX62 (1)	P,PO,POR,PPC,PR																•	
RXZ800 (1)	P,PPC,PR				•				•				•					
	PO,POR				•				•									

Model	Ver	950	1000	1001
RX62 (1)	P,PR		•	

(1) Requires a thermostat with heater management. Not available for sizes with an oversized main coil. The PCR1 PCR2 or PCR1V appliance must also be provided depending on the unit.

Heating only additional coil

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
BV117 (1)	P,PR	•																			
BV122 (1)	P,PO,POR,PR					•															
BV132 (1)	P,PO,POR,PPC,PR									•											
BV142 (1)	P,PO,POR,PPC,PR													•				•			

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
BV162 (1)	P,PR													•			•	
	PO,POR,PPC													•				
BVZ800 (1)	P,PPC,PR	•				•				•								
	PO,POR	•				•												

(1) Not available for sizes with oversized main coil.

Galvanised plate protection for the controls and the electrical element.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500
PCR1	P,PO,POR,PR	•				•				•				•				•

Model	Ver	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850	900	901
PCR1	P,PO,POR,PR				•				•				•					
PCR2	P,PO,POR,PR																•	

Model	Ver	950	1000	1001
PCR2	P,PO,POR,PR		•	

Installation accessories

Wall mounting kit

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
AMP20	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
AMPZ	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

Condensate drip

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
BCZ4 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
BCZ5 (2)	P		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•
	PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
BCZ4 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
BCZ5 (2)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•					
	PO,POR	•	•	•	•	•	•	•	•									
	PPC	•			•	•			•	•			•					
BCZ6 (2)	P,PR													•	•	•	•	•
	PO,POR													•	•	•		
	PPC													•		•	•	

(1) For vertical installation.
(2) For horizontal installation.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
BC8 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
BC8 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•					
	PO,POR	•	•	•	•	•	•	•	•									
	PPC	•			•	•			•	•			•					
BC9 (1)	P,PR													•	•	•	•	•
	PO,POR													•	•	•		
	PPC													•		•	•	

(1) For horizontal installation.

Condensate recirculation device

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
DSCZ4 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•	•			•	•			•	•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
DSCZ4 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Ventilcassaforma

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
CHF17	P,PR	•	•	•	•																
	PPC	•			•																
CHF22	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
CHF32	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
CHF42	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
CHF62	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

Cabinet housing with fixed fins.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
MZA100	P,PPC,PR	•	•	•	•																
MZA200	P,PPC,PR					•	•	•	•												
MZA300	P,PPC,PR									•	•	•	•								
MZA500	P,PPC,PR													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
MZA800	P,PPC,PR	•	•	•	•	•	•	•	•	•	•	•	•					
MZA900	P,PPC,PR													•	•	•	•	•

Cabinet housing with adjustable fins.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
MZU100	P,PPC,PR	•	•	•	•																
MZU200	P,PPC,PR					•	•	•	•												
MZU300	P,PPC,PR									•	•	•	•								
MZU500	P,PPC,PR													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
MZU800	P,PPC,PR	•	•	•	•	•	•	•	•	•	•	•	•					
MZU900	P,PPC,PR													•	•	•	•	•

Wall mounting and duct type installation accessories

Lower intake grille

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
GA17	P,PR	•	•	•	•																
	PPC	•			•																
GA22	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
GA32	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
GA42	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
GA62	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

Intake grilles with fixed louvers and filter

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
GAF17	P,PR	•	•	•	•																
	PPC	•			•																
GAF22	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
GAF32	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
GAF42	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
GAF62	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

Delivery grilles with adjustable louvers

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
GM17	P,PR	•	•	•	•																
	PPC	•			•																
GM22	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
GM32	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
GM42	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
GM62	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

Intake plenum in sheet metal complete with connectors for circular channels

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
PA17	P,PR	•	•	•	•																
	PPC	•			•																
PA22	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
PA32	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
PA42	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
PA62	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

Intake plenum providing recovery and delivery on the same side

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
PA17F	P,PR	•	•	•	•																
	PPC	•			•																
PA22F	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
PA32F	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
PA42F	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
PA62F	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

Delivery plenum with circular flanges.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
PM17	P,PR	•	•	•	•																
	PPC	•			•																
PM22	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
PM32	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
PM42	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
PM62	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

Straight delivery coupling

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RD17	P,PR	•	•	•	•																
	PPC	•			•																
RD22	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
RD32	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
RD42	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
RD62	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

Straight suction coupling

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RDA22	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
RDA32	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
RDA42	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
RDA62	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

90° delivery coupling.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RP17	P,PR	•	•	•	•																
	PPC	•			•																
RP22	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
RP32	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
RP42	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
RP62	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

90° suction coupling.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RPA22	P,PO,POR,PR					•	•	•	•												
	PPC					•			•												
RPA32	P,PO,POR,PR									•	•	•	•								
	PPC									•			•								
RPA42	P,PO,POR,PR													•	•	•	•	•	•	•	•
	PPC													•			•	•			•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
RPA62	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	

Accessories for ducting

Plenum with motorised dampers.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
MZC220	P0,P0R					•	•	•	•												
MZC320	P0,P0R									•	•	•	•								
MZC530	P0,P0R													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
MZC830	P0,P0R	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		

Straight intake connection with rectangular flange.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RDA000V	P0,P0R					•	•	•	•												
RDA100V	P0,P0R									•	•	•	•								
RDA200V	P0,P0R													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
RDA300V	P0,P0R	•	•	•	•	•	•	•	•					•	•	•		

Intake plenum with rectangular flange.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RPA000V	P0,P0R					•	•	•	•												
RPA100V	P0,P0R									•	•	•	•								
RPA200V	P0,P0R													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
RPA300V	P0,P0R	•	•	•	•	•	•	•	•					•	•	•		

Suction plenum with plastic circular flanges.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
PA000V	P0,P0R					•	•	•	•												
PA100V	P0,P0R									•	•	•	•								
PA200V	P0,P0R													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
PA300V	P0,P0R	•	•	•	•	•	•	•	•					•	•	•		

Internally insulated delivery plenum with circular flanges.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
PM000V	P0,P0R					•	•	•	•												
PM100V	P0,P0R									•	•	•	•								
PM200V	P0,P0R													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
PM300V	P0,P0R	•	•	•	•	•	•	•	•					•	•	•		

Internally insulated delivery plenum with rectangular flange.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RPM000V	P0,P0R					•	•	•	•												
RPM100V	P0,P0R									•	•	•	•								
RPM200V	P0,P0R													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
RPM300V	P0,P0R	•	•	•	•	•	•	•	•					•	•	•		

Straight delivery coupling in galvanised sheet metal.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RDM000V	P0,P0R					•	•	•	•												
RDM100V	P0,P0R									•	•	•	•								
RDM200V	P0,P0R													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
RDM300V	P0,P0R	•	•	•	•	•	•	•	•					•	•	•		

Straight discharge internally insulated, with circular flanges.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RDMC000V	P0,P0R					•	•	•	•												
RDMC100V	P0,P0R									•	•	•	•								
RDMC200V	P0,P0R													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
RDMC300V	P0,P0R	•	•	•	•	•	•	•	•					•	•	•		

PERFORMANCE DATA FOR UNITS WITHOUT HEAD (EUROVENT CERTIFICATE FC-H)

2-pipe

		FCZ100P			FCZ150P			FCZ200P			FCZ250P			FCZ300P			FCZ350P			FCZ400P			FCZ450P			FCZ500P			FCZ550P		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																															
Heating capacity	kW	1,45	2,00	2,40	1,55	2,19	2,65	2,02	2,95	3,70	2,20	3,18	4,05	3,47	4,46	5,50	3,77	4,92	6,15	4,32	5,74	7,15	4,57	6,29	7,82	5,27	7,31	8,50	5,82	8,34	9,75
Water flow rate system side	l/h	125	172	206	136	192	232	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685	462	641	745	510	731	855
Pressure drop system side	kPa	4	7	9	5	9	12	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16	12	21	28	10	20	26
Heating performance 45 °C / 40 °C (2)																															
Heating capacity	kW	0,72	0,99	1,19	0,77	1,09	1,31	1,00	1,46	1,84	1,09	1,58	2,01	1,72	2,21	2,73	1,87	2,44	3,06	2,14	2,85	3,55	2,27	3,12	3,88	2,62	3,63	4,22	2,89	4,14	4,85
Water flow rate system side	l/h	126	173	207	134	189	229	174	254	319	190	274	350	299	385	475	325	425	531	373	495	617	394	543	675	455	631	734	502	720	842
Pressure drop system side	kPa	4	7	10	5	9	12	6	12	18	8	15	22	8	12	18	8	14	20	10	16	24	6	11	16	12	21	28	10	20	26
Fan																															
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			1			1			1			2			2			2			2			2			2		
Air flow rate	m^3/h	110	160	200	110	160	200	140	220	290	140	220	290	260	350	450	260	350	450	330	460	600	330	460	600	400	600	720	400	600	720
Input power	W	19	29	35	19	29	35	25	29	33	25	29	33	25	33	44	25	33	44	30	43	57	30	43	57	38	52	76	38	52	76
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)																															
Sound power level	dB(A)	31,0	38,0	45,0	31,0	38,0	45,0	35,0	46,0	51,0	35,0	46,0	51,0	34,0	41,0	48,0	34,0	41,0	48,0	37,0	44,0	51,0	37,0	44,0	51,0	42,0	51,0	56,0	42,0	51,0	56,0
Sound pressure level	dB(A)	23,0	30,0	37,0	23,0	30,0	37,0	27,0	38,0	43,0	27,0	38,0	43,0	26,0	33,0	40,0	26,0	33,0	40,0	29,0	36,0	43,0	29,0	36,0	43,0	34,0	43,0	48,0	34,0	43,0	48,0
Finned pack heat exchanger																															
Water content main heat exchanger	l	0,4			0,5			0,5			0,7			0,8			1,0			1,0			1,4			1,0			1,4		
Diametre hydraulic fittings																															
Main heat exchanger	Ø	1/2"			1/2"			1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		

		FCZ600P			FCZ650P			FCZ700P			FCZ750P			FCZ800P			FCZ850P			FCZ900P			FCZ950P			FCZ1000P		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																												
Heating capacity	kW	6,50	8,10	10,00	7,19	9,15	11,50	8,10	9,80	11,00	9,10	11,30	12,50	9,80	10,80	12,00	11,30	12,35	14,00	10,77	13,35	15,14	11,20	14,42	17,10	12,53	15,24	17,02
Water flow rate system side	l/h	570	710	877	631	802	1008	710	860	964	798	991	1096	859	947	1052	991	1083	1227	945	1171	1328	982	1264	1500	1101	1337	1493
Pressure drop system side	kPa	12	18	26	14	21	31	17	24	29	10	15	18	22	27	32	17	20	25	12	17	22	16	24	33	22	32	38
Heating performance 45 °C / 40 °C (2)																												
Heating capacity	kW	3,32	4,03	4,97	3,57	4,55	5,72	4,03	4,87	5,47	4,52	5,62	6,21	4,87	5,37	5,97	5,62	6,14	6,96	5,35	6,64	7,53	5,57	7,17	8,50	6,24	7,58	8,46
Water flow rate system side	l/h	561	699	863	621	790	993	699	846	950	786	975	1079	846	932	1036	975	1066	1209	930	1152	1307	967	1245	1476	1084	1316	1469
Pressure drop system side	kPa	12	18	26	14	20	31	16	24	29	10	14	18	22	26	32	17	20	25	12	17	22	15	24	33	22	31	38
Fan																												
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	3			3			3			3			3			3			3			3			3		
Air flow rate	m^3/h	520	720	920	520	720	920	700	930	1140	700	930	1140	900	1120	1300	900	1120	1300	700	930	1140	700	930	1140	900	1120	1300
Input power	W	38	60	91	38	60	91	59	80	106	59	80	106	80	100	131	80	100	131	59	80	106	59	80	106	80	100	131
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)																												
Sound power level	dB(A)	42,0	51,0	57,0	42,0	51,0	57,0	50,0	57,0	62,0	50,0	57,0	62,0	56,0	61,0	66,0	56,0	61,0	66,0	51,0	57,0	62,0	51,0	57,0	62,0	56,0	61,0	66,0
Sound pressure level	dB(A)	34,0	43,0	49,0	34,0	43,0	49,0	42,0	49,0	54,0	42,0	49,0	54,0	48,0	53,0	58,0	48,0	53,0	58,0	43,0	49,0	54,0	43,0	49,0	54,0	48,0	53,0	58,0
Finned pack heat exchanger																												
Water content main heat exchanger	l	1,2			1,6			1,2			1,6			1,2			1,6			1,8			2,3			1,8		
Diametre hydraulic fittings																												
Main heat exchanger	Ø	3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

4-pipe

		FCZ201P			FCZ301P			FCZ401P			FCZ501P			FCZ601P			FCZ701P			FCZ901P		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)																						
Heating capacity	kW	1,02	1,35	1,60	1,80	2,18	2,56	2,21	2,65	3,12	2,59	3,34	3,73	2,96	3,67	4,36	3,66	4,29	4,94	4,73	5,63	5,72
Water flow rate system side	l/h	89	118	140	158	191	224	186	232	273	227	293	327	259	321	381	320	375	437	414	492	501
Pressure drop system side	kPa	4	8	10	16	23	30	4	6	8	6	8	10	8	12	16	11	14	18	8	12	12
Cooling performance 7 °C / 12 °C																						
Cooling capacity	kW	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25	3,22	3,90	4,65	3,92	4,89	5,50	4,29	5,00	6,91
Sensible cooling capacity	kW	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18	2,56	3,17	3,92	2,99	3,76	4,30	2,97	3,78	5,68
Water flow rate system side	l/h	153	221	275	288	374	456	379	503	619	460	634	731	554	671	800	675	841	946	738	860	1189
Pressure drop system side	kPa	6	12	18	8	13	18	10	16	24	13	22	29	14	19	26	16	24	30	10	12	22
Fan																						
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			2			2			2			3			3			3		
Air flow rate	m^3/h	140	220	-	260	350	-	330	460	-	400	600	-	520	720	-	700	930	-	700	930	-
Input power	W	25	29	33	25	33	44	30	43	57	38	52	76	38	60	91	59	80	106	59	80	106
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (2)																						
Sound power level	dB(A)	35,0	46,0	51,0	34,0	41,0	48,0	37,0	44,0	51,0	42,0	51,0	56,0	42,0	51,0	57,0	50,0	57,0	62,0	51,0	57,0	62,0
Sound pressure level	dB(A)	27,0	38,0	43,0	26,0	33,0	40,0	29,0	36,0	43,0	34,0	43,0	48,0	34,0	43,0	49,0	42,0	49,0	54,0	43,0	49,0	54,0
Finned pack heat exchanger																						
Water content main heat exchanger	l	0,5			0,8			1,0			1,0			1,2			1,2			1,8		
Water content secondary heat exchanger	l	0,2			0,3			0,3			0,3			0,4			0,4			0,7		

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

PERFORMANCE DATA FOR UNITS WITH HEAD (EUROVENT CERTIFICATE FCP-H)

2-pipe

		FCZ200P0			FCZ250P0			FCZ300P0			FCZ350P0			FCZ400P0			FCZ450P0			FCZ500P0		
		2	4	6	2	4	6	1	4	6	1	4	6	1	3	6	1	3	6	1	5	6
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																						
Heating capacity	kW	2,11	3,00	3,32	2,29	3,24	3,60	3,50	5,03	5,45	3,80	5,59	6,10	4,49	6,02	6,74	4,79	6,62	7,40	5,27	7,22	7,59
Water flow rate system side	l/h	182	258	285	197	279	310	301	433	469	327	481	524	386	517	580	412	569	637	453	621	652
Pressure drop system side	kPa	7	12	15	9	16	19	8	15	18	9	18	21	11	18	22	7	12	15	12	21	23
Heating performance 45 °C / 40 °C (2)																						
Heating capacity	kW	1,05	1,49	1,65	1,14	1,61	1,79	1,74	2,50	2,71	1,89	2,78	3,03	2,23	2,99	3,35	2,38	3,29	3,68	2,62	3,59	3,77
Water flow rate system side	l/h	160	224	248	196	277	308	299	430	466	325	478	521	383	514	576	409	566	633	451	617	648
Pressure drop system side	kPa	7	12	15	9	16	19	8	15	18	9	18	21	11	18	22	7	12	15	12	21	23
Cooling performance 7 °C / 12 °C																						
Cooling capacity	kW	0,93	1,30	1,44	1,11	1,59	1,74	1,70	2,40	2,63	1,91	2,77	3,00	2,29	3,06	3,41	2,51	3,37	3,79	2,68	3,65	3,82
Sensible cooling capacity	kW	0,74	1,14	1,18	0,83	1,23	1,36	1,27	1,86	2,03	1,34	1,99	2,16	1,66	2,24	2,52	1,76	2,42	2,73	1,94	2,70	2,83
Water flow rate system side	l/h	160	224	248	191	273	299	292	413	452	328	476	516	394	526	586	432	580	652	461	628	657
Pressure drop system side	kPa	8	13	15	9	18	21	8	16	18	11	22	25	11	18	22	11	16	20	13	22	24
Fan																						
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			1			2			2			2			2			2		
Air flow rate	m^3/h	148	226	254	148	226	254	263	404	446	263	404	446	346	487	559	346	487	559	400	592	627
High static pressure	Pa	21	50	63	21	50	63	21	50	61	21	50	61	25	-	66	25	-	66	22	50	56
Input power	W	28	41	74	28	41	74	38	55	78	38	55	78	53	63	102	53	63	102	49	80	627
Electrical wiring		V2	V4	V6	V2	V4	V6	V1	V4	V6	V1	V4	V6	V1	V3	V6	V1	V3	V6	V1	V5	V6
Duct type fan coil sound data (3)																						
Sound power level (inlet + radiated)	dB(A)	41,0	56,0	59,0	41,0	56,0	59,0	39,0	51,0	54,0	39,0	51,0	54,0	44,0	54,0	55,0	44,0	54,0	55,0	45,0	55,0	57,0
Sound power level (outlet)	dB(A)	37,0	52,0	55,0	37,0	52,0	55,0	35,0	47,0	49,0	35,0	47,0	49,0	40,0	50,0	52,0	40,0	50,0	52,0	41,0	51,0	53,0
Finned pack heat exchanger																						
Water content main heat exchanger	l	0,5			0,7			0,8			1,0			1,0			1,4			1,0		
Diametre hydraulic fittings																						
Main heat exchanger	Ø	1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"		

		FCZ550P0			FCZ600P0			FCZ650P0			FCZ700P0			FCZ750P0			FCZ900P0			FCZ950P0		
		1	5	6	1	4	7	1	4	7	2	5	7	2	5	7	2	5	7	2	5	7
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																						
Heating capacity	kW	5,81	8,25	8,67	6,86	8,55	10,00	7,63	9,72	11,51	8,77	10,10	10,52	10,02	11,65	12,09	11,81	13,80	14,45	12,43	15,07	16,00
Water flow rate system side	l/h	500	709	746	590	735	860	656	836	990	754	868	905	862	1002	1040	1016	1187	1242	1069	1296	1375
Pressure drop system side	kPa	10	19	21	12	20	26	15	23	31	19	25	27	12	15	16	14	18	20	19	26	29
Heating performance 45 °C / 40 °C (2)																						
Heating capacity	kW	2,89	4,10	4,31	3,41	4,25	4,97	3,79	4,83	5,72	4,36	5,02	5,23	4,98	5,79	6,01	5,87	6,86	7,18	6,18	7,49	7,95
Water flow rate system side	l/h	497	705	741	586	731	855	652	831	984	750	863	899	856	996	1034	1009	1180	1235	1063	1288	1367
Pressure drop system side	kPa	10	19	21	13	20	26	15	23	31	19	25	27	12	15	16	14	18	20	19	26	29
Cooling performance 7 °C / 12 °C																						
Cooling capacity	kW	2,91	4,08	4,28	3,37	4,08	4,65	4,15	5,02	5,67	4,24	4,97	5,18	4,69	5,53	5,80	4,38	5,33	5,95	6,35	7,62	8,07
Sensible cooling capacity	kW	2,07	2,94	3,09	2,70	3,34	3,92	2,93	3,60	4,12	3,24	3,83	4,02	3,53	4,20	4,41	3,11	4,11	4,73	4,20	5,08	5,40
Water flow rate system side	l/h	500	702	736	580	702	800	715	863	975	731	855	892	807	951	997	753	917	1023	1092	1310	1388
Pressure drop system side	kPa	12	21	23	15	21	26	16	23	28	20	26	28	12	16	17	10	14	17	18	24	27
Fan																						
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	2			3			3			3			3			3			3		
Air flow rate	m^3/h	400	592	627	567	770	920	567	770	920	785	978	1050	785	978	1050	785	978	1050	785	978	1050
High static pressure	Pa	22	50	56	27	50	71	27	50	71	32	50	58	32	50	58	32	50	58	32	50	58
Input power	W	49	80	627	66	89	118	66	89	118	92	117	138	92	117	138	92	117	138	92	117	138
Electrical wiring		V1	V5	V6	V1	V4	V7	V1	V4	V7	V2	V5	V7	V2	V5	V7	V2	V5	V7	V2	V5	V7
Duct type fan coil sound data (3)																						
Sound power level (inlet + radiated)	dB(A)	45,0	55,0	57,0	46,0	56,0	61,0	46,0	56,0	61,0	54,0	60,0	62,0	54,0	60,0	62,0	54,0	60,0	62,0	54,0	60,0	62,0
Sound power level (outlet)	dB(A)	41,0	51,0	53,0	44,0	54,0	60,0	44,0	54,0	60,0	52,0	59,0	61,0	52,0	59,0	61,0	52,0	59,0	61,0	52,0	59,0	61,0
Finned pack heat exchanger																						
Water content main heat exchanger	l	1,4			1,2			1,6			1,2			1,6			1,8			2,3		
Diametre hydraulic fittings																						
Main heat exchanger	Ø	3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		

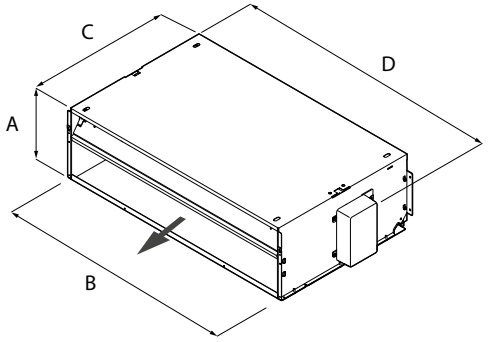
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

4-pipe

		FCZ201P0			FCZ301P0			FCZ401P0			FCZ501P0			FCZ601P0			FCZ701P0			FCZ901P0		
		2	4	6	1	4	6	1	3	6	1	5	6	1	4	7	2	5	7	2	5	7
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)																						
Heating capacity	kW	1,06	1,37	1,48	1,82	2,39	2,55	2,19	2,75	2,99	2,59	3,30	3,34	3,13	3,85	4,35	4,13	4,40	4,60	5,16	5,71	5,77
Water flow rate system side	l/h	93	120	130	159	210	223	192	240	262	226	290	301	274	336	381	361	385	403	452	500	504
Pressure drop system side	kPa	5	8	9	8	12	14	5	7	8	6	9	9	9	13	16	16	15	17	10	12	12
Cooling performance 7 °C / 12 °C																						
Cooling capacity	kW	0,93	1,30	1,44	1,70	2,40	2,63	2,29	3,06	3,41	2,68	3,65	3,82	3,37	4,08	4,65	4,24	4,97	5,18	4,38	5,33	5,95
Sensible cooling capacity	kW	0,74	1,14	1,18	1,27	1,86	2,03	1,66	2,24	2,52	1,94	2,70	2,83	2,70	3,34	3,92	3,24	3,83	4,02	3,11	4,11	4,73
Water flow rate system side	l/h	160	224	248	292	413	452	394	526	586	461	628	657	580	702	800	729	855	28	753	917	1023
Pressure drop system side	kPa	8	13	15	8	16	18	11	18	22	13	22	24	15	21	26	20	26	28	10	14	17
Fan																						
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			2			2			2			3			3			3		
Air flow rate	m^3/h	148	226	254	263	404	446	346	487	559	400	592	627	567	770	920	785	978	1050	785	978	1050
High static pressure	Pa	21	50	63	21	50	61	25	50	66	22	50	56	27	50	71	32	50	58	32	50	58
Input power	W	28	41	74	38	55	78	53	63	102	49	80	627	66	89	118	92	117	138	92	117	138
Electrical wiring		V2	V4	V6	V1	V4	V6	V1	V3	V6	V1	V5	V6	V1	V4	V7	V2	V5	V7	V2	V5	V7
Duct type fan coil sound data (2)																						
Sound power level (inlet + radiated)	dB(A)	41,0	56,0	59,0	39,0	51,0	54,0	44,0	54,0	55,0	45,0	55,0	57,0	46,0	56,0	61,0	54,0	60,0	62,0	54,0	60,0	62,0
Sound power level (outlet)	dB(A)	37,0	52,0	55,0	35,0	47,0	49,0	40,0	50,0	52,0	41,0	51,0	53,0	44,0	54,0	60,0	52,0	59,0	61,0	52,0	59,0	61,0
Finned pack heat exchanger																						
Water content main heat exchanger	l	0,5			0,8			1,0			1,0			1,2			1,2			1,8		
Water content secondary heat exchanger	l	0,2			0,3			0,3			0,3			0,4			0,4			0,7		
Diametre hydraulic fittings																						
Main heat exchanger	Ø	1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Secondary heat exchanger	Ø	1/2"			1/2"			1/2"			1/2"			1/2"			1/2"			1/2"		

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		FCZ101P	FCZ102P	FCZ201P	FCZ202P	FCZ301P	FCZ302P	FCZ401P	FCZ402P	FCZ501P	FCZ502P
Dimensions and weights											
A	mm	216	216	216	216	216	216	216	216	216	216
B	mm	412	412	522	522	753	753	973	973	973	973
C	mm	453	453	453	453	453	453	453	453	453	453
D	mm	452	452	562	562	793	793	1013	1013	1013	1013
Net weight	kg	12,0	13,0	13,0	14,0	15,0	16,0	21,0	22,0	23,0	24,0

		FCZ601P	FCZ602P	FCZ701P	FCZ702P	FCZ801P	FCZ802P	FCZ901P	FCZ1001P
Dimensions and weights									
A	mm	216	216	216	216	216	216	216	216
B	mm	1122	1122	1122	1122	1122	1122	1122	1122
C	mm	453	453	453	453	453	453	558	558
D	mm	1147	1147	1147	1147	1147	1147	1147	1147
Net weight	kg	30,0	31,0	30,0	31,0	30,0	31,0	32,0	32,0

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

FCZI P

Fan coil unit for ducted installations

Cooling capacity 0,89 ÷ 8,60 kW
Heating capacity 2,02 ÷ 17,02 kW

- **Electric saving equal to 50% with respect to a fan coil with 3-speed motor**
- **Suitable for duct-type installations too**
- **Total comfort: reduced variations in temperature and relative humidity**
- **Vertical and horizontal installation**
- **Very quiet**

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

DESCRIPTION

fan coil can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Their characteristics permit energy savings compared to conventional fans.
They are statically and dynamically balanced and directly coupled to the motor shaft.
The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
Reversibility of the water connections during installation only for units with a standard or boosted main heat exchanger, or standard with BV accessory. Not reversible in all other configurations. In any case, units with the coil water connections on the right are available at the time of ordering.

Condensate drip

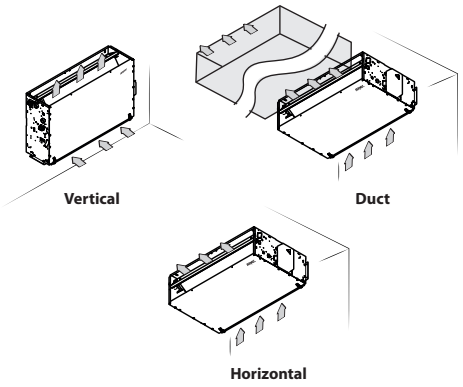
Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean.

VERSIONS

Flush-mounting and duct-type versions



In the standard configuration there is no useful static pressure available. If necessary for canaled installations, you must act on the engine dip switches, for more details refer to the technical documentation.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3,4	FCZI
5,6,7	Size 200, 201, 202, 250, 300, 301, 302, 350, 400, 401, 402, 450, 500, 501, 502, 550, 700, 701, 702, 750, 900, 901, 950
8	main heat exchanger

Field		Description
9		Secondary heat exchanger
10		Version
	P	Flush-mounting
	PR	Flush-mounting with water connections on right-hand side

SIZE AVAILABLE FOR VERSION

Size		200	201	202	250	300	301	302	350	400	401	402	450
Versions produced (by size)													
Versions available (by size)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•

		500	501	502	550	700	701	702	750	900	901	950
Versions produced (by size)												
Versions available (by size)	P,PR	•	•	•	•	•	•	•	•	•	•	•

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
PXAI: Thermostat on the machine for controlling the fan coils (both with asynchronous and brushless motors), complete with water and air probes to be positioned in the relative seats, and a plastic support to fix it on the side of the unit. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, purifier devices (Cold Plasma and germicidal lamp), or radiant plate.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.
VCZ41: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCZ4124: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCZ42: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZ4224: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCZ43: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCZ4324: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.
VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

(Heating only) additional coil

BV: Hot water heat exchanger with 1 row.

Installation accessories

AMP: Wall mounting kit
DSC: Condensate drainage device.
BC: Condensate drip.
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.
Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.
MZA: Cabinet housing with fixed fins.
MZU: Cabinet housing with adjustable fins.
GA: Intake grid with fixed louvers
GAF: Intake grid with filter and fixed louvers
GM: Flow grid with adjustable louvers.
PA: Intake plenum in galvanised sheet metal, complete with suction couplings for circular-section ducts.
PAF: Intake plenum providing recovery and delivery on the same side, for all installations where the machine needs to be positioned outside the air conditioned rooms to minimise the noise levels and facilitate maintenance.
PM: Galvanised sheet steel flow plenum, externally insulated, equipped with plastic flow fittings for ducts and circular sections.
RD: Straight delivery coupling for canalisation.
RDA: Straight suction coupling for canalisation.
RP: 90° delivery coupling.
RPA: 90° suction coupling.

Accessories for ducting

MZC: Plenum with motorised dampers.
RDA_V: Straight intake connection with rectangular flange.
RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
RDA_C: Straight intake connection with circular flanges.
PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.
PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.
RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
RDM_V: Straight delivery coupling in galvanised sheet metal.
RDM_C: Straight discharge internally insulated, with circular flanges.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
AER503IR (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRO503	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PXAI	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SA5 (2)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW3 (2)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW5 (2)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TX (3)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

For more information about VMF system, refer to the dedicated documentation.

VMF system

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
DI24	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E19I (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E3	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4DX	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4X	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-IR	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW1	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMHI	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) Mandatory accessory.

Water valves

Valve Kit for 4 pipe systems

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
VCZ1X4L (1)	P,PR	•			•																			
VCZ1X4R (1)	P,PR	•			•																			
VCZ2X4L (1)	P,PR					•			•	•			•	•			•	•			•			
VCZ2X4R (1)	P,PR					•			•	•			•	•			•	•			•			
VCZ3X4L (1)	P,PR																					•		•

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
VCZ3X4R (1)	P,PR																					•		•

(1) The valves can be combined with the units if there is a control panel for managing them.

3 way valve kit

	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ41 VCZ4124	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224
Secondary coil	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-
Additional coil "BV"	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-

	500	501	502	550	700	701	702	750	900	901	950
Main coil	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ42 VCZ4224	VCZ43 VCZ4324	VCZ43 VCZ4324	VCZ43 VCZ4324
Secondary coil	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF45 VCF4524	-
Additional coil "BV"	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF45 VCF4524	-	-

VCF41 - 42 - 43; VCF44 - 45 (230V~50Hz)
VCF4124 - 4224 - 4324; VCF4424 - 4524 (24V)

2 way valve kit

	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD1 VCZD124	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224
Secondary coil	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-
Additional coil "BV"	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-

	500	501	502	550	700	701	702	750	900	901	950
Main coil	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD2 VCZD224	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324
Secondary coil	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	VCFD4 VCFD424	-	-	VCFD4 VCFD424	-
Additional coil "BV"	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-	-	VCFD4 VCFD424	-	-

VCZD1 - 2 - 3; VCFD4 (230V~50Hz)
VCZD124 - 224 - 324; VCF424 (24V)

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
VJP060 (1)	P,PR	•	•	•	•	•	•	•	•															
VJP060M (2)	P,PR	•	•	•	•	•	•	•	•															
VJP090 (1)	P,PR									•	•	•	•	•	•	•	•							
VJP090M (2)	P,PR									•	•	•	•	•	•	•	•							
VJP150 (1)	P,PR																	•	•	•	•	•	•	•
VJP150M (2)	P,PR																	•	•	•	•	•	•	•

(1) 230V~50Hz
(2) 24V

(Heating only) additional coil

Heating only additional coil

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
BV122 (1)	P,PR	•																						
BV132 (1)	P,PR					•																		
BV142 (1)	P,PR									•				•										
BV162 (1)	P,PR																					•		
BVZ800 (1)	P,PR																	•						

(1) Not available for sizes with oversized main coil.

Installation accessories

Wall mounting kit

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
AMP20	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•							
AMPZ	P,PR																	•	•	•	•	•	•	•

Condensate drip

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
BCZ4 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
BCZ5 (2)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
BCZ6 (2)	P,PR																					•	•	•

(1) For vertical installation.
(2) For horizontal installation.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
BC8 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
BC9 (1)	P,PR																					•	•	•

(1) For horizontal installation.

Condensate recirculation device

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
DSCZ4 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Ventilcassaforma

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
CHF22	P,PR	•	•	•	•																			
CHF32	P,PR					•	•	•	•															
CHF42	P,PR									•	•	•	•	•	•	•	•							
CHF62	P,PR																	•	•	•	•	•	•	•

Cabinet housing with fixed fins.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
MZA200	P,PR	•	•	•	•																			
MZA300	P,PR					•	•	•	•															
MZA500	P,PR									•	•	•	•	•	•	•	•							
MZA800	P,PR																	•	•	•	•			
MZA900	P,PR																					•	•	•

Cabinet housing with adjustable fins.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
MZU100	P,PR	•	•	•	•																			
MZU300	P,PR					•	•	•	•															
MZU500	P,PR									•	•	•	•	•	•	•	•							
MZU800	P,PR																	•	•	•	•			
MZU900	P,PR																					•	•	•

Wall mounting and duct type installation accessories

Lower intake grille

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
GA22	P,PR	•	•	•	•																			
GA32	P,PR					•	•	•	•															
GA42	P,PR									•	•	•	•	•	•	•	•							
GA62	P,PR																	•	•	•	•	•	•	•

Intake grilles with fixed louvers and filter

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
GAF22	P,PR	•	•	•	•																			
GAF32	P,PR					•	•	•	•															
GAF42	P,PR									•	•	•	•	•	•	•	•							
GAF62	P,PR																	•	•	•	•	•	•	•

Delivery grilles with adjustable louvers

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
GM22	P,PR	•	•	•	•																			
GM32	P,PR					•	•	•	•															
GM42	P,PR									•	•	•	•	•	•	•	•							
GM62	P,PR																	•	•	•	•	•	•	•

Intake plenum in sheet metal complete with connectors for circular channels

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
PA22	P,PR	•	•	•	•																			
PA32	P,PR					•	•	•	•															
PA42	P,PR									•	•	•	•	•	•	•	•							
PA62	P,PR																	•	•	•	•	•	•	•

Intake plenum providing recovery and delivery on the same side

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
PA22F	P,PR	•	•	•	•																			
PA32F	P,PR					•	•	•	•															
PA42F	P,PR									•	•	•	•	•	•	•	•							
PA62F	P,PR																	•	•	•	•	•	•	•

Delivery plenum with circular flanges.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
PM22	P,PR	•	•	•	•																			
PM32	P,PR					•	•	•	•															
PM42	P,PR									•	•	•	•	•	•	•	•							
PM62	P,PR																	•	•	•	•	•	•	•

Straight delivery coupling

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RD22	P,PR	•	•	•	•																			
RD32	P,PR					•	•	•	•															
RD42	P,PR									•	•	•	•	•	•	•	•							
RD62	P,PR																	•	•	•	•	•	•	•

Straight suction coupling

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RDA22	P,PR	•	•	•	•																			
RDA32	P,PR					•	•	•	•															
RDA42	P,PR									•	•	•	•	•	•	•	•							
RDA62	P,PR																	•	•	•	•	•	•	•

90° delivery coupling.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RP22	P,PR	•	•	•	•																			
RP32	P,PR					•	•	•	•															
RP42	P,PR									•	•	•	•	•	•	•	•							
RP62	P,PR																	•	•	•	•	•	•	•

90° suction coupling.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RPA22	P,PR	•	•	•	•																			
RPA32	P,PR					•	•	•	•															
RPA42	P,PR									•	•	•	•	•	•	•	•							
RPA62	P,PR																	•	•	•	•	•	•	•

Accessories for ducting

Plenum with motorised dampers.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
MZC220	P,PR	•	•	•	•																			
MZC320	P,PR					•	•	•	•															
MZC530	P,PR									•	•	•	•	•	•	•	•							
MZC830	P,PR																	•	•	•	•	•	•	•

Straight intake connection with rectangular flange.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RDA000V	P,PR	•	•	•	•																			
RDA100V	P,PR					•	•	•	•															
RDA200V	P,PR									•	•	•	•	•	•	•	•							
RDA300V	P,PR																	•	•	•	•	•	•	•

Intake plenum with rectangular flange.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RPA000V	P,PR	•	•	•	•																			
RPA100V	P,PR					•	•	•	•															
RPA200V	P,PR									•	•	•	•	•	•	•	•							
RPA300V	P,PR																	•	•	•	•	•	•	•

Suction plenum with plastic circular flanges.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
PA000V	P,PR	•	•	•	•																			
PA100V	P,PR					•	•	•	•															
PA200V	P,PR									•	•	•	•	•	•	•	•							
PA300V	P,PR																	•	•	•	•	•	•	•

Internally insulated delivery plenum with circular flanges.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
PM000V	P,PR	•	•	•	•																			
PM100V	P,PR					•	•	•	•															
PM200V	P,PR									•	•	•	•	•	•	•	•							
PM300V	P,PR																	•	•	•	•	•	•	•

Internally insulated delivery plenum with rectangular flange.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RPM000V	P,PR	•	•	•	•																			
RPM100V	P,PR					•	•	•	•															
RPM200V	P,PR									•	•	•	•	•	•	•	•							
RPM300V	P,PR																	•	•	•	•	•	•	•

Straight delivery coupling in galvanised sheet metal.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RDM000V	P,PR	•	•	•	•																			
RDM100V	P,PR					•	•	•	•															
RDM200V	P,PR									•	•	•	•	•	•	•	•							
RDM300V	P,PR																	•	•	•	•	•	•	•

Straight discharge internally insulated, with circular flanges.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RDMC000V	P,PR	•	•	•	•																			
RDMC100V	P,PR					•	•	•	•															
RDMC200V	P,PR									•	•	•	•	•	•	•	•							
RDMC300V	P,PR																	•	•	•	•	•	•	•

PERFORMANCE DATA FOR UNITS WITHOUT HEAD (EUROVENT CERTIFICATE FC-H)

2-pipe

		FCZI200P			FCZI250P			FCZI300P			FCZI350P			FCZI400P			FCZI450P		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	2,02	2,95	3,70	2,20	3,18	4,05	3,47	4,46	5,50	3,77	4,92	6,15	4,32	5,74	7,15	4,57	6,29	7,82
Water flow rate system side	l/h	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685
Pressure drop system side	kPa	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,00	1,46	1,84	1,09	1,58	2,01	1,72	2,21	2,73	1,87	2,44	3,06	2,14	2,85	3,55	2,27	3,12	3,88
Water flow rate system side	l/h	174	254	319	190	274	350	299	385	475	325	425	531	373	495	617	394	543	675
Pressure drop system side	kPa	6	12	18	8	15	22	8	12	18	8	14	20	10	16	24	6	11	16
Fan																			
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Inverter			Inverter			Inverter			Inverter			Inverter			Inverter		
Number	no.	1			1			2			2			2			2		
Air flow rate	m^3/h	140	220	290	140	220	290	260	350	450	260	350	450	330	460	600	330	460	600
Input power	W	7	8	14	7	8	14	5	7	13	5	7	13	5	10	18	5	10	18
Signal 0-10V	%	44	68	90	44	68	90	52	70	90	52	70	90	49	68	90	49	68	90
Fan coil sound data (3)																			
Sound power level	dB(A)	35,0	46,0	51,0	35,0	46,0	51,0	34,0	41,0	48,0	34,0	41,0	48,0	37,0	44,0	51,0	37,0	44,0	51,0
Sound pressure level	dB(A)	27,0	38,0	43,0	27,0	38,0	43,0	26,0	33,0	40,0	26,0	33,0	40,0	29,0	36,0	43,0	29,0	36,0	43,0
Finned pack heat exchanger																			
Water content main heat exchanger	l	0,5			0,7			0,8			1,0			1,0			1,4		
Diametre hydraulic fittings																			
Main heat exchanger	Ø	1/2"			1/2"			3/4"			3/4"			3/4"			3/4"		

		FCZI500P			FCZI550P			FCZI700P			FCZI750P			FCZI900P			FCZI950P		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	5,27	7,31	8,50	5,82	8,34	9,75	8,10	9,80	11,00	9,10	11,30	12,50	10,77	13,35	15,14	11,20	14,42	17,10
Water flow rate system side	l/h	462	641	745	510	731	855	710	860	964	798	991	1096	945	1171	1328	982	1264	1500
Pressure drop system side	kPa	12	21	28	10	20	26	17	24	29	10	15	18	12	17	22	16	24	33
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	2,62	3,63	4,22	2,89	4,14	4,85	4,03	4,87	5,47	4,52	5,62	6,21	5,35	6,64	7,53	5,57	7,17	8,50
Water flow rate system side	l/h	455	631	734	502	720	842	699	846	950	786	975	1079	930	1152	1307	967	1245	1476
Pressure drop system side	kPa	12	21	28	10	20	26	16	24	29	10	14	18	12	17	22	15	24	33
Fan																			
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Inverter			Inverter			Inverter			Inverter			Inverter			Inverter		
Number	no.	2			2			3			3			3			3		
Air flow rate	m^3/h	400	600	720	400	600	720	700	930	1140	700	930	1140	700	930	1140	700	930	1140
Input power	W	7	18	31	4	10	19	30	40	80	30	40	80	30	40	80	30	40	80
Signal 0-10V	%	50	74	90	50	74	90	56	72	90	56	72	90	56	72	90	56	72	90
Fan coil sound data (3)																			
Sound power level	dB(A)	42,0	51,0	56,0	42,0	51,0	56,0	50,0	57,0	62,0	50,0	57,0	62,0	51,0	57,0	62,0	51,0	57,0	62,0
Sound pressure level	dB(A)	34,0	43,0	48,0	34,0	43,0	48,0	42,0	49,0	54,0	42,0	49,0	54,0	43,0	49,0	54,0	43,0	49,0	54,0
Finned pack heat exchanger																			
Water content main heat exchanger	l	1,0			1,4			1,2			1,6			1,8			2,3		
Diametre hydraulic fittings																			
Main heat exchanger	Ø	3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

4-pipe

		FCZI201P			FCZI301P			FCZI401P			FCZI501P			FCZI701P			FCZI901P		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)																			
Heating capacity	kW	1,02	1,35	1,60	1,80	2,18	2,56	2,21	2,65	3,12	2,59	3,34	3,73	3,66	4,29	4,94	4,73	5,63	5,72
Water flow rate system side	l/h	89	118	140	158	191	224	186	232	273	227	293	327	320	375	437	414	492	501
Pressure drop system side	kPa	4	8	10	16	23	30	4	6	8	6	8	10	11	14	18	8	12	12
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25	3,92	4,89	5,50	4,29	5,00	6,91
Sensible cooling capacity	kW	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18	2,99	3,76	4,30	2,97	3,78	5,68
Water flow rate system side	l/h	153	221	275	288	374	456	379	503	619	460	634	731	675	841	946	738	860	1189
Pressure drop system side	kPa	6	12	18	8	13	18	10	16	24	13	22	29	16	24	30	10	12	22
Fan																			
Type	type	Centrifugal																	
Fan motor	type	Inverter																	
Number	no.	1			2			2			2			3			3		
Air flow rate	m^3/h	140	220	290	260	350	450	330	460	600	400	600	720	700	930	1140	700	930	1140
Input power	W	7	8	14	5	7	13	5	10	18	7	16	31	30	40	80	30	40	80
Signal 0-10V	%	44	68	90	52	70	90	49	68	90	50	74	90	56	72	90	56	72	90
Fan coil sound data (2)																			
Sound power level	dB(A)	35,0	46,0	51,0	34,0	41,0	48,0	37,0	44,0	51,0	42,0	51,0	56,0	50,0	57,0	62,0	51,0	57,0	62,0
Sound pressure level	dB(A)	27,0	38,0	43,0	26,0	33,0	40,0	29,0	36,0	43,0	34,0	43,0	48,0	42,0	49,0	54,0	43,0	49,0	54,0
Finned pack heat exchanger																			
Water content main heat exchanger	l	0,5			0,8			1,0			1,0			1,2			1,8		
Water content secondary heat exchanger	l	0,2			0,3			0,3			0,3			0,4			0,7		
Diametre hydraulic fittings																			
Main heat exchanger	Ø	1/2"			3/4"			3/4"			3/4"			3/4"			3/4"		
Secondary heat exchanger	Ø	1/2"																	

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

PERFORMANCE DATA FOR UNITS WITH HEAD (EUROVENT CERTIFICATE FCP-H)

2-pipe

		FCZI200P			FCZI250P			FCZI300P			FCZI350P			FCZI400P			FCZI450P			FCZI500P			FCZI550P		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	1,81	3,16	3,34	2,01	3,40	3,62	3,08	4,83	5,23	3,32	5,43	5,83	3,96	5,85	6,34	4,10	6,44	6,96	5,39	7,28	7,63	5,92	8,37	8,71
Water flow rate system side	l/h	156	272	287	173	292	311	265	415	450	285	467	502	341	503	545	353	554	599	464	626	656	509	720	749
Pressure drop system side	kPa	6	13	16	7	17	19	7	14	16	7	17	19	9	17	19	5	12	13	12	22	23	11	20	21
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	0,90	1,57	1,66	1,00	1,69	1,80	1,53	2,40	2,60	1,65	2,70	2,90	1,97	2,91	3,15	2,04	3,20	3,46	2,68	3,62	3,79	2,94	4,16	4,33
Water flow rate system side	l/h	155	270	288	172	291	308	263	413	447	284	464	499	339	501	542	351	550	595	461	623	652	506	715	745
Pressure drop system side	kPa	6	13	16	7	17	19	7	14	16	7	17	19	9	17	19	5	12	13	12	22	23	11	20	21
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	0,80	1,37	1,45	0,95	1,67	1,76	1,40	2,38	2,53	1,66	2,70	2,88	2,03	2,98	3,21	2,22	3,28	3,55	2,73	3,68	3,84	2,97	4,15	4,31
Sensible cooling capacity	kW	0,63	1,13	1,20	0,70	1,29	1,37	1,10	1,82	1,94	1,15	1,94	2,07	1,45	2,18	2,36	1,54	2,35	2,56	1,98	2,73	2,85	2,11	2,98	3,12
Water flow rate system side	l/h	138	236	249	163	287	303	241	409	435	285	464	495	349	512	552	382	564	610	469	633	660	511	714	741
Pressure drop system side	kPa	5	13	16	8	17	19	7	14	16	9	17	19	9	17	19	8	12	13	13	22	23	12	20	21
Fan																									
Type	type	Centrifugal																							
Fan motor	type	Inverter																							
Number	no.	1			1			2			2			2			2			2			2		
Air flow rate	m^3/h	123	240	257	123	240	257	225	390	424	225	390	424	300	470	515	300	470	515	410	600	630	410	600	630
High static pressure	Pa	13	50	57	13	50	57	16	50	59	16	50	53	20	50	60	20	50	56	23	50	55	23	50	55
Input power	W	7	27	31	7	27	31	10	11	40	10	30	40	14	38	48	14	38	48	18	50	60	18	50	60
Signal 0-10V	%	43	84	90	43	84	90	48	83	90	48	83	90	52	82	90	52	82	90	58	85	90	58	85	90
Duct type fan coil sound data (3)																									
Sound power level (inlet + radiated)	dB(A)	37,0	57,0	59,0	37,0	57,0	59,0	36,0	50,0	53,0	36,0	50,0	53,0	43,0	53,0	55,0	43,0	53,0	55,0	45,0	56,0	57,0	45,0	56,0	57,0
Sound power level (outlet)	dB(A)	33,0	53,0	55,0	33,0	53,0	55,0	32,0	47,0	49,0	32,0	47,0	49,0	39,0	49,0	52,0	39,0	49,0	52,0	42,0	52,0	52,0	42,0	52,0	52,0
Finned pack heat exchanger																									
Water content main heat exchanger	l	0,5			0,7			0,8			1,0			1,0			1,4			1,0			1,4		
Diametre hydraulic fittings																									
Main heat exchanger	Ø	1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		

		FCZI700P			FCZI750P			FCZI900P			FCZI950P		
		1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)													
Heating capacity	kW	5,33	8,34	8,88	6,17	9,52	10,15	6,58	11,15	11,87	6,68	11,63	12,66
Water flow rate system side	l/h	468	732	779	541	835	890	566	958	1021	574	1000	1088
Pressure drop system side	kPa	8	17	20	5	11	12	5	13	14	6	17	19
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	2,67	4,15	4,40	2,46	4,69	5,00	3,27	5,54	5,90	3,32	5,78	6,29
Water flow rate system side	l/h	460	720	767	418	806	860	562	953	1015	571	994	1082
Pressure drop system side	kPa	8	18	20	3	11	12	5	13	14	6	17	19
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	2,20	4,00	4,30	2,60	4,41	4,70	2,81	4,80	5,20	3,58	6,00	6,46
Sensible cooling capacity	kW	1,71	3,00	3,20	1,90	3,30	3,50	2,10	3,60	3,90	2,33	3,94	4,27
Water flow rate system side	l/h	378	688	739	447	760	818	483	825	894	616	1032	1111
Pressure drop system side	kPa	7	18	20	4	11	12	5	13	14	7	17	19
Fan													
Type	type	Centrifugal											
Fan motor	type	Inverter											
Number	no.	3			3			3			3		
Air flow rate	m^3/h	405	730	799	405	730	799	405	730	799	405	730	799
High static pressure	Pa	15	50	60	15	50	60	15	50	60	15	50	60
Input power	W	21	61	78	21	61	78	21	61	78	21	61	78
Signal 0-10V	%	46	82	90	46	82	90	45	84	90	45	84	90
Duct type fan coil sound data (3)													
Sound power level (inlet + radiated)	dB(A)	41,0	55,0	58,0	41,0	55,0	58,0	44,0	55,0	58,0	44,0	55,0	58,0
Sound power level (outlet)	dB(A)	36,0	51,0	54,0	36,0	51,0	54,0	40,0	51,0	54,0	40,0	51,0	54,0
Finned pack heat exchanger													
Water content main heat exchanger	l	1,2			1,6			1,8			2,3		
Diametre hydraulic fittings													
Main heat exchanger	Ø	3/4"											

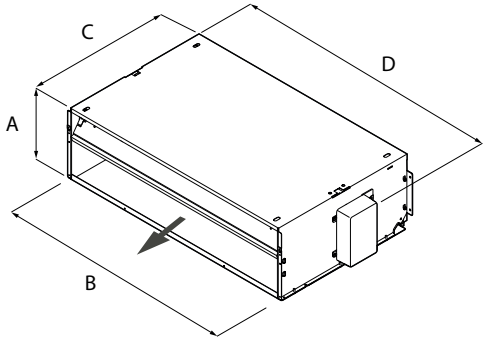
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

4-pipe

		FCZI201P			FCZI301P			FCZI401P			FCZI501P			FCZI701P			FCZI901P		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)																			
Heating capacity	kW	0,94	1,42	1,49	1,60	2,34	2,47	1,99	2,69	2,85	2,62	3,59	3,45	2,99	3,70	3,92	3,17	5,09	5,47
Water flow rate system side	l/h	81	122	128	138	201	212	171	231	245	225	309	297	257	318	337	273	438	470
Pressure drop system side	kPa	4	9	9	6	12	13	4	7	8	6	9	9	8	12	13	4	10	11
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	0,80	1,37	1,45	1,40	2,38	2,53	2,03	2,98	3,21	2,73	3,68	3,84	2,20	4,00	4,30	2,80	4,80	5,24
Sensible cooling capacity	kW	0,63	1,13	1,20	1,10	1,82	1,94	1,45	2,18	2,36	1,98	2,73	2,85	1,71	3,00	3,20	2,10	3,60	3,90
Water flow rate system side	l/h	138	236	249	241	409	435	349	512	552	469	633	660	378	688	739	482	825	901
Pressure drop system side	kPa	5	14	16	7	15	17	9	13	20	13	23	25	6	18	20	5	12	13
Fan																			
Type	type	Centrifugal																	
Fan motor	type	Inverter																	
Number	no.	1			2			2			2			3			3		
Air flow rate	m^3/h	123	240	257	225	390	424	300	470	515	410	600	630	405	730	799	405	730	799
High static pressure	Pa	13	50	57	16	50	59	20	50	60	23	50	55	15	50	60	15	50	60
Input power	W	7	27	31	10	31	40	14	38	58	18	50	60	21	61	78	21	61	78
Signal 0-10V	%	43	84	90	48	83	90	52	82	90	58	85	90	46	82	90	45	84	90
Duct type fan coil sound data (2)																			
Sound power level (inlet + radiated)	dB(A)	37,0	57,0	59,0	36,0	50,0	53,0	43,0	53,0	55,0	45,0	56,0	57,0	41,0	55,0	58,0	41,0	55,0	58,0
Sound power level (outlet)	dB(A)	33,0	53,0	55,0	32,0	47,0	49,0	39,0	49,0	52,0	42,0	52,0	52,0	36,0	51,0	54,0	36,0	51,0	54,0
Finned pack heat exchanger																			
Water content main heat exchanger	l	0,5			0,8			1,0			1,0			1,2			1,8		
Water content secondary heat exchanger	l	0,2			0,3			0,3			0,3			0,4			0,7		
Diametre hydraulic fittings																			
Main heat exchanger	Ø	1/2"			3/4"			3/4"			3/4"			3/4"			3/4"		
Secondary heat exchanger	Ø	1/2"																	

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		FCZI200P	FCZI200PAF	FCZI250P	FCZI250PAF	FCZI300P	FCZI300PAF
Dimensions and weights							
A	mm	216	-	216	-	216	-
B	mm	522	-	522	-	753	-
C	mm	453	-	453	-	453	-
D	mm	562	-	562	-	793	-
Net weight	kg	12,0	-	14,0	-	14,0	-

		FCZI350P	FCZI400P	FCZI400PAF	FCZI450P	FCZI500P	FCZI500PAF
Dimensions and weights							
A	mm	216	216	-	216	216	-
B	mm	753	973	-	973	973	-
C	mm	453	453	-	453	453	-
D	mm	793	1013	-	1013	1013	-
Net weight	kg	16,0	20,0	-	22,0	23,0	-

		FCZI550P	FCZI550PAF	FCZI700P	FCZI700PAF	FCZI750P	FCZI750PAF
Dimensions and weights							
A	mm	216	-	216	-	216	-
B	mm	973	-	1122	-	1122	-
C	mm	453	-	453	-	453	-
D	mm	1013	-	1147	-	1147	-
Net weight	kg	24,0	-	29,0	-	31,0	-

		FCZI900P	FCZI900PAF	FCZI950P	FCZI950PAF	Pre_acc
Dimensions and weights						
A	mm	216	-	216	-	-
B	mm	1122	-	1122	-	-
C	mm	558	-	558	-	-
D	mm	1147	-	1147	-	-
Net weight	kg	32,0	-	32,0	-	-

		FCZI201P	FCZI202P	FCZI301P	FCZI302P	FCZI401P	FCZI402P
Dimensions and weights							
A	mm	216	216	216	216	216	216
B	mm	522	522	753	753	973	973
C	mm	453	453	453	453	453	453
D	mm	562	562	793	793	1013	1013
Net weight	kg	13,0	14,0	15,0	16,0	21,0	22,0

		FCZI501P	FCZI502P	FCZI701P	FCZI702P	FCZI901P
Dimensions and weights						
A	mm	216	216	216	216	216
B	mm	973	973	1122	1122	1122
C	mm	453	453	453	453	558
D	mm	1013	1013	1147	1147	1147
Net weight	kg	23,0	24,0	30,0	31,0	32,0

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UL-P

-

- Very quiet
- Ideal for residential or office solutions
- Version with Coldplasma Air purifier

DESCRIPTION

Monobloc duct type fan coils for heating and/or cooling small and medium-sized environments for civil and commercial use.
It can be installed on 2-pipe systems and combined with any heat generator even at low temperatures. Choosing the optimal solution for any requirement is easy thanks to the various versions available and to the possibility of horizontal or vertical installation, depending on the version.

VERSIONS

P Without shell, vertical and horizontal installation, lower intake, without commands
PAF Without shell, vertical and horizontal installation, front intake, without commands

FEATURES

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.
The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

The fan coil units are equipped with a standard air filter. For specific details, please refer to the unit's documentation.

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.
SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.
WMT16: Electronic thermostat with thermostated ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-LON: Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

DSC: Condensate drainage device.
VCH: 3-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.
BC: Condensate drip.
Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Omnia ULP

Field		Description
1,2,3		ULI
4,5		Size 11, 16, 26, 36
6		Version
	P	Without shell, vertical and horizontal installation, lower intake, without commands
	PAF	Without shell, vertical and horizontal installation, front intake, without commands

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories - Omnia ULP

Model	Ver	11	16	26	36
AER503IR (1)	P,PAF	•	•	•	•
PRO503	P,PAF	•	•	•	•
SA5 (2)	P,PAF	•	•	•	•
SIT3 (3)	P,PAF	•	•	•	•
SIT5 (4)	P,PAF	•	•	•	•
SW5 (2)	P,PAF	•	•	•	•
TX (5)	P,PAF	•	•	•	•
WMT10 (5)	P,PAF	•	•	•	•
WMT16 (5)	P,PAF	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
(4) Probe for AER503IR-TX thermostats, if fitted.
(5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system - Omnia ULP

Model	Ver	11	16	26	36
DI24	P,PAF	•	•	•	•
VMF-E19 (1)	P,PAF	•	•	•	•
VMF-E3	P,PAF	•	•	•	•
VMF-E4DX	P,PAF	•	•	•	•
VMF-E4X	P,PAF	•	•	•	•
VMF-IO	P,PAF	•	•	•	•
VMF-IR	P,PAF	•	•	•	•
VMF-LON	P,PAF	•	•	•	•
VMF-SW	P,PAF	•	•	•	•
VMF-SW1	P,PAF	•	•	•	•
VMHI	P,PAF	•	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Condensate drip

Condensate drainage

Model	Ver	11	16	26	36
DSC5 (1)	P,PAF	•	•	•	•

(1) The accessory cannot be fit if the accessory BC10 or BC20 is installed.

Model	Ver	11	16	26	36
VCH	P,PAF	•	•	•	•

2 way valve kit

Model	Ver	11	16	26	36
VCHD	P,PAF	•	•	•	•

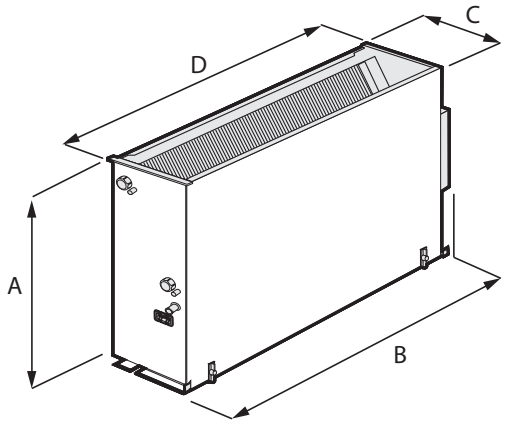
PERFORMANCE SPECIFICATIONS

2-pipe

		UL11P			UL16P			UL26P			UL36P		
		1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)													
Heating capacity	kW	1,06	1,46	2,01	1,54	2,12	2,91	2,89	3,83	4,62	3,63	4,87	5,94
Water flow rate system side	l/h	93	128	176	135	186	255	254	336	405	310	427	521
Pressure drop system side	kPa	1	1	2	1	2	4	5	8	11	7	13	18
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	0,52	0,73	1,00	0,76	1,05	1,44	1,44	1,90	2,29	1,75	2,42	2,95
Water flow rate system side	l/h	92	126	174	133	183	251	249	331	399	305	420	513
Pressure drop system side	kPa	1	1	2	2	3	3	5	8	11	7	13	18
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	0,53	0,67	0,82	0,69	0,87	1,17	1,26	1,65	1,99	1,63	2,26	2,79
Sensible cooling capacity	kW	0,38	0,52	0,68	0,52	0,69	0,96	0,97	1,30	1,61	1,13	1,59	2,00
Water flow rate system side	l/h	94	117	145	122	153	206	220	289	349	286	394	487
Pressure drop system side	kPa	1	2	2	2	3	5	5	8	11	7	13	19
Fan													
Type	type	Centrifugal											
Fan motor	type	Asynchronous											
Number	no.	1			1			2			2		
Air flow rate	m^3/h	80	120	180	110	160	240	190	270	350	240	350	460
Input power	W	8	12	18	23	25	32	24	27	35	30	35	42
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Diametre hydraulic fittings													
Main heat exchanger	Ø	1/2"											
Finned pack heat exchanger													
Water content main heat exchanger	l	0,3			0,4			0,6			0,8		
Power supply													
Power supply		230V~50Hz											

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT

DIMENSIONS



		UL11P	UL11PAF	UL16P	UL16PAF	UL26P	UL26PAF	UL36P	UL36PAF
Dimensions and weights									
A	mm	465	-	465	-	465	-	465	-
B	mm	420	-	530	-	761	-	981	-
C	mm	171	-	171	-	171	-	171	-
D	mm	360	-	470	-	701	-	921	-
Net weight	kg	10,0	-	12,0	-	15,0	-	18,0	-

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ULI-P

Fan coil unit for ducted installations

- Very quiet
- Ideal for residential or office solutions

DESCRIPTION
Monobloc duct type fan coils for heating and/or cooling small and medium-sized environments for civil and commercial use.
It can be installed on 2-pipe systems and combined with any heat generator even at low temperatures. Choosing the optimal solution for any requirement is easy thanks to the various versions available and to the possibility of horizontal or vertical installation, depending on the version.

VERSIONS
P Without shell, vertical and horizontal installation, lower intake, without commands
PAF Without shell, vertical and horizontal installation, front intake, without commands

FEATURES

Ventilation group
Centrifugal fans constructed from anti-static plastic with an airfoil design engineered for high efficiency and low noise levels.
Their characteristics permit energy savings compared to conventional fans.
They are statically and dynamically balanced and directly coupled to the motor shaft.
The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.
The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).
The plastic augers are extractable for easy and efficient cleaning.

Finned pack heat exchanger
With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

Condensate drip
Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter
The fan coil units are equipped with a standard air filter. For specific details, please refer to the unit's documentation.

ACCESSORIES

Control panels
AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SA503: Wall-mountable ambient sensor, compatible with AER503IR.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite
The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
DI24CP: Complete flush-mounted interface plate with support for DI24, Vimar brand, Arké series, graphite gray color.
VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-LON: Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

DSC: Condensate drainage device.
VCH: 3-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.
BC: Condensate drip.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Omnia ULP

Field		Description
1,2,3		**ULI**
4,5		**Size** 16, 26, 36
6		**Version**
	P	Without shell, vertical and horizontal installation, lower intake, without commands
	PAF	Without shell, vertical and horizontal installation, front intake, without commands

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories - Omnia ULP

Accessory	ULI16P	ULI16PAF	ULI26P	ULI26PAF	ULI36P	ULI36PAF
AER503IR	•	•	•	•	•	•
PRO503	•	•	•	•	•	•
SA5	•	•	•	•	•	•
SA503	•	•	•	•	•	•
SW5	•	•	•	•	•	•
TX	•	•	•	•	•	•

VMF system - Omnia ULP

Accessory	ULI16P	ULI16PAF	ULI26P	ULI26PAF	ULI36P	ULI36PAF
DI24	•	•	•	•	•	•
DI24CP	•	•	•	•	•	•
VMF-E19I	•	•	•	•	•	•
VMF-E3	•	•	•	•	•	•
VMF-E4DX	•	•	•	•	•	•
VMF-E4X	•	•	•	•	•	•
VMF-IO	•	•	•	•	•	•
VMF-IR	•	•	•		•	•
VMF-LON	•	•	•	•	•	•
VMF-SW	•	•	•	•	•	•
VMHI	•	•	•	•	•	•

Condensate drip

Accessory	ULI16P	ULI16PAF	ULI26P	ULI26PAF	ULI36P
BC10	•	•	•	•	•
BC20	•	•	•	•	•

Condensate drainage

Accessory	ULI16P	ULI16PAF	ULI26P	ULI26PAF	ULI36P
DSC5 (1)	•	•	•	•	•

(1) The accessory cannot be fit if the accessory BC10 or BC20 is installed.

2 way valve kit

Accessory	ULI16P	ULI16PAF	ULI26P	ULI26PAF	ULI36P
VCHD	•	•	•	•	•

3 way valve kit

Accessory	ULI16P	ULI16PAF	ULI26P	ULI26PAF	ULI36P
VCH	•	•	•	•	•

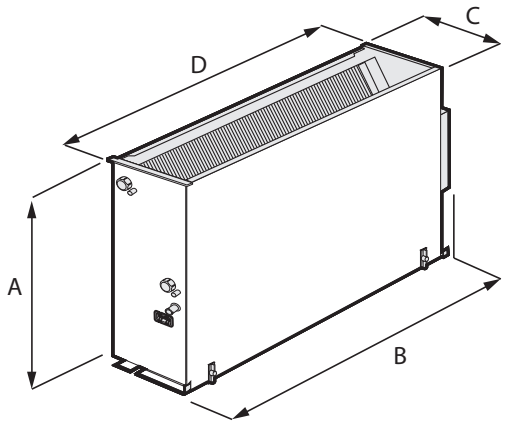
PERFORMANCE SPECIFICATIONS

2-pipe

		ULI16P			ULI26P			ULI36P		
		1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)										
Heating capacity	kW	1,54	2,12	2,91	2,89	3,83	4,62	3,53	4,87	5,94
Water flow rate system side	l/h	135	186	255	254	336	405	310	427	521
Pressure drop system side	kPa	1	2	4	5	8	11	3	5	7
Heating performance 45 °C / 40 °C (2)										
Heating capacity	kW	0,76	1,05	1,44	1,44	1,90	2,29	1,75	2,42	2,95
Water flow rate system side	l/h	133	183	251	249	331	399	305	420	513
Pressure drop system side	kPa	2	2	2	5	8	11	7	12	18
Cooling performance 7 °C / 12 °C										
Cooling capacity	kW	0,69	0,87	1,77	1,26	1,65	1,99	1,63	2,26	2,79
Sensible cooling capacity	kW	0,52	0,69	0,96	0,97	1,30	1,61	1,13	1,59	2,00
Water flow rate system side	l/h	122	153	206	220	289	349	286	394	487
Pressure drop system side	kPa	2	3	5	6	8	11	7	13	19
Fan										
Type	type	Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Inverter			Inverter			Inverter		
Number	no.	1			2			2		
Air flow rate	m^3/h	110	160	240	190	270	350	240	350	460
Input power	W	6	8	12	7	10	15	8	12	18
Diametre hydraulic fittings										
Main heat exchanger	Ø	1/2"			1/2"			1/2"		
Finned pack heat exchanger										
Water content main heat exchanger	l	0,4			0,6			0,8		
Power supply										
Power supply		230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT

DIMENSIONS



Dimensions and weights

		ULI16P	ULI16PAF	ULI26P	ULI26PAF	ULI36P	ULI36PAF
Dimensions and weights							
A	mm	465	465	465	465	465	465
B	mm	530	530	761	761	981	981
C	mm	171	171	171	171	171	171
D	mm	470	470	701	701	921	921
Net weight	kg	12,0	12,0	15,0	15,0	18,0	18,0

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Omnia ULSI_P

Fan coils wall-mount installation

- **Low operating temperature**
- **Cooling, heating, and dehumidification**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

The Omnia Slim P fan coils have been designed to meet the need to combine the typical features of a classic radiator - namely reduced depth and quiet operation - with the ability of a fan coil to air-condition rooms throughout the year.
Can be installed in 2-pipe systems and used in combination with any heat generator, even at low temperatures.

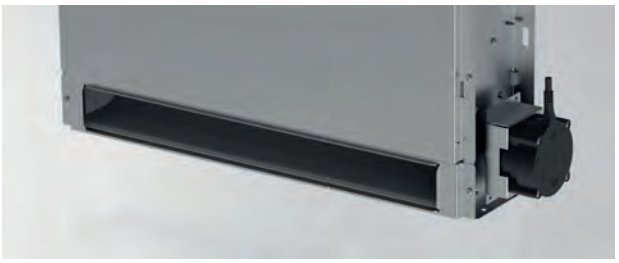
VERSIONS

P Inverter in ventilcassaforma
PR Inverter for ducted installation with right-hand connections

FEATURES

Ventilation group

These fan coils have extremely silent ventilation by using special tangential fans, which guarantees maximum acoustic comfort.
The electric motor is a new generation Brushless with built-in driver and IP66 protection rating, continuously variable speed



Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The coil is reversible during selection.*

Control

Both versions are supplied without on-board control, however, various thermostats or control panels are available as accessories to be installed on the wall.

Mandatory ventilcassaforma ULS_CH accessory

Available in 5 sizes.
Made of galvanised and painted sheet metal, they provide a space for housing the heat exchanger directly in the wall.
Rationalising spaces according to the criteria of modern interior architecture and current energy-saving requirements.

ACCESSORIES

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-485EXP: Not available for VMF-E6.
VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E2S: User interface on the fan coil, with two selectors - one for temperature and the other for speed control. For operation, the installation of either the VMF-E19 or VMF-E19I accessory is required.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

BCSV: Condensate collection tray, for valve kit.
DSC7: Condensate drainage device.
VCS2: 2-way motorised valve kit without insulating shell. The kit is made up of a valve, actuator and relative hydraulic fittings.
VCS3: 3-way motorised valve kit without insulating shell for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings.

ACCESSORIES COMPATIBILITY

Model	Ver	10	20	30	40	50
AER503IR (1)	P,PR	•	•	•	•	•
PRO503	P,PR	•	•	•	•	•
SA5 (2)	P,PR	•	•	•	•	•
SW5 (2)	P,PR	•	•	•	•	•
TX (3)	P,PR	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	10	20	30	40	50
DI24	P,PR	•	•	•	•	•
KITSV (1)	P,PR	•	•	•	•	•
VMF-E19I (2)	P,PR	•	•	•	•	•
VMF-E2S (3)	P,PR	•	•	•	•	•
VMF-E3	P,PR	•	•	•	•	•
VMF-E4X	P,PR	•	•	•	•	•
VMF-IR	P,PR	•	•	•	•	•
VMHI	P,PR	•	•	•	•	•

(1) Mandatory when the VMF-E19/19I thermostat is required.
(2) Mandatory accessory.
(3) Installation on the fan coil.

3 way valve kit

Model	Ver	10	20	30	40	50
VCS3 (1)	P,PR	•	•	•	•	•

(1) Power supply 230V - Hydraulic connections Ø 1/2"

2 way valve kit

Model	Ver	10	20	30	40	50
VCS2 (1)	P,PR	•	•	•	•	•

(1) Power supply 230V - Hydraulic connections Ø 1/2"

Condensate drip

Model	Ver	10	20	30	40	50
BCSV	P,PR	•	•	•	•	•

Condensate drainage

Model	Ver	10	20	30	40	50
DSC7	P,PR	•	•	•	•	•

PERFORMANCE SPECIFICATIONS

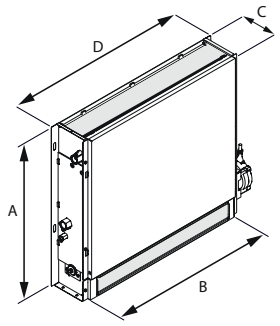
2-pipe

		ULSI10P			ULSI20P			ULSI30P			ULSI40P			ULSI50P		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																
Heating capacity	kW	0,70	1,14	1,53	1,27	1,88	2,86	1,88	2,91	3,72	2,32	3,55	4,77	2,49	3,85	5,73
Water flow rate system side	l/h	61	100	134	111	165	251	165	254	326	203	311	418	218	337	501
Pressure drop system side	kPa	2	4	7	5	10	20	6	14	22	6	13	22	5	10	21
Heating performance 45 °C / 40 °C (2)																
Heating capacity	kW	0,35	0,57	0,76	0,63	0,94	1,43	0,94	1,45	1,85	1,15	1,77	2,38	1,24	1,92	2,85
Water flow rate system side	l/h	61	99	132	110	163	248	163	251	322	201	307	413	216	333	495
Pressure drop system side	kPa	2	4	7	5	9	20	6	14	22	6	13	22	5	10	21
Cooling performance 7 °C / 12 °C																
Cooling capacity	kW	0,37	0,60	0,80	0,67	0,98	1,50	0,98	1,52	1,95	1,22	1,86	2,50	1,30	2,02	3,00
Sensible cooling capacity	kW	0,25	0,42	0,57	0,46	0,68	1,08	0,68	1,06	1,39	0,84	1,30	1,79	0,90	1,40	2,15
Water flow rate system side	l/h	63	103	137	114	169	257	169	261	335	209	319	429	224	346	515
Pressure drop system side	kPa	3	6	10	7	13	28	9	19	30	9	18	30	7	14	29
Fan																
Type	type	Tangential			Tangential			Tangential			Tangential			Tangential		
Fan motor	type	Inverter			Inverter			Inverter			Inverter			Inverter		
Number	no.	1			1			1			2			2		
Air flow rate	m^3/h	46	82	134	78	128	241	109	188	301	126	218	370	127	225	427
Input power	W	5	8	10	6	9	15	7	12	17	7	14	20	7	13	21
Signal 0-10V	%	40	70	90	40	70	90	40	70	90	40	70	90	40	70	90
Fan coil sound data (3)																
Sound power level	dB(A)	39,0	47,0	51,0	39,0	47,0	51,0	40,0	48,0	53,0	41,0	49,0	54,0	42,0	52,0	56,0
Sound pressure level	dB(A)	31,0	39,0	43,0	31,0	39,0	43,0	32,0	40,0	45,0	33,0	41,0	46,0	34,0	44,0	48,0
Finned pack heat exchanger																
Water content main heat exchanger	l	0,5			0,9			1,2			1,5			1,8		
Diametre hydraulic fittings																
Main heat exchanger	Ø	1/2"			1/2"			1/2"			1/2"			1/2"		
Power supply																
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

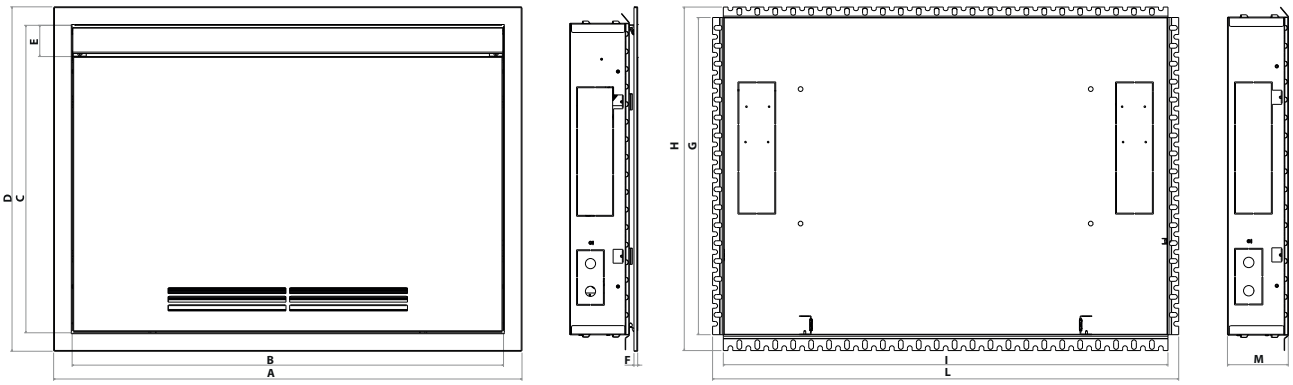
DIMENSIONS

ULSI_P



Size			10	20	30	40	50
Dimensions and weights							
A	P,PR	mm	130	130	130	130	130
B	P,PR	mm	745	940	1134	1328	1524
C	P,PR	mm	580	580	580	580	580
D	P,PR	mm	80	80	80	80	80
Empty weight	P,PR	kg	11	13	15	17	19

ULS_CH



		ULS10CH	ULS20CH	ULS30CH	ULS40CH	ULS50CH
Dimensions and weights						
A	mm	818	1013	1206	1401	1596
B	mm	738	933	1126	1321	1516
C	mm	665	665	665	665	665
D	mm	745	745	745	745	745
E	mm	67	67	67	67	67
F	mm	8	8	8	8	8
G	mm	672	672	672	672	672
H	mm	728	728	728	728	728
I	mm	747	942	1135	1330	1525
L	mm	793	988	1181	1376	1571
M	mm	129	129	129	129	129

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VED 030-340

Fan coil unit for ducted installations

- **Horizontal and vertical installation**
- **Large range of available static pressure**
- **Inspectable ventilation group**

DESCRIPTION

Ducted fan coil, for heating, cooling and dehumidifying.
Designed to maintain the set temperature over time, ensuring very low sound levels.
Can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures.
Thanks to the availability of various options, with standard or increased coil, for horizontal or vertical installation, it is easy to choose the optimal solution for any need.

FEATURES

Case

Unit for internal installation.
Internally insulated structure with class 1 fire resistance and IP20 protection.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Their characteristics permit energy savings compared to conventional fans.
They are statically and dynamically balanced and directly coupled to the motor shaft.
The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.
Fan housing in plastic material removable for easy and effective cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

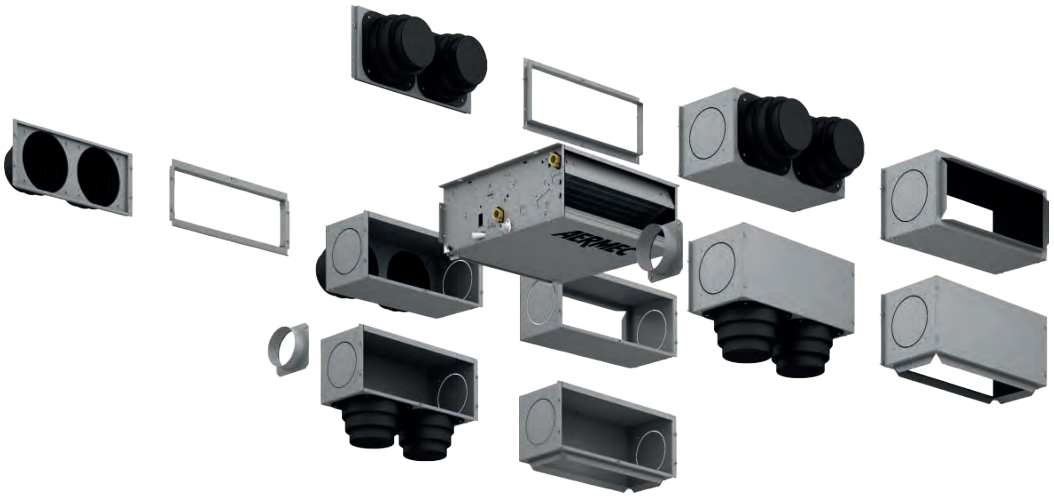
Air filter

Coarse 25% Class air filter, easy to remove and clean.

Controls and Accessoires

There is a wide selection of controls and a huge choice of accessories, to meet every system requirement.
The unit is supplied with the delivery connection supplied.

ACCESSORIES



Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.
SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.
WMT16: Electronic thermostat with thermostated ventilation.
WMT16CV: Electronic thermostat with continuous ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SIT3V: Relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Valves and additional water coil

BV: Hot water heat exchanger with 1 row.
VCF_X: 3-way valve kit for fan coils with single heat exchanger and hydraulic connections on the left side, for installation in 4-pipe systems. The kit is composed by 2 insulated 3-way valves and 4 connections complete with electrothermal actuators, insulating shells for the valves and with hydraulic fittings. 230V power supply. Hydraulic connections: Valve body Ø G 3/4" Male; Valve side connection pipes Ø G 3/4" Female; Unit side connection pipes Ø G 3/4" Male.
VCF41 - 42 - 43 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.
VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.
VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

Installation accessories

AMP: Wall mounting kit
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.
DSC: Condensate drainage device.

Accessories for intake

GA: Intake grid with fixed louvers
GAF: Intake grid with filter and fixed louvers
SE_X: External air shutter with manual control.
RDA_V: Straight intake connection with rectangular flange.
RDA_C: Straight intake connection with circular flanges.
RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

Delivery accessories

MZC: Plenum with motorised dampers.
MZCAC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with an asynchronous motor.
MZCACV: Electrical system with relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.
GM: Flow grid with adjustable louvers.
PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.
RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
RDM_C: Straight discharge internally insulated, with circular flanges.
RDM_V: Straight delivery coupling in galvanised sheet metal.
KFV: Circular flanges kit for plenum.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	030	040	130	140	230	240	330	340
AER503IR (1)	.	•	•	•	•	•	•	•	•
PRO503	.	•	•	•	•	•	•	•	•
SA5 (2)	.	•	•	•	•	•	•	•	•
SIT3 (3)	.	•	•	•	•	•	•	•	•
SIT5 (4)	.	•	•	•	•	•	•	•	•
SW3 (2)	.	•	•	•	•	•	•	•	•
SW5 (2)	.	•	•	•	•	•	•	•	•
TX (5)	.	•	•	•	•	•	•	•	•
WMT10 (5)	.	•	•	•	•	•	•	•	•
WMT16 (5)	.	•	•	•	•	•	•	•	•
WMT16CV (5)	.	•	•	•	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
(4) Probe for AER503IR-TX thermostats, if fitted.
(5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	030	040	130	140	230	240	330	340
DI24	.	•	•	•	•	•	•	•	•
VMF-E19 (1)	.	•	•	•	•	•	•	•	•
VMF-E3	.	•	•	•	•	•	•	•	•
VMF-E4DX	.	•	•	•	•	•	•	•	•
VMF-E4X	.	•	•	•	•	•	•	•	•
VMF-IO	.	•	•	•	•	•	•	•	•
VMF-IR	.	•	•	•	•	•	•	•	•
VMF-SIT3V (2)	.							•	•
VMF-SW	.	•	•	•	•	•	•	•	•
VMF-SW1	.	•	•	•	•	•	•	•	•
VMHI	.	•	•	•	•	•	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.
(2) For the selection, consult the documentation for the thermostat and the fan coil.

(Heating only) additional coil

Ver	030	040	130	140	230	240	330	340
.	BV030 (1)	-	BV130 (1)	-	BV230 (1)	-	BV162 (1)	-

(1) Not available for sizes with oversized main coil.
The accessory cannot be fitted on the configurations indicated with -

Water valves

Valve Kit for 4 pipe systems with main coil

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
VCF3X4L	•	•	•		•		•	•
VCF3X4LS				•		•		
VCF3X4R	•	•	•		•		•	•
VCF3X4RS				•		•		

3 way valve kit

	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
3 way valve kit								
Main heat exchanger	VCF43-VCF4324	VCF43-VCF4324	VCF43-VCF4324	VCF43S-VCF4324S	VCF43-VCF4324	VCF43S-VCF4324S	VCF43-VCF4324	VCF43-VCF4324
Additional coil "BV"	VCF45-VCF4524	-	VCF45-VFC4524	-	VCF45-VCF4524	-	VCF45-VCF4524	-

VCF43 - 45 Power supply 230V, VCF4324-4524 Power supply 24V - Hydraulic connections Ø 3/4"

2 way valve kit

	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
2 way valve kit								
Main heat exchanger	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324
Additional coil "BV"	VCFD4-VCFD424	-	VCFD4-VCFD424	-	VCFD4-VCFD424	-	VCFD4-VCFD424	-

VCFD3 Power supply 230V, VCFD324 Power supply 24V - Hydraulic connections Ø 3/4"
VCFD4 Power supply 230V, VCFD424 Power supply 24V - Hydraulic connections Ø 1/2"; For additional coil (heating only) BV.

Combined adjustment and balancing valve cold side

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
VJP060	•	•	•	•				
VJP060M	•	•	•	•				
VJP090					•	•	•	•
VJP090M					•	•	•	•
VJP150							•	•
VJP150M							•	•

Installation accessories

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
AMP	•	•	•	•	•	•	•	•

Condensate drip

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
BCZ4	•	•	•	•	•	•	•	•
BCZ6	•	•	•	•	•	•	•	•

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
BC9	•	•	•	•	•	•	•	•

BCZ4 For vertical installation.
BCZ6 For horizontal installation.
BC9 For horizontal installation.

Condensate recirculation device

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
DSC4	•	•	•	•	•	•	•	•
DSCZ4	•	•	•	•	•	•	•	•

Accessories for intake

Intake grids

Ver	030	040	130	140	230	240	330	340
.	GA22	GA22	GA32	GA32	GA42	GA42	GA62	GA62

Intake grid with filter and fixed louvers

Ver	030	040	130	140	230	240	330	340
.	GAF22	GAF22	GAF32	GAF32	GAF42	GAF42	GAF62	GAF62

External air shutter with manual control

Ver	030	040	130	140	230	240	330	340
.	SE20X	SE20X	SE30X	SE30X	SE40X	SE40X	SE80X	SE80X

Intake straight with rectangular flanges

Ver	030	040	130	140	230	240	330	340
.	RDA000V	RDA000V	RDA100V	RDA100V	RDA200V	RDA200V	RDA300V	RDA300V

Intake straight internally insulated, with circular flanges

Ver	030	040	130	140	230	240	330	340
.	RDAC000V	RDAC000V	RDAC100V	RDAC100V	RDAC200V	RDAC200V	RDAC300V	RDAC300V

Intake plenum with rectangular flanges

Ver	030	040	130	140	230	240	330	340
.	RPA000V	RPA000V	RPA100V	RPA100V	RPA200V	RPA200V	RPA300V	RPA300V

Intake plenum with circular flanges

Ver	030	040	130	140	230	240	330	340
.	PA000V	PA000V	PA100V	PA100V	PA200V	PA200V	PA300V	PA300V

Delivery accessories

Plenum with motor-driven dampers

Ver	030	040	130	140	230	240	330	340
.	MZC220	MZC220	MZC320	MZC320	MZC530	MZC530	MZC830	MZC830

Electrical system with relays

Ver	030	040	130	140	230	240	330	340
.	MZCACV (1)	MZCACV (1)	MZCACV (1)	MZCACV (1)	MZCACV (1)	MZCACV (1)	MZCACV (1)	MZCACV (1)

(1) It is mandatory to use MZCACV if the intake of the unit combined with the MZC accessory exceeds 0.7 Ampere.

Electric plant

Ver	030	040	130	140	230	240	330	340
.	MZCAC	MZCAC	MZCAC	MZCAC	MZCAC	MZCAC	MZCAC	MZCAC

Flow grid with adjustable louvers

Ver	030	040	130	140	230	240	330	340
.	GM22	GM22	GM32	GM32	GM42	GM42	GM62	GM62

Delivery plenum internally insulated, with circular flanges

Ver	030	040	130	140	230	240	330	340
.	PM000V	PM000V	PM100V	PM100V	PM200V	PM200V	PM300V	PM300V

Delivery plenum internally insulated, with rectangular flanges

Ver	030	040	130	140	230	240	330	340
.	RPM000V	RPM000V	RPM100V	RPM100V	RPM200V	RPM200V	RPM300V	RPM300V

Delivery straight internally insulated, with circular flanges

Ver	030	040	130	140	230	240	330	340
.	RDMC000V	RDMC000V	RDMC100V	RDMC100V	RDMC200V	RDMC200V	RDMC300V	RDMC300V

Straight delivery coupling

Ver	030	040	130	140	230	240	330	340
.	RDM000V	RDM000V	RDM100V	RDM100V	RDM200V	RDM200V	RDM300V	RDM300V

Circular flanges kit for plenum

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
KFV10	•	•	•	•	•	•	•	•

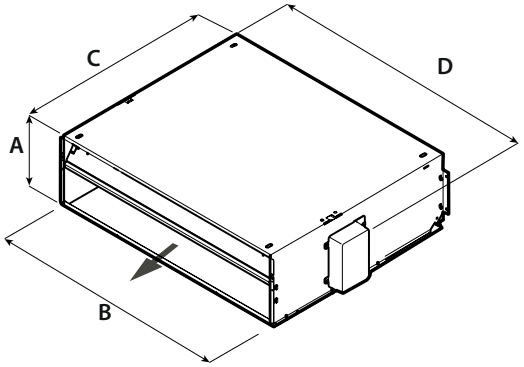
PERFORMANCE SPECIFICATIONS

2-pipe

		VED030			VED040			VED130			VED140			VED230			VED240			VED330			VED340		
		1	4	6	1	4	6	1	4	6	1	4	6	1	3	6	1	3	6	1	3	7	1	3	7
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	1,82	3,37	3,69	2,37	3,57	3,92	4,40	5,83	6,29	4,52	6,09	6,58	5,35	6,50	7,16	5,80	7,14	7,91	7,81	9,34	10,51	8,31	10,02	10,95
Water flow rate system side	l/h	160	296	323	207	313	343	386	512	552	396	534	577	469	570	628	509	626	694	685	819	921	729	878	960
Pressure drop system side	kPa	3	7	9	4	10	12	13	22	26	9	16	18	27	30	37	18	26	32	9	13	16	22	28	32
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	0,90	1,67	1,83	1,18	1,77	1,94	2,18	2,90	3,12	2,24	3,02	3,27	2,66	3,23	3,56	2,88	3,55	3,93	3,88	4,64	5,22	3,98	4,98	5,44
Water flow rate system side	l/h	157	291	318	204	208	338	380	504	543	390	526	568	462	561	618	501	616	683	674	807	907	718	865	945
Pressure drop system side	kPa	3	8	9	5	11	13	15	24	28	10	16	19	26	29	36	18	27	32	10	14	17	13	20	23
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	0,97	1,41	1,56	1,10	1,68	1,84	2,05	2,74	2,91	2,24	3,00	3,22	2,55	3,07	3,33	2,86	3,57	3,93	3,62	4,35	4,90	3,92	4,72	5,26
Sensible cooling capacity	kW	0,73	1,07	1,18	0,79	1,19	1,29	1,41	1,89	2,01	1,58	2,14	2,30	1,96	2,38	2,61	2,16	2,65	2,92	2,74	3,26	3,63	2,89	3,50	3,89
Water flow rate system side	l/h	170	250	279	193	296	327	358	480	515	390	525	566	445	538	588	499	624	691	633	760	860	685	824	922
Pressure drop system side	kPa	3	7	9	5	12	14	15	27	31	11	20	23	25	36	44	16	31	37	10	14	18	16	21	26
Fan																									
Type	type	Centrifugal																							
Fan motor	type	Asynchronous																							
Number	no.	1			1			2			2			2			2			3			3		
Air flow rate	m^3/h	161	256	285	160	249	277	287	397	433	280	386	420	417	524	590	406	509	570	572	704	805	563	685	775
High static pressure	Pa	21	50	61	21	50	61	26	50	60	26	50	60	32	50	64	32	50	63	33	50	66	34	50	64
Input power	W	23	38	59	23	38	58	34	53	76	34	52	75	43	57	93	43	57	92	63	75	104	63	74	107
Electrical wiring		V1	V4	V6	V1	V4	V6	V1	V4	V6	V1	V4	V6	V1	V3	V6	V1	V3	V6	V1	V3	V7	V1	V3	V7
Duct type fan coil sound data (3)																									
Sound power level (inlet + radiated)	dB(A)	44,0	52,0	54,0	44,0	52,0	54,0	47,0	53,0	55,0	47,0	53,0	55,0	49,0	54,0	57,0	49,0	54,0	57,0	49,0	55,0	58,0	49,0	55,0	58,0
Sound power level (outlet)	dB(A)	40,0	48,0	50,0	40,0	48,0	50,0	42,0	48,0	50,0	42,0	48,0	50,0	44,0	49,0	52,0	44,0	49,0	52,0	45,0	51,0	54,0	45,0	51,0	54,0
Finned pack heat exchanger																									
Water content main heat exchanger	l	0,7			1,0			1,1			1,5			1,5			2,1			1,8			2,3		
Diametre hydraulic fittings																									
Main heat exchanger	Ø	3/4"																							
Power supply																									
Power supply		230V~50Hz																							

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
Dimensions and weights									
A	mm	217	217	217	217	217	217	217	217
B	mm	550	550	781	781	1001	1001	1122	1122
C	mm	560	560	560	560	560	560	560	560
D	mm	576	576	807	807	1027	1027	1148	1148

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

VED 030I-340I

Fan coil unit for ducted installations

- **Horizontal and vertical installation**
- **Large range of available static pressure**
- **Inspectable ventilation group**
- **Total comfort: reduced temperature and humidity oscillations**
- **Electricity savings of 50% compared with a fan coil with multi-speed motor**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Ducted fan coil, for heating, cooling and dehumidifying.
Designed to maintain the set temperature over time, ensuring very low sound levels.
Can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures.
Thanks to the availability of various options, with standard or increased coil, for horizontal or vertical installation, it is easy to choose the optimal solution for any need.

FEATURES

Case

Unit for internal installation.
Internally insulated structure with class 1 fire resistance and IP20 protection.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Brushless motor with continuous speed variation 0-100%.
Inverter motor allows precise adaptation to the real indoor environment requirements without temperature oscillations.
The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

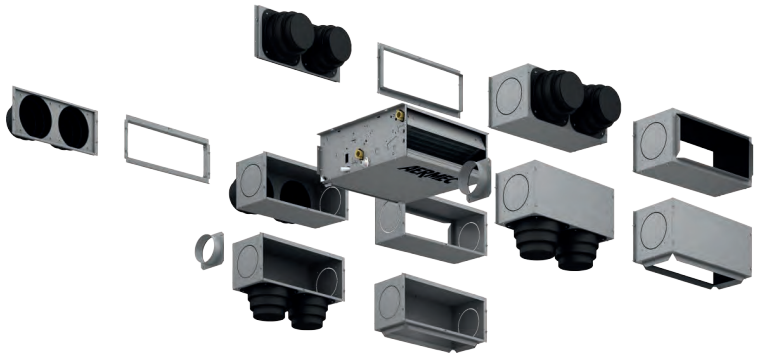
Air filter

Air filter Class G3, for easy removal and cleaning.

Controls and Accessoires

There is a wide selection of controls and a huge choice of accessories, to meet every system requirement.
The unit is supplied with the delivery connection supplied.

ACCESSORIES



Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
SWAI: External air or water temperature probe.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
WMT21: Electronic thermostat for inverter fancoils.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Valves and additional water coil

BV: Hot water heat exchanger with 1 row.
VCF_X: 3-way valve kit for fan coils with single heat exchanger and hydraulic connections on the left side, for installation in 4-pipe systems. The kit is composed by 2 insulated 3-way valves and 4 connections complete with electrothermal actuators, insulating shells for the valves and with hydraulic fittings. 230V power supply. Hydraulic connections: Valve body Ø G 3/4" Male; Valve side connection pipes Ø G 3/4" Female; Unit side connection pipes Ø G 3/4" Male.
VCF41 - 42 - 43 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.
VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.
VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

Installation accessories

AMP: Wall mounting kit

BC: Condensate drip.
DSC: Condensate drainage device.

Accessories for intake

GA: Intake grid with fixed louvers
GAF: Intake grid with filter and fixed louvers
SE_X: External air shutter with manual control.
RDA_V: Straight intake connection with rectangular flange.
RDA_C: Straight intake connection with circular flanges.
RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

Delivery accessories

GM: Flow grid with adjustable louvers.
MZC: Plenum with motorised dampers.
PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.
RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
RDM_C: Straight discharge internally insulated, with circular flanges.
RDM_V: Straight delivery coupling in galvanised sheet metal.
KFV: Circular flanges kit for plenum.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
AER503IR	•	•	•	•	•	•	•	•
PRO503	•		•	•	•	•	•	•
SA5	•	•	•	•	•	•	•	•
SW3	•	•	•	•	•	•	•	•
SW5	•	•	•	•	•	•	•	•
SWAI	•	•	•	•	•	•	•	•
TX	•	•	•	•	•	•	•	•
WMT21	•	•	•	•	•	•	•	•

VMF system

Accessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
DI24	•	•	•	•	•	•	•	•
VMF-E19I	•	•	•	•	•	•	•	•
VMF-E3	•	•	•	•	•	•	•	•
VMF-E4DX	•	•	•	•	•	•	•	•
VMF-E4X	•	•	•	•	•	•	•	•
VMF-IO	•	•	•	•	•	•	•	•
VMF-IR	•		•		•	•	•	•
VMF-LON	•	•	•	•	•	•	•	•
VMF-SW	•	•	•	•	•	•	•	•
VMF-SW1	•	•	•	•	•	•	•	•
VMHI	•	•	•	•	•	•	•	•

(Heating only) additional coil

Ver	030	040	130	140	230	240	330	340
I	BV030	-	BV130	-	BV230	-	BV162	-

Water valves

Valve Kit for 4 pipe systems with main coil

Accessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
VCF3X4L	•	•	•		•		•	•
VCF3X4LS				•		•		
VCF3X4R	•	•	•		•		•	•
VCF3X4RS				•		•		

3 way valve kit

	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
3 way valve kit								
Main heat exchanger	VCF43-VCF4324	VCF43-VCF4324	VCF43-VCF4324	VCF43S-VCF4324S	VCF43-VCF4324	VCF43S-VCF4324S	VCF43-VCF4324	VCF43-VCF4324
Additional coil "BV"	VCF45-VCF4524	-	VCF45-VFC4524	-	VCF45-VCF4524	-	VCF45-VCF4524	-

VCF43 - 45 Power supply 230V, VCF4324-4524 Power supply 24V - Hydraulic connections Ø 3/4"

2 way valve kit

	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
2 way valve kit								
Main heat exchanger	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324	VCFD3-VCFD324
Additional coil "BV"	VCFD4-VCFD424	-	VCFD4-VCFD424	-	VCFD4-VCFD424	-	VCFD4-VCFD424	-

VCFD3 Power supply 230V, VCFD324 Power supply 24V - Hydraulic connections Ø 3/4"
VCFD4 Power supply 230V, VCFD424 Power supply 24V - Hydraulic connections Ø 1/2"; For additional coil (heating only) BV.

Combined adjustment and balancing valve cold side

Model	Ver	030	040	130	140	230	240	330	340
VJP060 (1)	I	•	•	•	•				
VJP060M (2)	I	•	•	•	•				
VJP090 (1)	I					•	•	•	•
VJP090M (2)	I					•	•	•	•

Model	Ver	030	040	130	140	230	240	330	340
VJP150 (1)	I							•	•
VJP150M (2)	I							•	•

(1) 230V~50Hz
(2) 24V
VJP060 - 090 - 150 (230V~50Hz); VJP060M-090M-150M (24V)

Installation accessories

Wall mounting accessories

Accessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED340I
AMP	•	•	•	•	•	•	•

Condensate drip

Accessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
BCZ4	•	•	•	•	•	•	•	•
BCZ6	•	•	•	•	•	•	•	•

Accessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
BC9	•	•	•	•	•	•	•	•

BCZ4 For vertical installation.
BCZ6 For horizontal installation.
BC9 For horizontal installation.

Condensate drainage

Ver	030	040	130	140	230	240	330	340
I	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4

Accessories for intake

Intake grids

Ver	030	040	130	140	230	240	330	340
I	GA22	GA22	GA32	GA32	GA42	GA42	GA62	GA62

Intake grid with filter and fixed louvers

Ver	030	040	130	140	230	240	330	340
I	GAF22	GAF22	GAF32	GAF32	GAF42	GAF42	GAF62	GAF62

External air shutter with manual control

Ver	030	040	130	140	230	240	330	340
I	SE20X (1)	SE20X (1)	SE30X (1)	SE30X (1)	SE40X (1)	SE40X (1)	SE80X (1)	SE80X (1)

(1) The SE accessories must be combined with the design and structural feet.

Intake straight with rectangular flanges

Ver	030	040	130	140	230	240	330	340
I	RDA000V	RDA000V	RDA100V	RDA100V	RDA200V	RDA200V	RDA300V	RDA300V

Intake straight internally insulated, with circular flanges

Ver	030	040	130	140	230	240	330	340
I	RDAC000V	RDAC000V	RDAC100V	RDAC100V	RDAC200V	RDAC200V	RDAC300V	RDAC300V

Intake plenum with rectangular flanges

Ver	030	040	130	140	230	240	330	340
I	RPA000V	RPA000V	RPA100V	RPA100V	RPA200V	RPA200V	RPA300V	RPA300V

Intake plenum with circular flanges

Ver	030	040	130	140	230	240	330	340
I	PA000V	PA000V	PA100V	PA100V	PA200V	PA200V	PA300V	PA300V

Delivery accessories

Outlet grille with adjustable louvers

Ver	030	040	130	140	230	240	330	340
I	GM22	GM22	GM32	GM32	GM42	GM42	GM62	GM62

Plenum with motor-driven dampers

Ver	030	040	130	140	230	240	330	340
I	MZC220	MZC220	MZC320	MZC320	MZC530	MZC530	MZC830	MZC830

Delivery plenum internally insulated, with circular flanges

Ver	030	040	130	140	230	240	330	340
I	PM000V	PM000V	PM100V	PM100V	PM200V	PM200V	PM300V	PM300V

Delivery plenum internally insulated, with rectangular flanges

Ver	030	040	130	140	230	240	330	340
I	RPM000V	RPM000V	RPM100V	RPM100V	RPM200V	RPM200V	RPM300V	RPM300V

Delivery straight internally insulated, with circular flanges

Ver	030	040	130	140	230	240	330	340
I	RDMC000V	RDMC000V	RDMC100V	RDMC100V	RDMC200V	RDMC200V	RDMC300V	RDMC300V

Straight delivery coupling

Ver	030	040	130	140	230	240	330	340
I	RDM000V	RDM000V	RDM100V	RDM100V	RDM200V	RDM200V	RDM300V	RDM300V

Circular flanges kit for plenum

Accessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED340I
KFV10	•	•	•	•	•	•	•

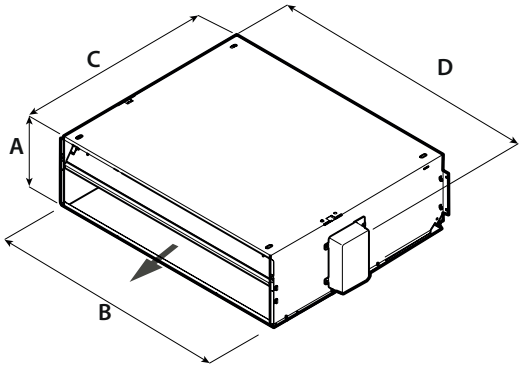
PERFORMANCE SPECIFICATIONS

2-pipe

		VED030I			VED040I			VED130I			VED140I			VED230I			VED240I			VED330I			VED340I		
		1	5	7	1	5	7	1	5	7	1	5	7	1	5	7	1	5	7	1	5	7	1	5	7
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	1,82	3,37	3,69	2,37	3,57	3,92	4,40	5,83	6,29	4,52	6,09	6,58	5,35	6,50	7,16	5,80	7,14	7,91	7,81	9,34	10,51	8,31	10,08	10,95
Water flow rate system side	l/h	160	296	323	207	313	343	386	512	552	396	534	577	469	570	628	509	626	694	685	819	921	729	878	960
Pressure drop system side	kPa	3	7	9	4	10	12	13	22	26	9	16	18	27	30	37	18	26	32	9	13	16	22	28	32
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	0,90	1,67	1,83	1,17	1,77	1,94	2,18	2,90	3,12	2,24	3,02	3,27	2,66	3,23	3,56	2,88	3,55	3,93	3,88	4,64	5,22	3,98	4,98	5,44
Water flow rate system side	l/h	157	291	318	204	308	338	380	504	543	390	526	568	462	561	618	501	616	683	674	807	907	718	865	945
Pressure drop system side	kPa	3	8	9	5	11	13	15	24	28	10	16	19	26	29	36	18	27	32	10	14	17	13	20	23
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	0,98	1,42	1,58	1,11	1,69	1,86	2,06	2,76	2,95	2,25	3,02	3,25	2,57	3,09	3,37	2,88	3,59	3,97	3,62	4,36	4,91	3,95	4,72	5,27
Sensible cooling capacity	kW	0,74	1,08	1,20	0,80	1,20	1,31	1,42	1,91	2,05	1,59	2,16	2,32	1,98	2,40	2,65	2,18	2,67	2,96	2,77	3,27	3,64	2,92	3,51	3,90
Water flow rate system side	l/h	170	250	279	193	296	327	358	480	515	390	525	566	445	538	588	499	624	691	633	760	860	680	811	906
Pressure drop system side	kPa	3	7	9	5	12	14	15	27	41	11	20	23	25	36	44	16	31	37	10	14	18	16	21	26
Fan																									
Type	type	Centrifugal																							
Fan motor	type	Inverter																							
Number	no.	1			1			2			2			2			2			3			3		
Air flow rate	m^3/h	161	256	285	160	249	277	287	397	434	280	386	420	417	524	590	406	509	570	572	704	805	563	685	775
High static pressure	Pa	21	50	61	21	50	61	26	50	60	26	50	60	32	50	64	32	50	63	33	50	66	34	50	64
Input power	W	12	29	36	12	29	36	17	33	45	17	33	45	24	40	53	24	40	53	35	60	86	35	60	86
Signal 0-10V	%	54	80	90	54	80	90	58	82	90	58	82	90	66	80	90	62	80	90	62	78	90	66	84	90
Duct type fan coil sound data (3)																									
Sound power level (inlet + radiated)	dB(A)	44,0	52,0	54,0	44,0	52,0	54,0	47,0	53,0	55,0	47,0	53,0	55,0	49,0	54,0	57,0	49,0	54,0	57,0	49,0	55,0	58,0	49,0	55,0	58,0
Sound power level (outlet)	dB(A)	40,0	48,0	50,0	40,0	48,0	50,0	42,0	48,0	50,0	42,0	48,0	50,0	44,0	49,0	52,0	44,0	49,0	52,0	45,0	51,0	54,0	45,0	51,0	54,0
Diametre hydraulic fittings																									
Type	type	Gas - F																							
Main heat exchanger	Ø	3/4"																							
Power supply																									
Power supply		230V~50Hz																							

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
Dimensions and weights									
A	mm	217	217	217	217	217	217	217	217
B	mm	550	550	781	781	1001	1001	1122	1122
C	mm	584	584	584	584	584	584	584	584
D	mm	576	576	807	807	1027	1027	1148	1148

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VED 430-741

Fan coil unit for ducted installations

- Horizontal and vertical installation
- Ventilation group to 5 speed
- Large range of available static pressure
- Inspectable ventilation group

DESCRIPTION

Ducted fan coil, for heating, cooling and dehumidifying.
Designed to maintain the set temperature over time, ensuring very low sound levels.
Can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures.
Thanks to the availability of various options, with standard or increased coil, for horizontal or vertical installation, it is easy to choose the optimal solution for any need.

FEATURES

Case

Unit for internal installation.
Internally insulated structure with class 1 fire resistance and IP20 protection.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Their characteristics permit energy savings compared to conventional fans.
They are statically and dynamically balanced and directly coupled to the motor shaft.
The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.
Fan housing in plastic material removable for easy and effective cleaning.

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

Air filter

Air filter Class G3, for easy removal and cleaning.

Controls and Accessoires

There is a wide selection of controls and a huge choice of accessories, to meet every system requirement.
The unit is supplied with the delivery connection supplied.

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.
SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan

speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.
WMT16: Electronic thermostat with thermostated ventilation.
WMT16CV: Electronic thermostat with continuous ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-MOD: Expansion board for the management of modulating valves.
VMF-SIT3V: Relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.
VCT: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.
VCT: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.
VCTK: The VCT series valves can be combined with the actuators On-Off 230V. The actuator must be selected according to the type of system/adjustment provided.
VCTKM: The VCT series valves can be combined with the actuators 24V modulating. The actuator must be selected according to the type of system/adjustment provided.
VCF45C - 47C - 47CS - for main heat exchanger: 3-way motorised valve kit for the main heat exchanger. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCF45H - 47H - for heating only heat exchanger: Motorized 3-way valve kit for hot only coil. The kit consists of a 3-way 4-way valve, the actuator and its hydraulic fittings, it is suitable for installation on both fan coil units with hydraulic connections on the right and left.
VCF25C - 25CS - for main coil: 2-way motorized valve kit for main coil. The kit consists of a valve with its insulating shell, the actuator and the relative hydraulic fittings, it is suitable for installation on both fan coil units with hydraulic connections on the right and left.
VCF25H - for heating only coil: 2-way motorized valve kit for hot only coil. The kit consists of a valve, actuator and relative hydraulic fittings, it is suitable for installation on both fan coils with hydraulic connections on the right and left.
BCV: Condensate drip.

Installation accessories

MZC: Plenum with motorised dampers.
RDA_V: Straight intake connection with rectangular flange.
RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.
PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.
RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
KFV: Circular flanges kit for plenum.
MZCACV: Electrical system with relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.
MZCAC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with an asynchronous motor.

Configurator

Field	Description
1,2,3	VED
4,5,6	Size 430, 432, 440, 441, 530, 532, 540, 541, 630, 632, 640, 641, 730, 732, 740, 741
7	main heat exchanger
8	Secondary heat exchanger

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
AER503IR (1)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRO503	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SA5 (2)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIT3 (3)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIT5 (4)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW3 (2)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW5 (2)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TX (5)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WMT10 (5)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WMT16 (5)	.	•		•		•		•		•		•		•		•	
WMT16CV (5)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
(4) Probe for AER503IR-TX thermostats, if fitted.
(5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
DI24	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E19 (1)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E3	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4DX	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4X	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-IO	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-IR	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-MOD	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SIT3V (2)	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW1	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMHI	.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.
(2) For the selection, consult the documentation for the thermostat and the fan coil.

Water valves

3 way valve kit

	VED430	VED432	VED440	VED441	VED530	VED532	VED540	VED541
3 way valve kit								
Main heat exchanger	VCF45C	VCF45C	VCF45C	VCF45C	VCF45C	VCF45C	VCF45C	VCF45C

	VED630	VED632	VED640	VED641	VED730	VED732	VED740	VED741
3 way valve kit								
Main heat exchanger	VCF47C	VCF47C	VCF47CS	VCF47CS	VCF47C	VCF47C	VCF47CS	VCF47CS

	VED430	VED432	VED440	VED441	VED530	VED532	VED540	VED541
3 way valve kit								
Main heat exchanger	VCF45C	VCF45C	VCF45C	VCF45C	VCF45C	VCF45C	VCF45C	VCF45C
Secondary heat exchanger for four pipes	-	VCF45H	-	VCF45H	-	VCF45H	-	VCF45H

	VED630	VED632	VED640	VED641	VED730	VED732	VED740	VED741
3 way valve kit								
Main heat exchanger	VCF47C	VCF47C	VCF47CS	VCF47CS	VCF47C	VCF47C	VCF47CS	VCF47CS
Secondary heat exchanger for four pipes	-	VCF47H	-	VCF47H	-	VCF47H	-	VCF47H

230V power supply - Hydraulic connection Ø 3/4"

2 way valve kit

	VED430	VED432	VED440	VED441	VED530	VED532	VED540	VED541
2 way valve kit								
Main heat exchanger	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C

	VED630	VED632	VED640	VED641	VED730	VED732	VED740	VED741
2 way valve kit								
Main heat exchanger	VCF25C	VCF25C	VCF25CS	VCF25CS	VCF25C	VCF25C	VCF25CS	VCF25CS

	VED430	VED432	VED440	VED441	VED530	VED532	VED540	VED541
2 way valve kit								
Main heat exchanger	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C
Secondary heat exchanger for four pipes	-	VCF25H	-	VCF25H	-	VCF25H	-	VCF25H

	VED630	VED632	VED640	VED641	VED730	VED732	VED740	VED741
2 way valve kit								
Main heat exchanger	VCF25C	VCF25C	VCF25CS	VCF25CS	VCF25C	VCF25C	VCF25CS	VCF25CS
Secondary heat exchanger for four pipes	-	VCF25H	-	VCF25H	-	VCF25H	-	VCF25H

230V power supply - Hydraulic connection Ø 3/4"

2-way globe valves actuator excluded

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	VCT102	VCT102	VCT102	VCT102	VCT102	VCT102	VCT102	VCT102	VCT202	VCT202	VCT202	VCT202	VCT202	VCT202	VCT202	VCT202

3-way globe valves actuator excluded

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	VCT103	VCT103	VCT103	VCT103	VCT103	VCT103	VCT103	VCT103	VCT203	VCT203	VCT203	VCT203	VCT203	VCT203	VCT403	VCT403

Actuator 230V

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK

Actuator 24V

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM

Combined adjustment and balancing valve cold side

Model	Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
VJP150 (1)	.	•	•	•	•	•	•	•	•								
VJP150M (2)	.	•	•	•	•	•	•	•	•								
VJP270M (2)	.									•	•	•	•	•	•	•	•

(1) 230V~50Hz
(2) 24V

VJP/VJP_M the compatibility of the hot water valves with the designed air flow in a four-pipe installation is to be verified.

Accessories for intake

Intake straight with rectangular flanges

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	RDA450V	RDA450V	RDA450V	RDA450V	RDA450V	RDA450V	RDA450V	RDA450V	RDA670V	RDA670V	RDA670V	RDA670V	RDA670V	RDA670V	RDA670V	RDA670V

Intake plenum with rectangular flanges

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	RPA450V	RPA450V	RPA450V	RPA450V	RPA450V	RPA450V	RPA450V	RPA450V	RPA670V	RPA670V	RPA670V	RPA670V	RPA670V	RPA670V	RPA670V	RPA670V

Intake plenum with circular flanges

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	PA450V	PA450V	PA450V	PA450V	PA450V	PA450V	PA450V	PA450V	PA670V	PA670V	PA670V	PA670V	PA670V	PA670V	PA670V	PA670V

Delivery accessories

Delivery plenum internally insulated, with rectangular flanges

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	RPM450V	RPM450V	RPM450V	RPM450V	RPM450V	RPM450V	RPM450V	RPM450V	RPM670V	RPM670V	RPM670V	RPM670V	RPM670V	RPM670V	RPM670V	RPM670V

Delivery plenum internally insulated, with circular flanges

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	PM450V	PM450V	PM450V	PM450V	PM450V	PM450V	PM450V	PM450V	PM670V	PM670V	PM670V	PM670V	PM670V	PM670V	PM670V	PM670V

Circular flanges kit for plenum

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	KFV	KFV	KFV	KFV	KFV	KFV	KFV	KFV	KFV	KFV	KFV	KFV	KFV	KFV	KFV	KFV

Condensate drip

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	BCV45	BCV45	BCV45	BCV45	BCV45	BCV45	BCV45	BCV45	BCV67	BCV67	BCV67	BCV67	BCV67	BCV67	BCV67	BCV67

MZC

Plenum with motor-driven dampers

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	MZC5040	MZC5040	MZC5040	MZC5040	MZC5040	MZC5040	MZC5040	MZC5040	MZC7050	MZC7050	MZC7050	MZC7050	MZC7050	MZC7050	MZC7050	MZC7050

Electric plant

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	MZCAC	MZCAC	MZCAC	MZCAC	MZCAC	MZCAC	MZCAC	MZCAC	MZCAC	MZCAC	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Electrical system with relays

Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
.	-	-	-	-	-	-	-	-	-	-	MZCACV (1)	MZCACV (1)	MZCACV (1)	MZCACV (1)	MZCACV (1)	MZCACV (1)

(1) It is mandatory to use MZCACV if the intake of the unit combined with the MZC accessory exceeds 0.7 Ampere.
The accessory cannot be fitted on the configurations indicated with -

■ *For more information, please refer to the MZC plenum sheet.*

PERFORMANCE SPECIFICATIONS

2-pipe

		VED430			VED440			VED530			VED540			VED630			VED640			VED730			VED740		
		1	3	5	1	3	5	2	4	5	2	4	5	1	3	5	1	3	5	1	3	5	1	3	5
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	10,47	13,85	15,97	11,45	15,36	18,11	13,80	16,47	17,57	15,38	18,59	19,91	18,63	22,67	27,02	22,45	27,74	32,69	21,18	25,36	29,00	22,88	27,65	31,71
Water flow rate system side	l/h	918	1214	1401	1004	1347	1588	1210	1444	1541	1349	1630	1746	1634	1988	2369	1969	2433	2867	1857	2224	2543	2007	2425	2781
Pressure drop system side	kPa	9	14	19	11	18	24	13	158	21	18	25	29	30	43	58	19	29	38	38	55	67	26	36	46
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	5,20	5,88	7,94	5,69	7,64	9,01	6,86	8,19	8,74	7,45	9,24	9,90	9,26	11,20	13,40	9,88	12,40	14,80	10,50	12,60	14,20	11,30	13,70	15,70
Water flow rate system side	l/h	894	1183	1366	979	1314	1550	1180	1409	1503	1281	1589	1703	1593	1926	2305	1699	2133	2546	1806	2167	2442	1944	2356	2700
Pressure drop system side	kPa	9	14	19	11	18	24	14	19	21	21	25	30	30	42	58	16	24	32	38	52	66	26	36	35
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	4,54	5,98	6,72	5,21	6,88	7,79	5,99	7,16	7,49	7,26	8,31	8,70	8,67	10,43	12,19	10,20	12,50	14,80	10,17	11,92	13,48	11,73	13,95	15,71
Sensible cooling capacity	kW	3,40	4,54	5,13	3,65	4,86	5,51	4,55	5,48	5,75	4,87	5,90	6,18	7,00	8,48	9,96	7,02	8,62	10,30	8,25	9,71	11,07	8,11	9,69	10,95
Water flow rate system side	l/h	781	1029	1156	896	1183	1340	1030	1232	1288	1249	1429	1496	1491	1794	2097	1754	2150	2546	1749	2050	2319	2018	2399	2702
Pressure drop system side	kPa	8	13	17	10	17	22	12	19	21	19	25	28	26	36	48	24	34	47	35	46	58	27	37	45
Fan																									
Type	type	Centrifugal																							
Fan motor	type	Asynchronous																							
Number	no.	2			2			2			2			3			3			3			3		
Air flow rate	m^3/h	790	1130	1350	780	1100	1340	1120	1400	1520	1100	1380	1500	1380	1800	2210	1567	2004	2440	1640	2040	2410	1600	2000	2350
High static pressure	Pa	24	50	72	-	50	63	32	50	70	32	50	56	30	50	75	30	50	75	32	50	69	32	50	64
Input power	W	137	175	228	135	178	222	175	232	270	172	230	267	220	271	340	220	293	340	234	285	371	234	285	371
Electrical wiring		V1	V3	V5	V1	V3	V5	V2	V4	V5	V2	V4	V5	V1	V3	V5	V1	V3	V5	V1	V3	V5	V1	V3	V5
Duct type fan coil sound data (3)																									
Sound power level (inlet + radiated)	dB(A)	51,0	57,0	61,0	51,0	57,0	61,0	53,0	59,0	62,0	53,0	59,0	62,0	61,0	64,0	68,0	61,0	64,0	68,0	62,0	66,0	68,0	62,0	66,0	68,0
Sound power level (outlet)	dB(A)	47,0	53,0	57,0	47,0	53,0	57,0	49,0	55,0	58,0	49,0	55,0	58,0	57,0	60,0	64,0	57,0	60,0	64,0	58,0	62,0	64,0	58,0	62,0	64,0
Diametre hydraulic fittings																									
Type	type	-																							
Main heat exchanger	Ø	3/4"																							
Finned pack heat exchanger																									
Water content main heat exchanger	l	2,9			3,9			2,9			3,9			4,7			6,3			4,7			6,3		
Power supply																									
Power supply		230V~50Hz																							

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

4-pipe

		VED441			VED541			VED641			VED741		
		1	3	5	2	4	5	1	3	5	1	3	5
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)													
Heating capacity	kW	5,53	6,68	7,30	6,70	7,62	7,89	9,65	11,00	12,30	10,50	11,80	12,90
Water flow rate system side	l/h	475	574	627	576	655	678	829	946	1057	903	1014	1109
Pressure drop system side	kPa	14	20	23	20	25	26	15	19	24	18	22	25
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	5,35	7,05	8,00	7,46	8,56	8,94	10,40	12,70	15,20	11,90	14,20	16,10
Sensible cooling capacity	kW	3,79	5,03	5,74	5,07	6,14	6,42	7,26	8,92	10,70	8,37	9,96	11,30
Water flow rate system side	l/h	920	1212	1376	1283	1472	1537	1788	2184	2614	2046	2442	2769
Pressure drop system side	kPa	12	19	24	21	27	29	24	35	48	27	37	46
Fan													
Type	type	Centrifugal											
Fan motor	type	Asynchronous											
Number	no.	2			2			3			3		
Air flow rate	m^3/h	750	1060	1253	1060	1360	1453	1340	1730	2120	1600	2000	2358
High static pressure	Pa	25	50	70	32	50	57	30	50	75	32	50	69
Input power	W	121	175	215	170	229	265	224	264	341	224	288	373
Electrical wiring		V1	V3	V5	V2	V4	V5	V1	V3	V5	V1	V3	V5

		VED441			VED541			VED641			VED741		
Duct type fan coil sound data (2)													
Sound power level (inlet + radiated)	dB(A)	51,0	57,0	61,0	53,0	59,0	62,0	61,0	64,0	68,0	62,0	66,0	68,0
Sound power level (outlet)	dB(A)	47,0	53,0	57,0	49,0	55,0	58,0	57,0	60,0	64,0	58,0	62,0	64,0
Diametre hydraulic fittings													
Type	type	-											
Main heat exchanger	Ø	3/4"											
Secondary heat exchanger	Ø	1/2"											
Finned pack heat exchanger													
Water content main heat exchanger	l	3,9			3,9			6,3			6,3		
Water content secondary heat exchanger	l	1,0			1,0			1,6			1,6		
Power supply													
Power supply		230V~50Hz											

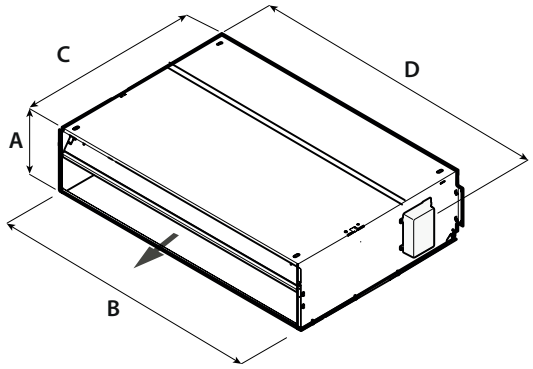
(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

VED			**From VED 430 to 741**			
Fan speed	V1	V2	V3	V4	V5	
Motor connection	L5	L4	L3	L2	L1	

The speed of associates may differ from the standard factory configuration.

For more information refer to the selection program and to to the dedicated documentation.

DIMENSIONS



		VED430	VED432	VED440	VED441	VED530	VED532	VED540	VED541
Dimensions and weights									
A	mm	300	300	300	300	300	300	300	300
B	mm	1133	1133	1133	1133	1133	1133	1133	1133
C	mm	737	737	737	737	737	737	737	737
D	mm	1158	1158	1158	1158	1158	1158	1158	1158
Net weight	kg	41,0	46,0	43,0	46,0	42,0	47,0	47,0	47,0

		VED630	VED632	VED640	VED641	VED730	VED732	VED740	VED741
Dimensions and weights									
A	mm	351	351	351	351	351	351	351	351
B	mm	1533	1533	1533	1533	1533	1533	1533	1533
C	mm	789	789	789	789	789	789	789	789
D	mm	1558	1558	1558	1558	1558	1558	1558	1558
Net weight	kg	57,0	60,0	60,0	60,0	58,0	61,0	61,0	64,0

		VED430	VED432	VED440	VED441	VED530	VED532	VED540	VED541
Dimensions and weights									
A	mm	300	300	300	300	300	300	300	300
B	mm	1133	1133	1133	1133	1133	1133	1133	1133
C	mm	737	737	737	737	737	737	737	737
D	mm	1158	1158	1158	1158	1158	1158	1158	1158
Net weight	kg	41,0	46,0	43,0	46,0	42,0	47,0	47,0	47,0

		VED630	VED632	VED640	VED641	VED730	VED732	VED740	VED741
Dimensions and weights									
A	mm	351	351	351	351	351	351	351	351
B	mm	1533	1533	1533	1533	1533	1533	1533	1533
C	mm	789	789	789	789	789	789	789	789
D	mm	1558	1558	1558	1558	1558	1558	1558	1558
Net weight	kg	57,0	60,0	60,0	60,0	58,0	61,0	61,0	64,0

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VED 530I-741I

Fan coil unit for ducted installations

- **Horizontal and vertical installation**
- **Ventilation group to 5 speed**
- **Large range of available static pressure**
- **Inspectable ventilation group**

DESCRIPTION

Ducted fan coil, for heating, cooling and dehumidifying.
Designed to maintain the set temperature over time, ensuring very low sound levels.
Can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures.
Thanks to the availability of various options, with standard or increased coil, for horizontal or vertical installation, it is easy to choose the optimal solution for any need.

FEATURES

Case

Unit for internal installation.
Internally insulated structure with class 1 fire resistance and IP20 protection.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Brushless motor with continuous speed variation 0-100%.
Inverter motor allows precise adaptation to the real indoor environment requirements without temperature oscillations.
The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

Air filter

Air filter Class G3, for easy removal and cleaning.

Controls and Accessoires

There is a wide selection of controls and a huge choice of accessories, to meet every system requirement.
The unit is supplied with the delivery connection supplied.

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
WMT21: Electronic thermostat for inverter fancoils.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

The VMF-E19I accessory must be factory installed

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.
VCF45C - 47C - 47CS - for main heat exchanger: 3-way motorised valve kit for the main heat exchanger. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCF45H - 47H - for heating only heat exchanger: Motorized 3-way valve kit for hot only coil. The kit consists of a 3-way 4-way valve, the actuator and its hydraulic fittings, it is suitable for installation on both fan coil units with hydraulic connections on the right and left.
VCF25C - 25CS - for main coil: 2-way motorized valve kit for main coil. The kit consists of a valve with its insulating shell, the actuator and the relative hydraulic fittings, it is suitable for installation on both fan coil units with hydraulic connections on the right and left.
VCF25H - for heating only coil: 2-way motorized valve kit for hot only coil. The kit consists of a valve, actuator and relative hydraulic fittings, it is suitable for installation on both fan coils with hydraulic connections on the right and left.
BCV: Condensate drip.

Installation accessories

MZC: Plenum with motorised dampers.
RDA_V: Straight intake connection with rectangular flange.
RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.
RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

KFV: Circular flanges kit for plenum.
MZCBC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with a brushless motor.

Configurator

Field	Description
1,2,3	VED
4,5,6	Size 530, 532, 540, 541, 730, 732, 740, 741

Field	Description
7	main heat exchanger
8	Secondary heat exchanger
9	Fans

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
AER503IR (1)	•	•	•	•	•	•	•	•
PRO503	•	•	•	•	•	•	•	•
SA5 (2)	•	•	•	•	•	•	•	•
SW5 (2)	•	•	•	•	•	•	•	•
TX (3)	•	•	•	•	•	•	•	•
WMT21	•		•		•		•	

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
DI24	•	•	•	•	•	•	•	•
VMF-E19I (1)	•	•	•	•	•	•	•	•
VMF-E3	•	•	•	•	•	•	•	•
VMF-E4DX	•	•	•	•	•	•	•	•
VMF-E4X	•	•	•	•	•	•	•	•
VMF-IO	•	•	•	•	•	•	•	•
VMF-IR	•	•	•	•	•	•	•	•
VMF-LON		•		•		•		•
VMF-SW	•	•	•	•	•	•	•	•
VMF-SW1	•	•	•	•	•	•	•	•
VMHI	•	•	•	•	•	•	•	•

(1) Mandatory accessory.

The VMF-E19I accessory must be factory installed

Water valves

3 way valve kit

	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
3 way valve kit								
Main heat exchanger	VCF45C	VCF45C	VCF45C	VCF45C	VCF47C	VCF47C	VCF47CS	VCF47CS
Secondary heat exchanger for four pipes	-	VCF45H	-	VCF45H	-	VCF47H	-	VCF47H

230V power supply - Hydraulic connection Ø 3/4"

2 way valve kit

	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
2 way valve kit								
Main heat exchanger	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C	VCF25CS	VCF25CS
Secondary heat exchanger for four pipes	-	VCF25H	-	VCF25H	-	VCF25H	-	VCF25H

230V power supply - Hydraulic connection Ø 3/4"

2-way globe valves actuator excluded

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
VCT102	•	•	•	•				
VCT202					•	•	•	•

Actuator 230V

Accessory	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
VCTK	•	•	•	•	•	•	•

Actuator 24V

Accessory	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
VCTKM	•	•	•	•	•	•	•

Combined adjustment and balancing valve cold side

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
VJP150 (1)	•	•	•	•				
VJP150M (2)	•	•	•	•				
VJP270M (2)					•	•	•	•

(1) 230V~50Hz
(2) 24V

VJP/VJP_M the compatibility of the hot water valves with the designed air flow in a four-pipe installation is to be verified.

Condensate drip

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
BCV45	•	•	•	•				
BCV67					•	•	•	•

Accessories for intake

Intake plenum with rectangular flanges

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
RPA450V	•	•	•	•				
RPA670V					•	•	•	•

Intake plenum with circular flanges

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
PA450V	•	•	•	•				
PA670V					•	•	•	•

Delivery accessories

Delivery plenum internally insulated, with rectangular flanges

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
RPM450V	•	•	•	•				
RPM670V					•	•	•	•

Delivery plenum internally insulated, with circular flanges

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
PM450V	•	•	•	•				
PM670V					•	•	•	•

Circular flanges kit for plenum

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
KFV	•	•	•	•	•	•	•	•

MZC

Plenum with motor-driven dampers

Accessory	VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
MZC5040	•	•	•	•				
MZC7050					•	•	•	•

Electric plant

Accessory	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
MZCBC	•	•	•	•	•	•	•

PERFORMANCE SPECIFICATIONS

2-pipe

		VED530I			VED540I			VED730I			VED740I		
		1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)													
Heating capacity	kW	13,80	16,47	17,57	15,38	18,59	19,91	21,18	25,36	29,00	22,88	27,65	31,71
Water flow rate system side	l/h	1210	1444	1541	1349	1630	1746	1857	2224	2543	2007	2425	2781
Pressure drop system side	kPa	13	18	21	18	25	29	38	55	67	26	36	46
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	6,86	8,19	8,74	7,65	9,24	9,90	10,53	12,61	14,22	11,34	27,65	15,81
Water flow rate system side	l/h	1180	1409	1503	1316	1589	1703	1811	2169	2446	1950	2425	2719
Pressure drop system side	kPa	14	19	21	21	25	30	38	52	66	26	36	46
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	6,05	7,25	7,39	7,31	8,40	8,70	10,25	11,96	13,48	11,81	13,99	15,71
Sensible cooling capacity	kW	4,61	5,57	6,02	4,93	5,99	6,18	8,33	9,75	11,07	8,19	9,73	10,95
Water flow rate system side	l/h	1041	1247	1271	1257	1445	1496	1763	2057	2319	2031	2406	2702
Pressure drop system side	kPa	12	19	21	19	25	28	35	46	58	27	37	45
Fan													
Type	type	Centrifugal											
Fan motor	type	Inverter											
Number	no.	2			2			3			3		
Air flow rate	m^3/h	1120	1400	1520	1100	1380	1500	1640	2040	2410	1600	2000	2358
High static pressure	Pa	32	50	58	32	50	56	32	50	69	32	50	69
Input power	W	115	160	205	115	160	205	147	241	370	147	241	370
Signal 0-10V	%	66	76	62	62	76	90	62	76	90	62	76	90
Duct type fan coil sound data (3)													
Sound power level (inlet + radiated)	dB(A)	53,0	59,0	62,0	53,0	59,0	62,0	62,0	66,0	68,0	62,0	66,0	68,0
Sound power level (outlet)	dB(A)	49,0	55,0	58,0	49,0	55,0	58,0	58,0	62,0	64,0	58,0	62,0	64,0
Diametre hydraulic fittings													
Main heat exchanger	Ø	3/4"											
Power supply													
Power supply		230V~50Hz											

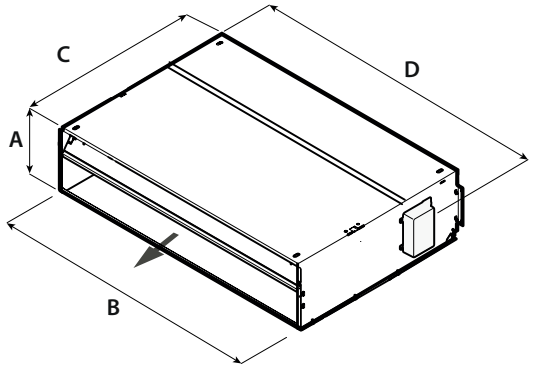
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

4-pipe

		VED541I			VED741I		
		1	2	3	1	2	3
		L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)							
Heating capacity	kW	6,70	7,62	7,90	10,57	11,88	12,96
Water flow rate system side	l/h	584	666	692	925	1040	1133
Pressure drop system side	kPa	19	24	26	17	21	25
Cooling performance 7 °C / 12 °C							
Cooling capacity	kW	7,43	8,54	8,97	11,96	14,23	16,08
Sensible cooling capacity	kW	5,04	6,13	6,45	8,34	9,97	11,32
Water flow rate system side	l/h	1278	1469	1543	2057	2448	2766
Pressure drop system side	kPa	21	27	29	27	37	46
Fan							
Type	type	Centrifugal					
Fan motor	type	Inverter					
Number	no.	2			3		
Air flow rate	m^3/h	1060	1360	1460	1600	2000	2350
High static pressure	Pa	32	50	56	32	50	69
Input power	W	106	163	185	138	240	363
Signal 0-10V	%	66	84	90	64	78	90
Duct type fan coil sound data (2)							
Sound power level (inlet + radiated)	dB(A)	53,0	59,0	62,0	62,0	66,0	68,0
Sound power level (outlet)	dB(A)	49,0	55,0	58,0	58,0	62,0	64,0
Diametre hydraulic fittings							
Main heat exchanger	Ø	3/4"					
Secondary heat exchanger	Ø	1/2"					
Power supply							
Power supply		230V~50Hz					

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		VED530I	VED532I	VED540I	VED541I	VED730I	VED732I	VED740I	VED741I
Dimensions and weights									
A	mm	300	300	300	300	351	351	351	351
B	mm	1133	1133	1133	1133	1533	1533	1533	1533
C	mm	737	737	737	737	789	789	789	789
D	mm	1158	1158	1158	1158	1558	1558	1558	1558
Net weight	kg	42,0	47,0	47,0	47,0	58,0	58,0	61,0	61,0

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VDCA_D

Fan coil unit for ducted installations

- For district cooling applications
- Horizontal and vertical installation
- Built-in sanitization system
- Large range of available static pressure

DESCRIPTION

The ducted range VDCA_D has been designed for air conditioning in environments where the installation of high-performance units with a wide range of useful head and compact dimensions is required.
Thanks to the availability of various versions and configurations, it's easy to choose the optimal solution for any requirement.

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Their characteristics permit energy savings compared to conventional fans.
They are statically and dynamically balanced and directly coupled to the motor shaft.
The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.
Fan housing in plastic material removable for easy and effective cleaning.

Finned pack heat exchanger

The high-efficiency heat exchanger is designed to operate with a high temperature difference, typical of District Cooling solutions.

Controls and Accessoires

To facilitate and streamline installation operations on-site, we have made it possible through the configurator, and therefore at the ordering stage, to receive the unit with certain accessories already pre-installed in the factory.

With copper pipes and aluminum fins, the main heat exchanger has female gas hydraulic connections and is equipped with air vents.
The hydraulic connections can be inverted during installation.

Air filter

All fan coils come equipped with an easily removable and cleanable air filter.
Various types of air filters are available through the configurator to meet different needs.

Control

The unit's electrical box is reversible, with the option of mounting it also on the same side of the water connections.
The standard equipment includes a single 10-pin control board as an interface for the electrical connections, the preparation for the VMF series thermostat fastener and the included supply of a DIN guide for the installation of a third-party control.
To facilitate and streamline installation operations on-site, we have made it possible through the configurator, and therefore at the ordering stage, to receive the unit with certain accessories already pre-installed in the factory.
We redirect your attention to the configurator available on this datasheet or to the unit selection software.

We redirect your attention to the configurator available on this datasheet or to the unit selection software.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3,4	**VDCA**
5	**Size** 1, 2, 3, 5, 7
6	**main heat exchanger**
0	Standard
7	**Secondary heat exchanger**
0	No present
1	Present
8	**Configuration**
D	High head
P	Low head
9	**Installation**
U	Universal
V	Only vertical
10	**Position of connections**
D	Water connections and electrical panel on the right
G	Water connections and electrical panel on the left
L	Hydraulic connections on the left and electric connections on the opposite side
R	Hydraulic connections on the right and electric connections on the opposite side
11	**Use**
V	With VMF system
W	Without control board
12	**Device / accessoires**
H	Electric heater
I	Ioniser
P	Photocatalytic lamp
W	Without devices
13	**Filter**
B	Basic filter
M	Increased filter
P	Special for units with photocatalytic device
V	With washable mesh filter

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SA503: Wall-mountable ambient sensor, compatible with AER503IR.
SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.
SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: Water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
VMF-RIC: Thermostat interface for fan coil units

VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Valves and additional water coil

BV: Hot water heat exchanger with 1 row.
VCF_X: 3-way valve kit for fan coils with single heat exchanger and hydraulic connections on the left side, for installation in 4-pipe systems. The kit is composed by 2 insulated 3-way valves and 4 connections complete with electrothermal actuators, insulating shells for the valves and with hydraulic fittings. 230V power supply. Hydraulic connections: Valve body Ø G 3/4" Male; Valve side connection pipes Ø G 3/4" Female; Unit side connection pipes Ø G 3/4" Male.
VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VDP: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 230 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.
VCT102: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.
VCT103: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.
VCTK: The VCT series valves can be combined with the actuators On-Off 230V. The actuator must be selected according to the type of system/adjustment provided.
VCTKM: The VCT series valves can be combined with the actuators 24V modulating. The actuator must be selected according to the type of system/adjustment provided.

Installation accessories

AMP: Wall mounting kit
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.
DSC: Condensate drainage device.

Accessories for intake

RDA_V: Straight intake connection with rectangular flange.
RDA_C: Straight intake connection with circular flanges.
RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.
MZC: Plenum with motorised dampers.
MZCACV: Electrical system with relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.
MZCAC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with an asynchronous motor.
KFV: Circular flanges kit for plenum.
GA: Intake grid with fixed louvers
GAF: Intake grid with filter and fixed louvers
GM: Flow grid with adjustable louvers.

Delivery accessories

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.
RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
RDM_V: Straight delivery coupling in galvanised sheet metal.
RDM_C: Straight discharge internally insulated, with circular flanges.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
AER503IR (1)	•	•	•	•	•
F3VU	•	•	•	•	•
PRO503	•	•	•	•	•
SA5 (2)	•	•	•	•	•
SA503 (3)	•	•	•	•	•
SW3 (2)	•	•	•	•	•
SW5 (2)	•	•	•	•	•
TX (4)	•	•	•	•	•
VMF-RIC	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Thermostat probe for AER503IR if available.
(4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

VMF system

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
DI24	•	•	•	•	•
VMF-E19 (1)	•	•	•	•	•
VMF-E3	•	•	•	•	•
VMF-E4DX	•	•	•	•	•
VMF-E4X	•	•	•	•	•
VMF-IO	•	•	•	•	•
VMF-IR	•	•	•	•	•
VMF-SW	•	•	•	•	•
VMF-SW1	•	•	•	•	•
VMHI	•	•	•		•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

(Heating only) additional heat exchanger

Accessory	VDCA100D	VDCA200D	VDCA300D
BV130 (1)	•		
BV162 (1)			•
BV230 (1)		•	

(1) Not available for sizes with oversized main coil.

Water valves

Valve Kit for 4 pipe systems with main coil

Accessory	VDCA100D	VDCA200D	VDCA300D
VCF3X4L	•	•	•
VCF3X4R	•	•	•

3 way valve kit

	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
3 way valve kit					
Main heat exchanger	VCZ43 / VCZ4324	VCZ43 / VCZ4324	VCZ43 / VCZ4324	VCF45CS	VCF45CS
Secondary heat exchanger for four pipes	-	-	-	-	-
Additional coil "BV"	VCF45 / VCF4524	VCF45 / VCF4524	VCF45 / VCF4524	-	-

VCZ43 - VCF45 - VCF45H - VCF47H Alimentazione 230V - VCZ4324 - VCF4524 Power supply 24V - Hydraulic connection Ø 3/4"

2 way valve kit

	VDCA100D	VDCA200D	VDCA300D
2 way valve kit			
Main heat exchanger	VCZD3 / VCZD324	VCZD3 / VCZD324	VCZD3 / VCZD324
Secondary heat exchanger for four pipes	-	-	-
Additional coil "BV"	VCFD4 / VCFD424	VCFD4 / VCFD424	VCFD4 / VCFD424

VCZD3 - VCFD4 Power supply 230V - VCZD324 - VCFD424 Power supply 24V
- Hydraulic connection Ø 3/4"

Combined adjustment and balancing valve cold side

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
VDP15	•	•	•	•	•
VDP15HF (1)	•	•	•	•	•
VDP15LF	•	•	•		
VDP20HF				•	•

(1) The compatibility of the valves with the unit must be checked using the project capacity.
Select the appropriate valve based on the project water flow rate.

2-way globe valves actuator excluded

Accessory	VDCA500D	VDCA700D
VCT103	•	•

Accessory	VDCA500D	VDCA700D
VCT102	•	•

Accessory	VDCA500D	VDCA700D
VCTK	•	•

Accessory	VDCA500D	VDCA700D
VCTKM	•	•

Installation accessories

Installation accessories

Accessory	VDCA100D	VDCA200D	VDCA300D
AMP	•	•	•

Condensate drip

Accessory	VDCA100D	VDCA200D	VDCA300D
BCZ4 (1)	•	•	•
BCZ6 (2)	•	•	•

(1) For vertical installation.
(2) For horizontal installation.

Accessory	VDCA100D	VDCA200D	VDCA300D
BC9 (1)	•	•	•

(1) For horizontal installation.

Accessory	VDCA500D	VDCA700D
BCV45	•	
BCV67		•

Condensate recirculation device

Accessory	VDCA100D	VDCA200D	VDCA300D
DSCZ4 (1)	•	•	•

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Accessories for intake

Intake straight with rectangular flanges

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
RDA100V	•				
RDA200V		•			
RDA300V			•		
RDA450V				•	
RDA670V					•

Intake straight internally insulated, with circular flanges

Accessory	VDCA100D	VDCA200D	VDCA300D
RDAC100V	•		
RDAC200V		•	
RDAC300V			•

Intake plenum with rectangular flanges

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
RPA100V	•				
RPA200V		•			
RPA300V			•		
RPA450V				•	
RPA670V					•

Intake plenum with circular flanges

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
PA100V	•				
PA200V		•			
PA300V			•		
PA450V				•	
PA670V					•

Circular flanges kit for plenum

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
KFV				•	•
KFV10	•	•	•		

Intake grids

Accessory	VDCA100D	VDCA200D	VDCA300D
GA32	•		
GA42		•	
GA62			•

Intake grid with filter and fixed louvers

Accessory	VDCA100D	VDCA200D	VDCA300D
GAF32	•		
GAF42		•	
GAF62			•

Flow grid with adjustable louvers

Accessory	VDCA100D	VDCA200D	VDCA300D
GM32	•		
GM42		•	
GM62			•

Delivery accessories

Delivery plenum internally insulated, with circular flanges

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
PM100V	•				
PM200V		•			
PM300V			•		
PM450V				•	
PM670V					•

Delivery plenum internally insulated, with rectangular flanges

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
RPM100V	•				
RPM200V		•			
RPM300V			•		
RPM450V				•	
RPM670V					•

Straight delivery coupling

Accessory	VDCA100D	VDCA200D	VDCA300D
RDM100V	•		
RDM200V		•	
RDM300V			•

Delivery straight internally insulated, with circular flanges

Accessory	VDCA100D	VDCA200D	VDCA300D
RDMC100V	•		
RDMC200V		•	
RDMC300V			•

Plenum with motor-driven dampers

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
MZC320	•				
MZC5040				•	
MZC530		•			
MZC7050					•
MZC830			•		

Electrical system with relays

Accessory	VDCA500D	VDCA700D
MZCACV (1)	•	•

(1) It is mandatory to use MZCACV if the intake of the unit combined with the MZC accessory exceeds 0.7 Ampere.

Electric plant

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
MZCAC	•	•	•	•	•

PERFORMANCE SPECIFICATIONS

2-pipe

		VDCA100D					VDCA200D					VDCA300D					VDCA500D					VDCA700D				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
		UL	L	M	H	HH	UL	L	M	H	HH	UL	L	M	H	HH	UL	L	M	H	HH	UL	L	M	H	HH
Heating performances 45 °C / 35 °C (1)																										
Heating capacity	kW	1,57	1,79	2,58	2,81	4,03	2,74	2,95	3,80	4,08	5,34	3,46	4,15	5,46	5,69	6,66	4,44	5,15	7,02	8,21	10,11	8,25	10,00	12,63	14,62	16,67
Water flow rate system side	l/h	136	156	224	244	350	238	256	330	354	463	300	360	474	494	578	386	447	609	713	877	716	868	1096	1269	1447
Pressure drop system side	kPa	7	9	17	19	37	23	26	40	46	74	11	16	26	28	37	6	8	14	18	26	9	13	20	26	33
Cooling performance 5.5 °C / 14.5 °C (2)																										
Cooling capacity	kW	1,21	1,38	1,98	2,16	3,10	2,11	2,27	2,92	3,13	4,10	2,66	3,19	4,20	4,38	5,12	3,42	3,96	5,40	6,31	7,77	6,34	7,69	9,71	11,23	12,81
Sensible cooling capacity	kW	0,90	1,03	1,51	1,65	2,46	1,52	1,64	2,16	2,33	3,15	2,00	2,43	3,28	3,44	4,11	2,44	2,81	3,77	4,39	5,44	4,98	5,88	7,20	8,19	9,27
Water flow rate system side	l/h	115	132	190	207	296	202	217	279	299	392	254	305	401	418	489	327	378	516	603	743	606	735	928	1074	1225
Pressure drop system side	kPa	6	7	14	17	32	19	22	35	39	64	10	13	22	24	32	5	7	12	16	23	8	11	17	22	28
Cooling performances 9 °C / 18 °C (3)																										
Cooling capacity	kW	0,79	0,91	1,30	1,42	2,04	1,39	1,49	1,92	2,06	2,69	1,75	2,09	2,76	2,88	3,36	2,24	2,60	3,55	4,15	5,10	4,17	5,05	6,38	7,38	8,42
Sensible cooling capacity	kW	0,75	0,86	1,27	1,39	2,04	1,27	1,38	1,81	1,95	2,64	1,68	2,04	2,75	2,88	3,36	2,05	2,36	3,16	3,69	4,56	4,17	4,93	6,04	6,88	7,78
Water flow rate system side	l/h	76	86	125	136	195	132	142	183	197	257	167	200	264	275	321	214	249	339	396	488	398	483	610	705	805
Pressure drop system side	kPa	3	3	7	8	15	9	10	16	19	30	5	6	10	11	15	2	3	6	7	11	4	5	8	10	13
Fan																										
Type	type	Centrifugal					Centrifugal					Centrifugal					Centrifugal					Centrifugal				
Fan motor	type	Asynchronous					Asynchronous					Asynchronous					Asynchronous					Asynchronous				
Number	no.	2					2					3					2					3				
Air flow rate	m^3/h	260	288	398	435	680	400	436	585	635	870	500	606	840	886	1100	800	911	1204	1393	1700	1400	1621	2017	2380	2800
High static pressure	Pa	32	26	50	60	24	34	28	50	59	30	45	26	50	56	37	50	29	50	67	35	63	32	50	70	44
Input power	W	33	34	52	75	85	43	44	67	95	107	54	61	87	98	120	137	144	198	259	282	217	233	285	371	408
Electrical wiring		1	1	4	6	6	1	1	4	6	6	1	1	4	6	7	1	1	3	5	5	1	1	3	5	5
Duct type fan coil sound data (4)																										
Sound power level (inlet + radiated)	dB(A)	47,0	46,0	53,0	54,0	55,0	50,0	49,0	56,0	57,0	59,0	54,0	52,0	58,0	59,0	61,0	52,0	51,0	57,0	63,0	61,0	63,0	62,0	66,0	68,0	68,0
Sound power level (outlet)	dB(A)	45,0	44,0	50,0	52,0	54,0	48,0	48,0	55,0	56,0	59,0	52,0	50,0	57,0	58,0	60,0	48,0	47,0	53,0	59,0	57,0	58,0	58,0	62,0	64,0	63,0
Diametre hydraulic fittings																										
Main heat exchanger	Ø	3/4"					3/4"					3/4"					3/4"					3/4"				
Power supply																										
Power supply		230V~50Hz					230V~50Hz					230V~50Hz					230V~50Hz					230V~50Hz				

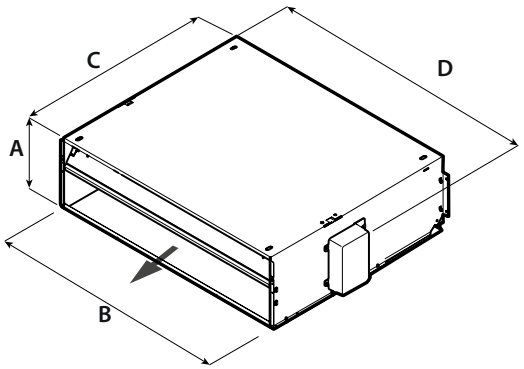
(1) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/35 °C;
(2) Room air temperature 24°C d.b./18°C w.b.; Water (in/out) 5.5 °C/14.5 °C; EUROVENT
(3) Room air temperature 26°C d.b./18.6°C w.b.; Water (in/out) 9 °C/18 °C; EUROVENT
(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

Eurovent certified speed: H,M,L

Only for units configured with electric heater (field 12 of the configurator, option H)

		VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
Electric heater						
Number	no.	1	1	1	1	1
Heating power	kW	1310	1970	2190	2920	4000

DIMENSIONS



		VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
Dimensions and weights						
A	mm	217	217	217	300	351
B	mm	781	1001	1122	1133	1153
C	mm	584	584	584	737	789
D	mm	807	1027	1148	1158	1558

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VDCB_D

Fan coil unit for ducted installations

- For district cooling applications
- Horizontal and vertical installation
- Built-in sanitization system
- Large range of available static pressure

DESCRIPTION

The ducted range VDCB has been designed for air conditioning in environments where the installation of high-performance units with a wide range of useful head and compact dimensions is required.
Thanks to the availability of various versions and configurations, it's easy to choose the optimal solution for any requirement.

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Their characteristics permit energy savings compared to conventional fans.
They are statically and dynamically balanced and directly coupled to the motor shaft.
The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.
The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).
The plastic augers are extractable for easy and efficient cleaning.

Finned pack heat exchanger

The high-efficiency heat exchanger is designed to operate with a high temperature difference, typical of District Cooling solutions.
With copper pipes and aluminum fins, the main heat exchanger has female gas hydraulic connections and is equipped with air vents.
The hydraulic connections can be inverted during installation.

Air filter

All fan coils come equipped with an easily removable and cleanable air filter.
Various types of air filters are available through the configurator to meet different needs.

Controls and Accessoires

The unit's electrical box is reversible, with the option of mounting it also on the same side of the water connections.
The standard equipment includes a single 10-pin control board as an interface for the electrical connections, the preparation for the VMF series thermostat fastener and the included supply of a DIN guide for the installation of a third-party control.
To facilitate and streamline installation operations on-site, we have made it possible through the configurator, and therefore at the ordering stage, to receive the unit with certain accessories already pre-installed in the factory.
We redirect your attention to the configurator available on this datasheet or to the unit selection software.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field		Description
1,2,3,4		**VDCB**
5		**Size** 1, 2, 3, 5, 7
6		**main heat exchanger**
	0	Standard
7		**Secondary heat exchanger**
	0	No present
	1	Present
8		**Configuration**
	D	Low head
	P	High head
9		**Installation**
	U	Universal
	V	Only vertical
10		**Position of connections**
	D	Water connections and electrical panel on the right
	G	Water connections and electrical panel on the left
	L	Hydraulic connections on the left and electric connections on the opposite side
	R	Hydraulic connections on the right and electric connections on the opposite side
11		**Use**
	V	With VMF system
	W	Without control board
12		**Device / accessoires**
	H	Electric heater
	I	Ioniser
	P	Photocatalytic lamp
	W	Without devices
13		**Filter**
	M	With increased filter
	P	Special for units with photocatalytic device
	S	With basic filter
	V	With washable mesh filter

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
F3VU: interface board to receive 3 separate voltage commands (corresponding to 3 speeds) and converting them into three analog voltages in the range of 0-10V.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SA503: Wall-mountable ambient sensor, compatible with AER503IR.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
VMF-RIC: Thermostat interface for fan coil units

VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Valves and additional finned-pack heat exchanger for water

BV: Hot water heat exchanger with 1 row.
VCF_X: 3-way valve kit for fan coils with single heat exchanger and hydraulic connections on the left side, for installation in 4-pipe systems. The kit is composed by 2 insulated 3-way valves and 4 connections complete with electrothermal actuators, insulating shells for the valves and with hydraulic fittings. 230V power supply. Hydraulic connections: Valve body Ø G 3/4" Male; Valve side connection pipes Ø G 3/4" Female; Unit side connection pipes Ø G 3/4" Male.
VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VDP: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 230 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.
VCT102: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.
VCT103: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.
VCTK: The VCT series valves can be combined with the actuators On-Off 230V. The actuator must be selected according to the type of system/adjustment provided.
VCTKM: The VCT series valves can be combined with the actuators 24V modulating. The actuator must be selected according to the type of system/adjustment provided.

Installation accessories

AMP: Wall mounting kit
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.
DSC: Condensate drainage device.

Accessories for intake

RDA_V: Straight intake connection with rectangular flange.
RDA_C: Straight intake connection with circular flanges.
RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.
MZC: Plenum with motorised dampers.
KFV: Circular flanges kit for plenum.
GA: Intake grid with fixed louvers
GAF: Intake grid with filter and fixed louvers
GM: Flow grid with adjustable louvers.

Delivery accessories

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.
RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
RDM_V: Straight delivery coupling in galvanised sheet metal.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
AER503IR (1)	•	•	•	•	•
F3VU	•	•	•	•	•
PRO503	•	•	•	•	•
SA5 (2)	•	•	•	•	•
SA503 (3)	•	•	•	•	•
SW3 (2)	•	•	•	•	•
SW5 (2)	•	•	•	•	•
TX (4)	•	•	•	•	•
VMF-RIC	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Thermostat probe for AER503IR if available.
(4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

To manage and control a VMF system, it is mandatory to include the VMF-E19I accessory on board the fan coil unit.

VMF system

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
DI24	•	•	•	•	•
VMF-E19I (1)	•	•	•	•	•
VMF-E3	•	•	•	•	•
VMF-E4DX	•	•	•	•	•
VMF-E4X	•	•	•	•	•
VMF-IO	•	•	•	•	•
VMF-IR	•	•	•	•	•
VMF-SW	•	•	•	•	•
VMF-SW1	•	•	•	•	•
VMHI	•	•	•	•	•

(1) Mandatory accessory.

(Heating only) additional coil

Accessory	VDCB100D	VDCB200D	VDCB300D
BV130 (1)	•		
BV162 (1)			•
BV230 (1)		•	

(1) Not available for sizes with oversized main coil.

Water valves

3 way valve kit

	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
3 way valve kit					
Main heat exchanger	VCZ43 / VCZ4324	VCZ43 / VCZ4324	VCZ43 / VCZ4324	VCF45CS	VCF45CS
Secondary heat exchanger for four pipes	-	-	-	-	-
Additional coil "BV"	VCF45 / VCF4524	VCF45 / VCF4524	VCF45 / VCF4524	-	-

VCZ43 - VCF45 - VCF45H - VCF47H Alimentazione 230V - VCZ4324 - VCF4524 Power supply 24V - Hydraulic connection Ø 3/4"

2 way valve kit

	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
2 way valve kit					
Main heat exchanger	VCZD3 / VCZD324	VCZD3 / VCZD324	VCZD3 / VCZD324	-	-
Secondary heat exchanger for four pipes	-	-	-	-	-
Additional coil "BV"	VCFD4 / VCFD424	VCFD4 / VCFD424	VCFD4 / VCFD424	-	-

VCFD3 Power supply 230V, VCFD324 Power supply 24V - Hydraulic connections Ø 3/4"
VCFD4 Power supply 230V, VCFD424 Power supply 24V - Hydraulic connections Ø 1/2"; For additional coil (heating only) BV.

Combined adjustment and balancing valve cold side

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
VDP15	•	•	•	•	•
VDP15HF (1)	•	•	•	•	•
VDP15LF	•	•	•		
VDP20HF				•	•

(1) The compatibility of the valves with the unit must be checked using the project capacity.
Select the appropriate valve based on the project water flow rate.

2-way globe valves actuator excluded

Accessory	VDCB500D	VDCB700D
VCT103	•	•

Accessory	VDCB500D	VDCB700D
VCT102	•	•

Accessory	VDCB500D	VDCB700D
VCTK	•	•

Accessory	VDCB500D	VDCB700D
VCTKM	•	•

Installation accessories

Installation accessories

Accessory	VDCB100D	VDCB200D	VDCB300D
AMP	•	•	•

Condensate drip

Accessory	VDCB100D	VDCB200D	VDCB300D
BCZ4 (1)	•	•	•
BCZ6 (2)	•	•	•

(1) For vertical installation.
(2) For horizontal installation.

Accessory	VDCB100D	VDCB200D	VDCB300D
BC9 (1)	•	•	•

(1) For horizontal installation.

Accessory	VDCB500D	VDCB700D
BCV45	•	
BCV67		•

Condensate recirculation device

Accessory	VDCB100D	VDCB101D	VDCB200D	VDCB300D	VDCB301D
DSCZ4	•	•	•	•	•

Accessories for intake

Intake straight with rectangular flanges

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
RDA100V	•				
RDA200V		•			
RDA300V			•		
RDA450V				•	
RDA670V					•

Intake straight internally insulated, with circular flanges

Accessory	VDCB100D	VDCB200D	VDCB300D
RDAC100V	•		
RDAC200V		•	
RDAC300V			•

Intake plenum with rectangular flanges

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
RPA100V	•				
RPA200V		•			
RPA300V			•		
RPA450V				•	
RPA670V					•

Intake plenum with circular flanges

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
PA100V	•				
PA200V		•			
PA300V			•		
PA450V				•	
PA670V					•

Intake grids

Accessory	VDCB100D	VDCB200D	VDCB300D
GA32	•		
GA42		•	
GA62			•

Intake grid with filter and fixed louvers

Accessory	VDCB100D	VDCB200D	VDCB300D
GAF32	•		
GAF42		•	
GAF62			•

Flow grid with adjustable louvers

Accessory	VDCB100D	VDCB200D	VDCB300D
GM32	•		
GM42		•	
GM62			•

Delivery accessories

Plenum with motor-driven dampers

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
MZC320	•				
MZC5040				•	
MZC530		•			
MZC7050					•
MZC830			•		

Delivery plenum internally insulated, with circular flanges

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
PM100V	•				
PM200V		•			
PM300V			•		
PM450V				•	
PM670V					•

Delivery plenum internally insulated, with rectangular flanges

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
RPM100V	•				
RPM200V		•			
RPM300V			•		
RPM450V				•	
RPM670V					•

Delivery straight internally insulated, with circular flanges

Accessory	VDCB100D	VDCB200D	VDCB300D
RDMC100V	•		
RDMC200V		•	
RDMC300V			•

Straight delivery coupling

Accessory	VDCB100D	VDCB200D	VDCB300D
RDM100V	•		
RDM200V		•	
RDM300V			•

Circular flanges kit for plenum

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
KFV				•	•
KFV10	•	•	•		

PERFORMANCE SPECIFICATIONS

2-pipe

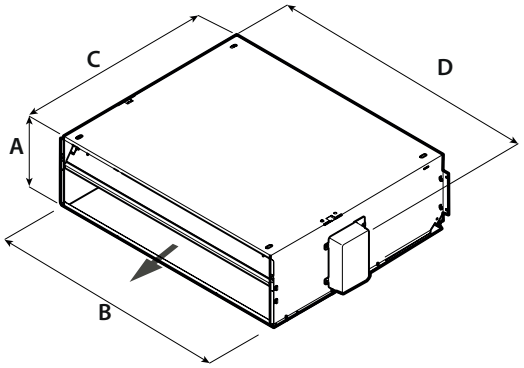
		VDCB100D					VDCB200D					VDCB300D					VDCB500D					VDCB700D				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
		UL	L	M	H	HH	UL	L	M	H	HH	UL	L	M	H	HH	UL	L	M	H	HH	UL	L	M	H	HH
Heating performances 45 °C / 35 °C (1)																										
Heating capacity	kW	1,04	1,79	2,58	2,82	4,49	2,18	2,96	3,80	4,08	5,97	2,75	4,14	5,46	5,70	7,06	3,18	5,17	7,02	8,22	11,87	4,37	9,98	12,63	14,64	18,63
Water flow rate system side	l/h	90	155	224	245	390	189	257	329	354	518	238	360	474	495	613	276	449	609	713	1030	379	866	1096	1271	1617
Pressure drop system side	kPa	3	9	17	19	45	15	26	40	46	91	7	16	26	28	41	3	8	14	18	35	3	13	20	26	40
Cooling performance 5.5 °C / 14.5 °C (2)																										
Cooling capacity	kW	0,80	1,37	1,98	2,17	3,45	1,67	2,27	2,92	3,13	4,59	2,11	3,18	4,20	4,38	5,43	2,44	3,97	5,40	6,31	9,12	3,35	7,67	9,71	11,25	14,32
Sensible cooling capacity	kW	0,59	1,03	1,51	1,66	2,80	1,19	1,64	2,15	2,33	3,58	1,57	2,43	3,28	3,44	4,40	1,77	2,82	3,77	4,40	6,51	2,93	5,86	7,20	8,20	10,39
Water flow rate system side	l/h	77	131	190	207	330	160	217	279	300	439	202	304	401	419	519	233	380	516	604	872	321	733	928	1075	1369
Pressure drop system side	kPa	3	7	14	17	39	13	22	35	40	79	6	13	22	24	35	3	7	12	16	30	3	11	17	22	34
Cooling performances 9 °C / 18 °C (3)																										
Cooling capacity	kW	0,53	0,90	1,30	1,42	2,27	1,10	1,49	1,92	2,06	3,02	1,39	2,09	2,76	2,88	3,57	1,60	2,61	3,55	4,15	5,99	2,20	5,04	6,38	7,39	9,41
Sensible cooling capacity	kW	0,49	0,86	1,27	1,39	2,27	1,00	1,38	1,81	1,96	3,01	1,32	2,04	2,75	2,88	3,57	1,48	2,36	3,17	3,69	5,47	2,20	4,92	6,04	6,89	8,72
Water flow rate system side	l/h	50	86	125	136	217	105	143	183	197	288	133	200	264	275	341	153	249	339	397	573	211	481	610	706	899
Pressure drop system side	kPa	1	3	7	8	18	6	10	16	19	37	3	6	10	11	16	1	3	6	7	14	1	5	8	10	16
Fan																										
Type	type	Centrifugal					Centrifugal					Centrifugal					Centrifugal					Centrifugal				
Fan motor	type	Inverter					Inverter					Inverter					Inverter					Inverter				
Number	no.	2					2					3					2					3				
Air flow rate	m^3/h	200	287	398	436	800	300	437	585	635	1000	400	606	840	888	1200	600	913	1204	1393	2000	1000	1617	2017	2384	3200
High static pressure	Pa	9	26	50	60	43	6	28	50	59	34	3	26	50	56	16	9	29	50	67	19	5	32	50	70	79
Input power	W	7	15	30	37	80	10	23	45	55	100	14	35	76	93	121	18	50	103	155	249	31	100	166	255	471
Signal 0-10V	%	30	49	69	76	90	30	55	74	81	90	30	61	85	90	90	30	49	66	76	90	30	53	65	75	90
Duct type fan coil sound data (4)																										
Sound power level (inlet + radiated)	dB(A)	35,0	46,0	53,0	54,0	59,0	40,0	50,0	56,0	57,0	62,0	41,0	52,0	58,0	60,0	61,0	44,0	53,0	60,0	63,0	65,0	49,0	62,0	66,0	69,0	73,0
Sound power level (outlet)	dB(A)	33,0	44,0	50,0	52,0	57,0	37,0	48,0	55,0	56,0	60,0	39,0	50,0	57,0	58,0	60,0	40,0	51,0	57,0	60,0	64,0	43,0	56,0	62,0	66,0	69,0
Power supply																										
Power supply		230V~50Hz					230V~50Hz					230V~50Hz					230V~50Hz					230V~50Hz				

(1) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/35 °C;
(2) Room air temperature 24°C d.b./18°C w.b.; Water (in/out) 5.5 °C/14.5 °C; EUROVENT
(3) Room air temperature 26°C d.b./18.6°C w.b.; Water (in/out) 9 °C/18 °C; EUROVENT
(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.
Eurovent certified speed: H,M,L

Only for units configured with electric heater (field 12 of the configurator, option H)

		VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
Electric heater						
Number	no.	1	1	1	1	1
Heating power	kW	1310	1970	2190	2920	4000

DIMENSIONS



		VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
Dimensions and weights						
A	mm	217	217	217	300	351
B	mm	781	1001	1122	1133	1153
C	mm	584	584	584	737	789
D	mm	807	1027	1148	1158	1558

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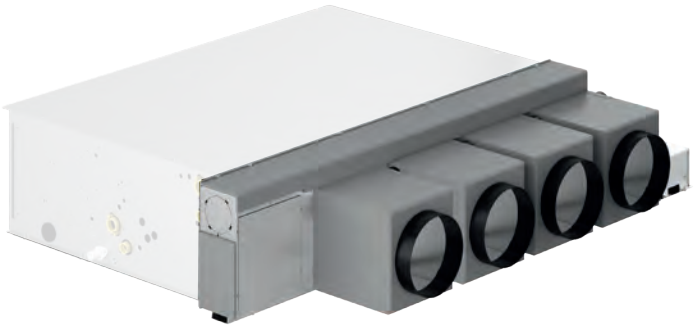
MZC

Plenum with motor-driven dampers

- **Multi-zone plenum for controlling air capacity**
- **Available for channelles on/off and inverter fan coils**



DESCRIPTION

The plenum with motor-driven dampers is designed for residential and tertiary applications. It combines optimal ambient comfort with assured energy savings.
Modern plant increasingly require overall air conditioning using channelled systems. Thanks to the electronic control of the dampers, the MZC accessory regulates the room's comfort by adjusting the air flow to meet the actual requirements.
MZC is designed for use in combination with all fan coils with asynchronous or brushless motors and is pre-set to distribute exchange air.

FEATURES

Structure

— Galvanized sheet metal structure, insulated with self-extinguishing material.
— From 2 to 6 delivery outlets, depending on the model. Each outlet is fitted with a motorised damper, with the possibility - if required by the system - to add an MZCSM accessory outlet (possibility not available for all models - see the accessory compatibility table)
— Fresh air injection flange, supplied as standard, for connecting the MZC plenum to a heat recovery unit.
— Pre-setting for the installation of an additional air probe (accessory MZCSA) to control modulating or pressure-independent valves.
— Possibility to install the plenum even on the fan coil intake, using a flange (accessory MZCA)
— Reversible electrical box (right/left)
— Water probe supplied as standard, for the fan coil.

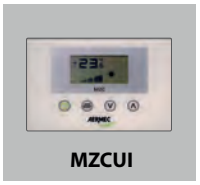
Regulation

— MZC is equipped with a zone thermostat VMHI to define the required temperature setting.
— The status of the dampers (open/closed) is adjusted on reaching the temperature set in each room.
— Management of up to 6 motorized dampers.
— Flow control for each damper (the maximum and minimum damper opening can be set for each outlet).
— Possibility to associate the control of several dampers with the request from the same zone thermostat (VMHI or WT10).
— For installations in which the dampers and room thermostats are uniquely associated, the dampers can be modulated in relation to the room thermostat requirements.
— "Suction plenum" function enabling
— MZC can control the valves that may be installed on the fan coil associated with it (On/Off, modulating or pressure-independent types), for 2- or 4-pipe systems
— Possibility to set the control unit parameters via the supervision serial port.

ACCESSORIES

Control panels

WR10: Two-channel wireless receiver for WT10.
WT10: Wireless thermostat.



VMF Components

VMF-VOC: Air quality detection accessory.
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Installation accessories

MZCACV: Electrical system with relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.
MZCAC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with an asynchronous motor.
MZCBC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with a brushless motor.
MZCSM: Single module with motorized damper.
MZCA: Adapter flange for installing the Plenum even under fan coil suction.
MZCSA: Air probe for controlling modulating or pressure independent valves.
ZCT: It is an electrical device equipped with Bluetooth and WiFi technology, with which it is possible to perform the functions of air probe and thermostat with dry contact. Communicate with the AerChront App (available for Android and iOS) for home control by creating customised rooms with name and cover image. For more information on the use of the application and available functions, please refer to the respective documentation on the site.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050
WR10	•	•	•	•	•	•
WT10	•	•	•	•	•	•

VMF system

Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050
VMF-VOC	•	•	•	•	•	•
VMHI	•	•	•	•	•	•

Installation accessories

Relay interface board

Accessory	MZC7050
MZCACV	•

Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050
MZCAC	•	•	•	•	•	•

Compulsory electrical plant

Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050
MZCBC	•	•	•	•	•	•

Single module with damper

Accessory	MZC320	MZC530	MZC830	MZC5040	MZC7050
MZCSM	•	•	•	•	•

Adaptation flange

Accessory	MZC220	MZC320	MZC530	MZC830
MZCA2	•			
MZCA3		•		
MZCA5			•	
MZCA8				•

Air temperature probe

Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050
MZCSA	•	•	•	•	•	•

Thermostat

Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050
ZCT	•	•	•	•	•	•

COMPATIBILITY OF MZC PLENUMS WITH AERMEC FAN COILS

Plenum with motorised dampers - FCZ - PO

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
MZC220	PO,POR					•	•	•	•												
MZC320	PO,POR									•	•	•	•								
MZC530	PO,POR													•	•	•	•	•	•	•	•

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
MZC830	PO,POR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		

Plenum with motorised dampers - VED 030-340

Plenum with motorised dampers - VED 430- 741

Accessory	VED430	VED440	VED530	VED540	VED630	VED640	VED730	VED740
MZC5040	•	•	•	•				
MZC7050					•	•	•	•

Accessory	VED432	VED441	VED532	VED541	VED632	VED641	VED732	VED741
MZC5040	•	•	•	•				
MZC7050					•	•	•	•

Plenum with motorised dampers - VED 030I-340I

Plenum with motorised dampers - VED 530I-741I

Accessory	VED530I	VED540I	VED730I	VED740I
MZC5040	•	•		
MZC7050			•	•

Accessory	VED532I	VED541I	VED732I	VED741I
MZC5040	•	•		
MZC7050			•	•

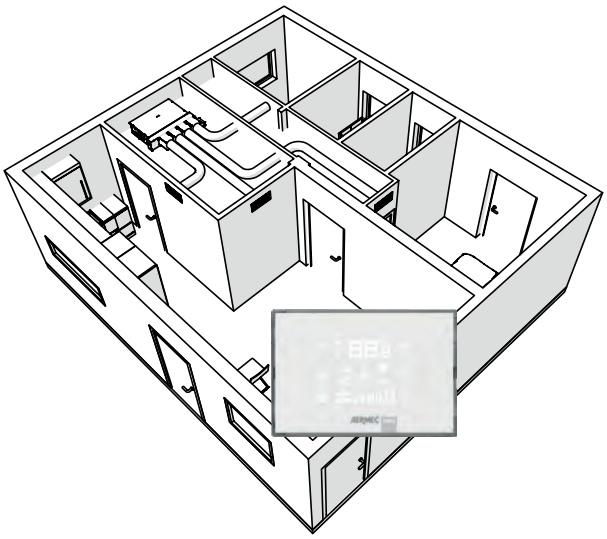
Plenum with motor-driven dampers - VES 030-340

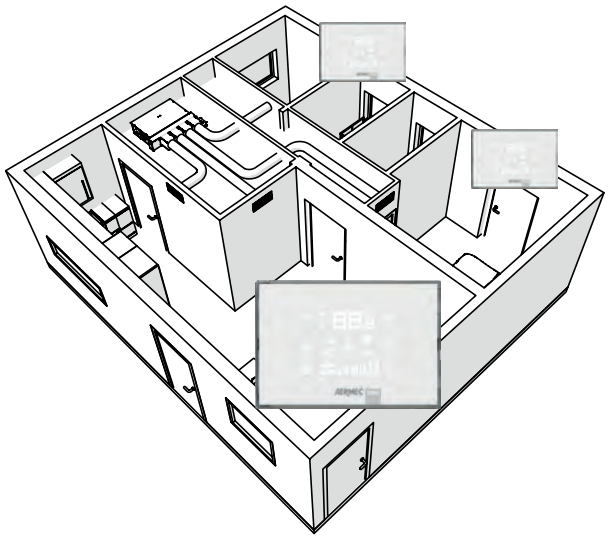
Accessory	VES030	VES040	VES130	VES140	VES230	VES240	VES330	VES340
MZC220	•	•						
MZC320			•	•				
MZC530					•	•		
MZC830							•	•

Plenum with motor-driven dampers - VES 030I-340I

Accessory	VES030I	VES040I	VES130I	VES140I	VES230I	VES240I	VES330I	VES340I
MZC220	•	•						
MZC320			•	•				
MZC530					•	•		
MZC830							•	•

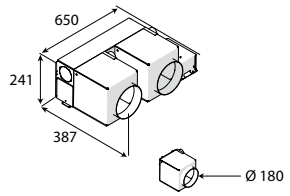
SYSTEM SOLUTIONS



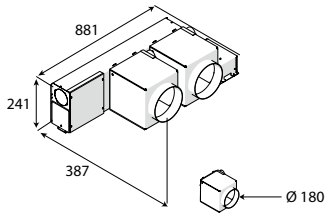


DIMENSIONS

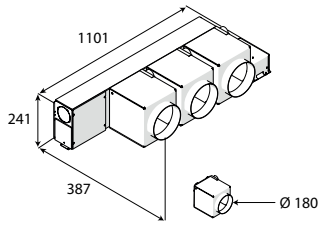
MZC220



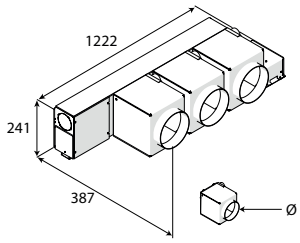
MZC320



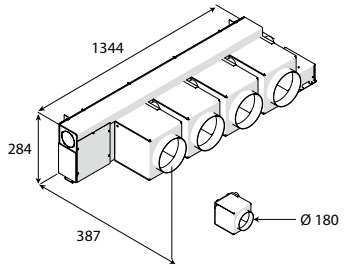
MZC530



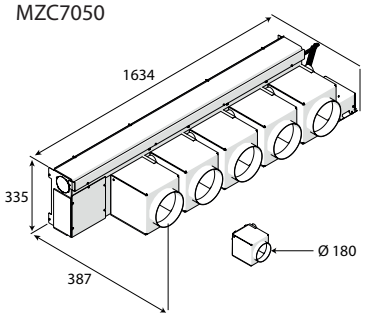
MZC830



MZC5040



MZC7050



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VEC

Coanda-effect fan coil for cassette installation

- **Very quiet**
- **Total comfort in every season**

DESCRIPTION

Thanks to a special air intake and flow grid, these units allow a coanda-effect air flow to be generated, parallel to the ceiling, creating optimal circulation inside the room to be air-conditioned.
They are suitable to be installed inside a suspended ceiling.

FEATURES

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.
In addition to the traditional three-speed asynchronous motor for the "VECs", every unit can be supplied with a "VEC_I" Brushless-type inverter motor controlled by an inverter board.

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
Units are available with a standard coil (20-50) and a larger coil (24-54). Only units with the standard coil can be combined with an additional electric or water coil with 1 row, both available as an accessory.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

Air filter

Fire resistance class **1** air filter.

ACCESSORY COMPULSORY

VEC_GL: Air intake and flow grid with adjustable Coanda-effect vents (white M9016 = lacquered white similar to Ral 9016).

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
FMT10: Electronic thermostat for fan coil in to 2/4 pipe systems.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.
SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.
WMT16: Electronic thermostat with thermostated ventilation.
WMT16CV: Electronic thermostat with continuous ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

BV: Hot water heat exchanger with 1 row.
RX: Armoured electric coil with safety thermostat.
VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.
VCF41 - 42 - 43 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
DSC: Condensate drainage device.
BC: Condensate drip.
VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.
PCR: Galvanised plate protection for the controls and the electrical element.

ACCESSORIES COMPATIBILITY

Accessories mandatory

Intake grid and distribution of the air

Model	Ver	20	24	30	34	40	44	50	54
VEC20GL (1)	.	•	•						
VEC30GL (1)	.			•	•				
VEC40GL (1)	.					•	•	•	•

(1) Mandatory accessory.

Control panels and dedicated accessories

Model	Ver	20	24	30	34	40	44	50	54
AER503IR (1)	.	•	•	•	•	•	•	•	•
FMT10	.	•	•	•	•	•	•	•	•
PRO503	.	•	•	•	•	•	•	•	•
SA5 (2)	.	•	•	•	•	•	•	•	•
SIT3 (3)	.	•	•	•	•	•	•	•	•
SIT5 (4)	.	•	•	•	•	•	•	•	•
SW3 (2)	.	•	•	•	•	•	•	•	•
SW5 (2)	.	•	•	•	•	•	•	•	•
TX (5)	.	•	•	•	•	•	•	•	•
WMT10 (5)	.	•	•	•	•	•	•	•	•
WMT16 (5)	.	•	•	•	•	•	•	•	•
WMT16CV (5)	.	•	•	•	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
(4) Probe for AER503IR-TX thermostats, if fitted.
(5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF Components

Model	Ver	20	24	30	34	40	44	50	54
DI24	.	•	•	•	•	•	•	•	•
VMF-E19 (1)	.	•	•	•	•	•	•	•	•
VMF-E3	.	•	•	•	•	•	•	•	•
VMF-E4X	.	•	•	•	•	•	•	•	•
VMF-IR	.	•	•	•	•	•	•	•	•
VMF-SW	.	•	•	•	•	•	•	•	•
VMF-SW1	.	•	•	•	•	•	•	•	•

Model	Ver	20	24	30	34	40	44	50	54
VMHI	.	•	•	•	•	•	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Common accessories

Electric coil

Model	Ver	20	24	30	34	40	44	50	54
RX22 (1)	.	•	•						
RX32 (1)	.			•	•				
RX42 (1)	.					•	•		
RX52 (1)	.							•	•

(1) Requires a thermostat with heater management. Not available for sizes with an oversized main coil. The PCR1 PCR2 or PCR1V appliance must also be provided depending on the unit.

Protection for controls and electric resistance

Model	Ver	20	24	30	34	40	44	50	54
PCR1V	.	•	•	•	•	•	•	•	•

Water coil with 1 row

Model	Ver	20	24	30	34	40	44	50	54
BV122 (1)	.	•							
BV132 (1)	.			•					
BV142 (1)	.					•		•	

(1) Not available for sizes with oversized main coil.

3-way valve kit - main coil or accessory BV coil

	VEC20	VEC24	VEC30	VEC34	VEC40	VEC44	VEC50	VEC54
Main coil	VCF41 - VCF4124	VCF42 - VCF4224	VCF41 - VCF4124	VCF42 - VCF4224	VCF42 - VCF4224	VCF42 - VCF4224	VCF42 - VCF4224	VCF42 - VCF4224
Additional coil "BV"	VCF44 - VCF4424	-	VCF44 - VCF4424	-	VCF44 - VCF4424	-	VCF44 - VCF4424	-

2-way valve kit - main coil or accessory BV coil

	VEC20	VEC24	VEC30	VEC34	VEC40	VEC44	VEC50	VEC54
Main coil	VCFD1 - VCFD124	VCFD2 - VCFD224	VCFD1 - VCFD124	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224
Additional coil "BV"	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-

Valves ending with **24 ex. VCFD124,** are 24V.

Condensate drip

Ver	20	24	30	34	40	44	50	54
.	BC5 (1)	BC5 (1)	BC5 (1)	BC5 (1)	BC5 (1)	BC5 (1)	BC5 (1)	BC5 (1)

(1) For horizontal installation.

Condensate drainage

Ver	20	24	30	34	40	44	50	54
.	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4

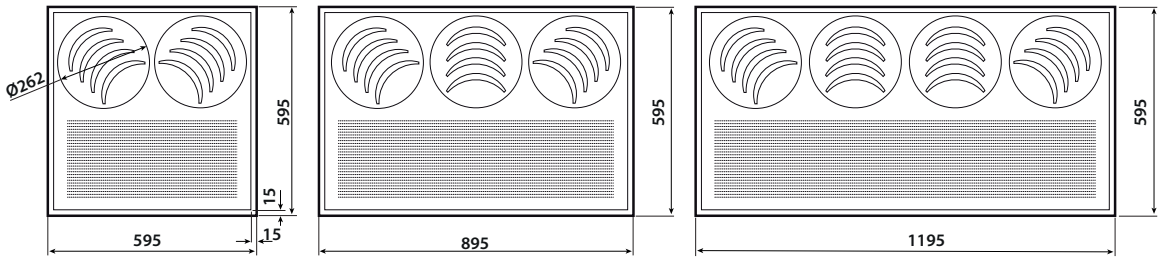
PERFORMANCE SPECIFICATIONS VEC

2-pipe

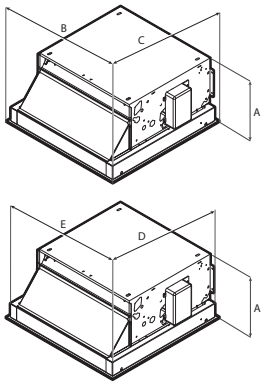
		VEC20			VEC24			VEC30			VEC34			VEC40			VEC44			VEC50			VEC54		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	1,87	2,54	3,10	2,07	2,50	3,42	3,03	3,64	4,31	4,31	53,18	6,14	4,21	5,21	6,29	5,41	6,68	8,07	4,76	6,34	7,16	6,06	8,08	9,18
Water flow rate system side	l/h	164	223	272	181	219	300	266	319	378	378	454	538	369	457	551	474	586	708	417	556	628	532	709	805
Pressure drop system side	kPa	2	4	6	1	2	3	9	13	17	5	7	9	6	9	12	9	14	19	7	11	14	9	15	19
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	0,95	1,26	1,54	1,20	1,40	1,70	1,50	1,81	2,14	2,15	2,57	3,05	2,09	2,59	3,12	2,69	3,30	4,01	2,37	3,15	3,56	3,02	4,02	4,54
Water flow rate system side	l/h	163	217	265	206	241	292	258	311	368	370	442	525	359	445	537	463	568	690	408	542	612	519	691	781
Pressure drop system side	kPa	3	5	7	2	3	4	9	13	17	5	7	9	6	9	13	10	14	20	7	12	14	17	15	19
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	0,80	1,07	1,31	0,88	1,21	1,52	1,35	1,61	1,91	1,79	2,14	2,47	1,99	2,47	2,99	2,55	3,34	3,91	2,35	3,17	3,61	3,00	4,00	4,28
Sensible cooling capacity	kW	0,64	0,87	1,07	0,67	0,90	1,14	1,03	1,25	1,49	1,26	1,51	1,78	1,58	1,98	2,41	1,91	2,42	2,74	1,68	2,27	2,59	2,09	2,83	3,04
Water flow rate system side	l/h	138	184	225	151	208	261	232	277	329	308	368	425	342	425	514	439	574	673	404	545	621	516	688	736
Pressure drop system side	kPa	3	4	6	1	2	3	6	11	13	5	6	8	6	9	12	11	17	22	7	12	15	17	27	30
Fan																									
Type	type	Centrifugal																							
Fan motor	type	Asynchronous																							
Number	no.	1			1			2			2			2			2			2			2		
Air flow rate	m^3/h	130	194	247	130	167	247	241	309	383	241	309	383	306	406	511	306	406	511	371	529	613	371	529	613
Input power	W	19	22	25	19	22	25	25	33	44	25	33	44	30	43	57	30	43	57	34	46	67	34	46	67
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)																									
Sound power level	dB(A)	35,0	42,0	48,0	35,0	42,0	48,0	37,0	43,0	49,0	37,0	43,0	49,0	38,0	43,0	48,0	38,0	43,0	48,0	43,0	50,0	53,0	43,0	50,0	53,0
Sound pressure level	dB(A)	27,0	34,0	40,0	27,0	34,0	40,0	29,0	35,0	41,0	29,0	35,0	41,0	30,0	35,0	40,0	30,0	35,0	40,0	35,0	38,0	45,0	35,0	38,0	45,0
Diametre hydraulic fittings																									
Main heat exchanger	Ø	1/2"			3/4"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"		
Power supply																									
Power supply		230V~50Hz																							

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

GRID DIMENSIONS (MANDATORY ACCESSORY)



DIMENSIONS



Dimensions and weights of the unit with grid (maximum dimensions)

Size			20	24	30	34	40	44	50	54
Dimensions and weights										
A	.	mm	283	283	283	283	283	283	283	283
B	.	mm	595	595	895	895	1195	1195	1195	1195
C	.	mm	595	595	595	595	595	595	595	595
Empty weight	.	kg	16	16	21	21	25	25	25	25
Weight of the grid	.	kg	3,7	3,7	5,7	5,7	7,0	7,0	7,0	7,0

Dimensions of the unit with grid (dimensions for installation)

Size			20	24	30	34	40	44	50	54
Dimensions and weights										
A	.	mm	283	283	283	283	283	283	283	283
D	.	mm	574	574	574	574	574	574	574	574
E	.	mm	574	574	874	874	1174	1174	1174	1174

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

VEC-I

Coanda-effect fan coil for cassette installation

- **Very quiet**
- **Electric saving equal to 50% with respect to a fan coil with 3-speed motor**
- **Total comfort: reduced variations in temperature and relative humidity in every season**

DESCRIPTION

Thanks to a special air intake and flow grid, these units allow a coanda-effect air flow to be generated, parallel to the ceiling, creating optimal circulation inside the room to be air-conditioned.
They are suitable to be installed inside a suspended ceiling.

FEATURES

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.
The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.
Continuous air flow rate variation is made possible by a 0-10V signal generated by Aermec adjustment and control commands or by independent regulation systems.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).
Apart from the inverter motor of the "VEC-I" models, each unit can be supplied with a single-phase asynchronous "VEC" motor.

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
Units are available with a standard coil (20-50) and a larger coil (24-54). Only units with the standard coil can be combined with an additional electric or water coil with 1 row, both available as an accessory.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

Air filter

Fire resistance class **1** air filter.

ACCESSORY COMPULSORY

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

Common accessories

BV: Hot water heat exchanger with 1 row.
RX: Armoured electric coil with safety thermostat.
VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.
VCF41 - 42 - 43 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
DSC: Condensate drainage device.
BC: Condensate drip.
PCR: Galvanised plate protection for the controls and the electrical element.

ACCESSORIES COMPATIBILITY

Accessories mandatory

Intake grid and distribution of the air

Accessory	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
VEC20GL	•						
VEC30GL		•	•				
VEC40GL				•	•	•	•

Control panels and dedicated accessories

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
AER503IR	•	•	•	•	•	•	•	•
PRO503	•	•	•	•	•	•	•	•
SA5	•	•	•	•	•	•	•	•
SW5	•	•	•	•	•	•	•	•
TX	•	•	•	•	•	•	•	•

VMF Components

Model	Ver	20	24	30	34	40	44	50	54
DI24	.	•	•	•	•	•	•	•	•
VMF-E19 (1)	.	•	•	•	•	•	•	•	•
VMF-E3	.	•	•	•	•	•	•	•	•
VMF-E4X	.	•	•	•	•	•	•	•	•
VMF-IR	.	•	•	•	•	•	•	•	•
VMF-SW	.	•	•	•	•	•	•	•	•
VMF-SW1	.	•	•	•	•	•	•	•	•
VMHI	.	•	•	•	•	•	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Common accessories

Electric coil

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
RX22	•	•						
RX32			•	•				
RX42					•	•		
RX52							•	•

Protection for controls and electric resistance

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
PCR1V	•	•	•	•	•	•	•	•

Water coil with 1 row

Accessory	VEC20I	VEC30I	VEC40I	VEC50I
BV122	•			

Accessory	VEC20I	VEC30I	VEC40I	VEC50I
BV132		•		
BV142			•	•

3-way valve kit - main coil or accessory BV coil

	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
Main coil	VCF41 - VCF4124	VCF42 - VCF4224	VCF41 - VCF4124	VCF42 - VCF4224	VCF42 - VCF4224	VCF42 - VCF4224	VCF42 - VCF4224	VCF42 - VCF4224
Additional coil "BV"	VCF44 - VCF4424	-	VCF44 - VCF4224	-	VCF44 - VCF4224	-	VCF44 - VCF4224	-

2-way valve kit - main coil or accessory BV coil

	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
Main coil	VCFD1 - VCFD124	VCFD2 - VCFD224	VCFD1 - VCFD124	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224	VCFD2 - VCFD224
Additional coil "BV"	VCFD2 - VCFD424	-	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-	VCFD4 - VCFD424	-

Valves ending with **24 ex. VCFD124,** are 24V.

Condensate drip

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
BC5	•	•	•	•	•	•	•	•

Condensate drainage

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
DSC4	•	•	•	•	•	•	•	•

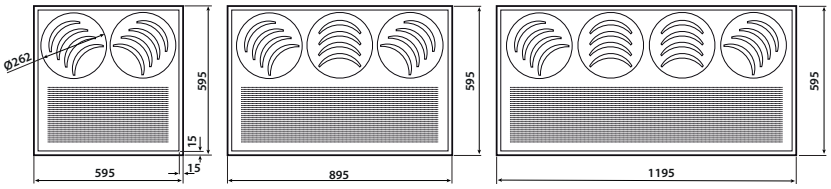
PERFORMANCE SPECIFICATIONS VEC

2-pipe

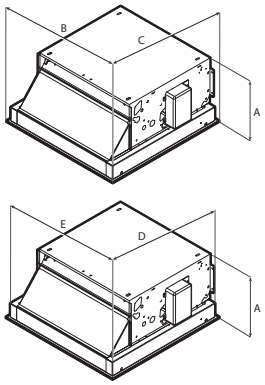
		VEC20I			VEC24I			VEC30I			VEC34I			VEC40I			VEC44I			VEC50I			VEC54I		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	1,87	2,54	3,10	2,07	2,50	3,42	3,03	3,64	4,31	4,31	53,18	6,14	4,21	5,21	6,29	5,41	6,68	8,07	4,76	6,34	7,16	6,06	8,08	9,18
Water flow rate system side	l/h	164	223	272	181	219	300	266	319	378	378	454	538	369	457	551	474	586	708	417	556	628	532	709	805
Pressure drop system side	kPa	2	4	6	1	2	3	9	13	17	5	7	9	6	9	12	9	14	19	7	11	14	9	15	19
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	0,95	1,26	1,54	1,20	1,40	1,70	1,50	1,81	2,14	2,15	2,57	3,05	2,09	2,59	3,12	2,69	3,30	4,01	2,37	3,15	3,56	3,02	4,02	4,54
Water flow rate system side	l/h	163	217	265	206	241	292	258	311	368	370	442	525	359	445	537	463	568	690	408	542	612	519	691	781
Pressure drop system side	kPa	3	5	7	2	3	4	9	13	17	5	7	9	6	9	13	10	14	20	7	12	14	17	15	19
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	0,80	1,07	1,31	0,88	1,21	1,52	1,35	1,61	1,91	1,79	2,14	2,47	1,99	2,47	2,99	2,55	3,34	3,91	2,35	3,17	3,61	3,00	4,00	4,28
Sensible cooling capacity	kW	0,64	0,87	1,07	0,67	0,90	1,14	1,03	1,25	1,49	1,26	1,51	1,78	1,58	1,98	2,41	1,91	2,42	2,74	1,68	2,27	2,59	2,09	2,83	3,04
Water flow rate system side	l/h	138	184	225	151	208	261	232	277	329	308	368	425	342	425	514	439	574	673	404	545	621	516	688	736
Pressure drop system side	kPa	3	4	6	1	2	3	6	11	13	5	6	8	6	9	12	11	17	22	7	12	15	17	27	30
Fan																									
Type	type	Centrifugal																							
Fan motor	type	Inverter																							
Number	no.	1			1			2			2			2			2			2			2		
Air flow rate	m^3/h	130	194	247	130	167	247	241	309	383	241	309	383	306	406	511	306	406	511	371	529	613	371	529	613
Input power	W	4	9	14	4	9	14	11	16	35	11	16	35	16	20	26	16	20	26	18	27	34	18	27	34
Signal 0-10V	%	48	70	90	48	70	90	58	66	90	58	66	90	54	72	90	54	72	90	56	78	90	56	78	90
Fan coil sound data (3)																									
Sound power level	dB(A)	35,0	42,0	48,0	35,0	42,0	48,0	37,0	43,0	49,0	37,0	43,0	49,0	38,0	43,0	48,0	38,0	43,0	48,0	43,0	50,0	53,0	43,0	50,0	53,0
Sound pressure level	dB(A)	27,0	34,0	40,0	27,0	34,0	40,0	29,0	35,0	41,0	29,0	35,0	41,0	30,0	35,0	40,0	30,0	35,0	40,0	35,0	38,0	45,0	35,0	38,0	45,0
Diametre hydraulic fittings																									
Main heat exchanger	Ø	1/2"			3/4"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"		
Power supply																									
Power supply		230V~50Hz																							

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

GRID DIMENSIONS (MANDATORY ACCESSORY)



DIMENSIONS



Dimensions and weights of the unit with grid (maximum dimensions)

Size			20	24	30	34	40	44	50	54
Dimensions and weights										
A	.	mm	283	283	283	283	283	283	283	283
B	.	mm	595	595	895	895	1195	1195	1195	1195
C	.	mm	595	595	595	595	595	595	595	595
Empty weight	.	kg	16	16	21	21	25	25	25	25
Weight of the grid	.	kg	3,7	3,7	5,7	5,7	7,0	7,0	7,0	7,0

Dimensions of the unit with grid (dimensions for installation)

Size			20	24	30	34	40	44	50	54
Dimensions and weights										
A	.	mm	283	283	283	283	283	283	283	283
D	.	mm	574	574	574	574	574	574	574	574
E	.	mm	574	574	874	874	1174	1174	1174	1174

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

FCL

Cassette Type Fan Coil Unit

- **Standard internal three-way valve**
- **Version with 2-way valve for variable water flow rate systems**
- **Version without valves**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

4-way cassettes that can be installed in any type of 2- or 4-pipe system with any heat generator, even at low temperatures. Thanks to the selection of versions and configurations, it's easy to choose the best solution for every need.

FEATURES

Intake grid and distribution of the air

The recovery and air diffusion grille has an elegant design. In plastic, RAL 9010.
The dimensions of the first nine sizes respect the 600x600 mm modularity of false ceilings, whereas the larger sizes measuring 840x840 mm are designed for quiet operation and optimum performance.

Load-bearing structure

Models with a 600x600 mm module have a reinforced load-bearing structure with side panels in galvanised steel sheet, thermally insulated with internal polystyrene foam elements.
The structure of models with a 840x840 mm module is made entirely of galvanised steel sheet, thermally insulated with polyethylene foam on the inside and with an anti-condensate felt coating.

Ventilation group

Formed of a particularly quiet axial-centrifugal fan, statically and dynamically balanced.
The single-phase electric motor offers three or four speeds (depending on the size), is mounted on anti-vibration supports, and has a permanently enabled condenser.

Heat exchanger coil

Heat exchanger with shaped profile to increase the exchange surface, and easily accessible drain valves.
There are models with a single coil for 2-pipe systems, with the possibility to add an electric heater too, and models with two coils for 4-pipe systems.
There is the possibility to combine outside air with the inlet ambient air, and to distribute it in separate rooms.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
There is the possibility to combine outside air with the inlet ambient air, and to distribute it in separate rooms.

Condensate drip

Condensation drip tray in one piece, with V0 self-extinguishing level and overmoulding to insulation in expanded polystyrene with flame retardant additive.

Air filter

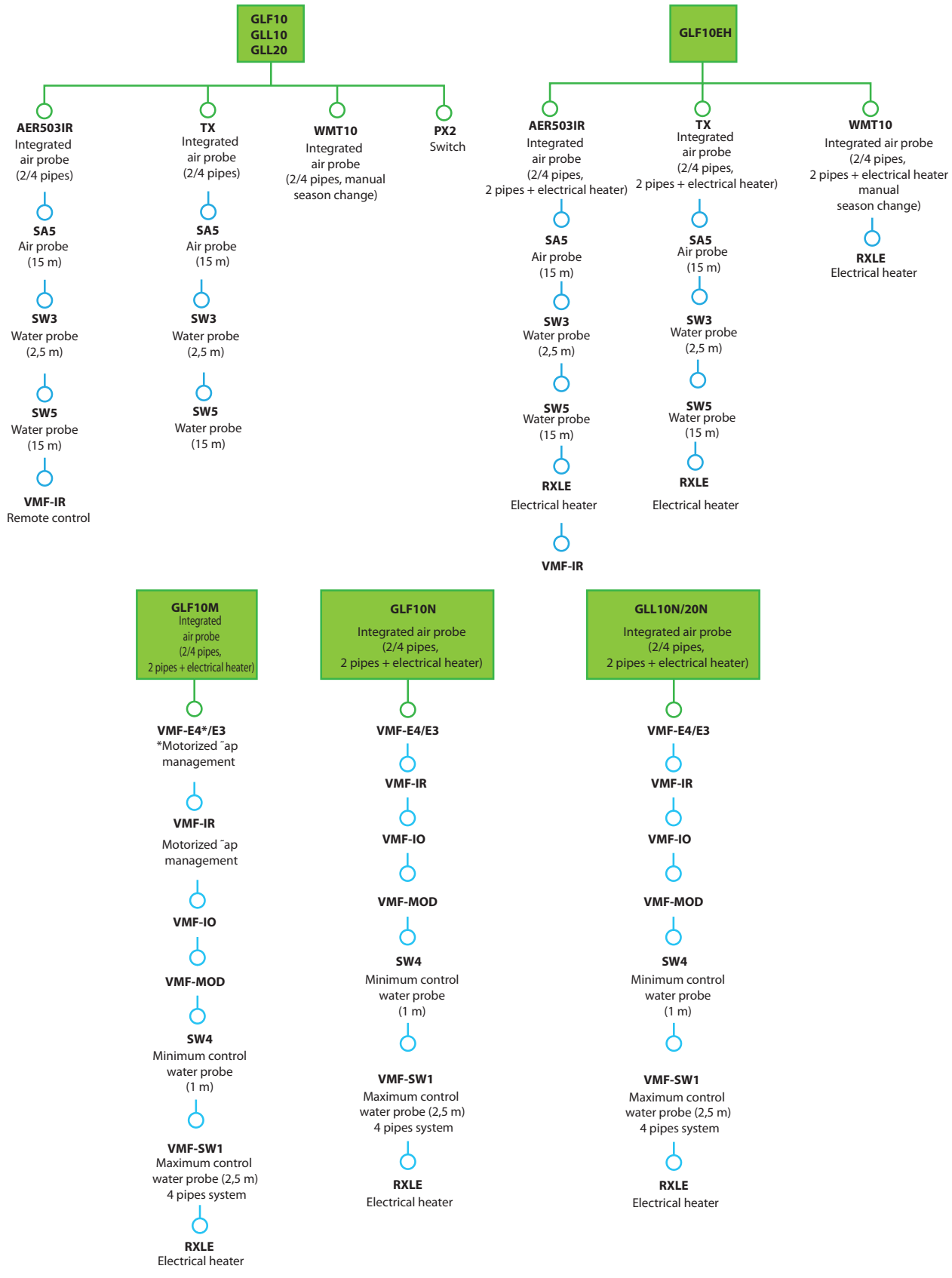
Air filter easily removed and cleaned, self-supporting structure, characterised by a high efficiency and low pressure drops, with class-V0 fire resistance (UL 94).

Versions

FCL Standard with internal 3-way valve
V2 With internal 2-way valve
VL Without internal valve

ACCESSORIES

Accessories that can be combined with the grilles



RXLE it can be installed only at the factory.

Intake grids and distribution of the air, compulsory accessory

GLF10: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated louvers. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLF10EH: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLF10M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. It is equipped with an infrared receiver with an emergency operation button, a thermostat card which also requires the installation of the VMF-E4 panel or the VMF-IR remote control. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be orientated with the remote control. (size 840x840 not available).

GLF10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4 or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 800x800 mm not available).

GLL10: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLL10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLL20: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLL20N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-MOD: Expansion board for the management of modulating valves.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

Control panels and their accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW4: Water temperature probe allowing automatic season change on electronic controllers supplied with water-side change over.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

Electric heaters it can be installed only at the factory

RXLE: Electric heater for heating, can be installed on board the units.

RXLE20: Electric heater for heating, can be installed on board the units.

Water valve kit

VCFLX4: 3-way valve kit for single-coil fan coil for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings.

VHL1: 3-way motorised valve kit with 4 connections including the actuator. 230V~50Hz power supply.

VHL124: 3-way motorised valve kit with 4 connections including the actuator. 24V power supply.
VHL20: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 230V~50Hz power supply.
VHL2024: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.
VHL2: 2-way motorised valve kit with 2 connections including the actuator. Power supply 230V~50Hz;
VHL22: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. Power supply 230V~50Hz;
VHL2224: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.
VHL224: 2-way motorised valve kit with 2 connections including the actuator. 24V power supply.

Installation accessories

KFL: Delivery flange, allowing the air to be directed to an adjacent room.
KFL20: Delivery flange, allowing the air to be directed to an adjacent room. Up to three KFL20 can be assembled on a single unit.
KFLD: Suction flange, allows to introduce external air directly into the room without mixing.
KFLD20: Suction flange, allows to introduce external air directly into the room without mixing. Up to two KFL20D can be assembled on a single unit.
FCLMC10: Perimeter housing in painted galvanised sheet metal, 600x600 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.
FCLMC20: Perimeter housing in painted sheet metal, 840x840 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.

ACCESSORIES COMPATIBILITY

Intake grids and distribution of the air

Model	Ver	32	34	36	38	42	44	62	64
GLF10 (1)	FCL,V2,VL	•	•	•	•	•	•	•	•
GLF10EH (2)	FCL,V2,VL	•	•	•	•	•	•	•	•
GLF10M (3)	FCL,V2,VL	•	•	•	•	•	•	•	•
GLF10N (3)	FCL,V2,VL	•	•	•	•	•	•	•	•

Model	Ver	72	82	84	102	104	122	124
GLF10 (1)	FCL,V2,VL	•						
GLF10EH (2)	FCL,V2,VL	•						
GLF10M (3)	FCL,V2,VL	•						
GLF10N (3)	FCL,V2,VL	•						

(1) Not compatible with the VMF system and electric heaters.
(2) Not compatible with the VMF system, but compatible with electric heaters.
(3) Compatible with the VMF system and electric heaters.

Intake grid and distribution of the air

Model	Ver	32	34	36	38	42	44	62	64	72	82	84	102	104	122	124
GLL10 (1)	FCL,V2,VL	•	•	•	•	•	•	•	•	•						
GLL10N (2)	FCL,V2,VL	•	•	•	•	•	•	•	•	•						
GLL20 (1)	FCL,V2,VL										•	•	•	•	•	•
GLL20N (2)	FCL,V2,VL										•	•	•	•	•	•

(1) Not compatible with the VMF system and electric heaters.
(2) Compatibility with VMF system.

VMF system

Model	Ver	32	34	36	38	42	44	62	64
DI24	FCL,V2,VL	•	•	•	•	•	•	•	•
VMF-E3	FCL,V2,VL	•	•	•	•	•	•	•	•
VMF-E4DX	FCL,V2,VL	•	•	•	•	•	•	•	•
VMF-E4X	FCL,V2,VL	•	•	•	•	•	•	•	•
VMF-IO	FCL,V2,VL	•	•	•	•	•	•	•	•
VMF-IR	FCL,V2,VL	•	•	•	•	•	•	•	•
VMF-MOD	FCL,V2,VL	•	•	•	•	•	•	•	•
VMF-SW1	FCL,V2,VL	•	•	•	•	•	•	•	•

Model	Ver	72	82	84	102	104	122	124
DI24	FCL,V2,VL	•	•	•	•	•	•	•
VMF-E3	FCL,V2,VL	•	•	•	•	•	•	•
VMF-E4DX	FCL,V2,VL	•	•	•	•	•	•	•
VMF-E4X	FCL,V2,VL	•	•	•	•	•	•	•
VMF-IO	FCL,V2,VL	•	•	•	•	•	•	•
VMF-IR	FCL,V2,VL	•	•	•	•	•	•	•
VMF-MOD	FCL,V2,VL	•	•	•	•	•	•	•
VMF-SW1	FCL,V2,VL	•	•	•	•	•	•	•

Control panels and dedicated accessories

Model	Ver	32	34	36	38	42	44	62	64	72	82	84	102	104	122	124
AER503IR (1)	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SA5 (2)	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIT3 (3)	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIT5 (4)	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW3 (2)	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW4	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW5 (2)	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TX (5)	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	32	34	36	38	42	44	62	64	72	82	84	102	104	122	124
WMT10 (5)	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
(4) Probe for AER503IR-TX thermostats, if fitted.
(5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

3 way valve kit

Model	Ver	32	34	36	38	42	44	62	64
VHL1 (1)	FCL,V2,VL		•		•		•		•
VHL124 (1)	FCL,V2,VL		•		•		•		•

Model	Ver	72	82	84	102	104	122	124
VHL20 (1)	FCL,V2,VL			•		•		•
VHL2024 (1)	FCL,V2,VL			•		•		•

(1) Obligatory accessory in 4-pipe systems.

2 way valve kit

Model	Ver	32	34	36	38	42	44	62	64
VHL2 (1)	FCL,V2,VL		•		•		•		•
VHL224 (1)	FCL,V2,VL		•		•		•		•

Model	Ver	72	82	84	102	104	122	124
VHL22 (1)	FCL,V2,VL			•		•		•
VHL2224 (1)	FCL,V2,VL			•		•		•

(1) Compulsory accessory in 4-pipe systems with variable flow rate.

Valve Kit for 4 pipe systems

Model	Ver	32	34	36	38	42	44	62	64	72
VCFLX4 (1)	VL	•		•		•		•		•

(1) The valve must be commanded via command panels enabled for valve control.

Delivery flange

Model	Ver	32	34	36	38	42	44	62	64
KFL	FCL,V2,VL	•	•	•	•	•	•	•	•
KFLD	FCL,V2,VL	•	•	•	•	•	•	•	•

Model	Ver	72	82	84	102	104	122	124
KFL	FCL,V2,VL	•						
KFL20	FCL,V2,VL		•	•	•	•	•	•
KFLD	FCL,V2,VL	•						
KFLD20	FCL,V2,VL		•	•	•	•	•	•

Perimeter case

Model	Ver	32	34	36	38	42	44	62	64	72	82	84	102	104	122	124
FCLMC10 (1)	FCL,V2,VL	•	•	•	•	•	•	•	•	•						
FCLMC20 (1)	FCL,V2,VL										•	•	•	•	•	•

(1) Can only be combined with GLL/GLLI grilles

Electric heaters it can be installed only at the factory

Model	Ver	32	34	36	38	42	44	62	64	72
RXLE (1)	FCL,V2,VL	•		•		•		•		•

Model	Ver	82	84	102	104	122	124
RXLE20 (1)	FCL,V2,VL	•		•		•	

(1) It is mandatory to provide one of the grids that manage the resistance.

PERFORMANCE SPECIFICATIONS

2-pipe

		FCL32			FCL36			FCL42			FCL62			FCL72			FCL82			FCL102			FCL122		
		1	2	3	1	2	3	1	2	4	1	2	4	1	2	4	1	2	4	1	2	4	1	2	4
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	2,22	2,95	4,00	3,42	4,50	6,27	3,32	4,47	7,34	5,19	6,37	10,49	6,14	7,57	11,32	5,88	8,12	11,88	8,30	11,71	17,73	10,53	14,73	21,75
Water flow rate system side	l/h	194	258	350	300	394	549	290	391	642	454	558	918	538	662	991	514	710	1039	726	1025	1551	921	1289	1903
Pressure drop system side	kPa	4	6	10	6	10	19	6	10	24	12	17	42	14	20	42	7	13	26	6	12	25	11	21	42
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	1,10	1,47	1,98	1,70	2,24	3,12	1,65	2,22	3,64	2,58	3,17	5,21	3,50	3,76	5,63	2,92	4,03	5,90	4,12	5,82	8,81	5,23	7,32	10,80
Water flow rate system side	l/h	192	254	345	295	389	541	287	386	633	448	550	905	530	654	977	507	701	1025	716	1011	1530	909	1271	1877
Pressure drop system side	kPa	4	6	11	6	9	17	5	9	23	10	15	36	13	19	40	7	12	23	4	7	15	10	17	35
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	1,14	1,44	1,86	1,77	2,22	2,96	1,94	2,51	3,88	2,63	3,17	4,90	2,75	3,29	5,35	2,76	3,97	5,85	4,00	5,82	8,85	5,31	7,40	10,83
Sensible cooling capacity	kW	0,97	1,22	1,48	1,37	1,75	2,36	1,36	1,79	3,09	1,83	2,23	3,73	1,84	2,29	3,99	1,86	2,69	4,05	2,89	4,22	6,51	3,99	5,63	8,30
Water flow rate system side	l/h	200	253	327	308	387	516	337	437	679	458	551	856	484	571	938	482	695	1032	697	1012	1547	921	1292	1893
Pressure drop system side	kPa	4	7	10	6	9	15	7	11	25	12	16	36	13	18	43	7	14	28	7	13	28	10	19	38
Fan																									
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			1			1			1			1			1			1			1		
Air flow rate	m^3/h	300	410	600	300	410	600	260	360	700	380	500	880	400	520	900	460	680	1100	560	830	1350	750	1100	1750
Sound power level (3)	dB(A)	35,0	38,0	46,0	35,0	38,0	46,0	35,0	38,0	53,0	41,0	47,0	61,0	44,0	49,0	60,0	39,0	43,0	50,0	40,0	45,0	54,0	44,0	50,0	60,0
Input power	W	21	31	45	21	31	45	-	32	75	26	37	83	50	58	110	45	80	150	50	80	155	55	105	175
Diametre hydraulic fittings																									
Type	type	Gas - F			Gas - F			Gas - F			Gas - F			Gas - F			Gas - F			Gas - F			Gas - F		
Main heat exchanger	Ø	3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Finned pack heat exchanger																									
Water content main heat exchanger	l	0,6			0,8			0,8			1,3			1,3			2,6			4,0			4,0		
Power supply																									
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

4-pipe

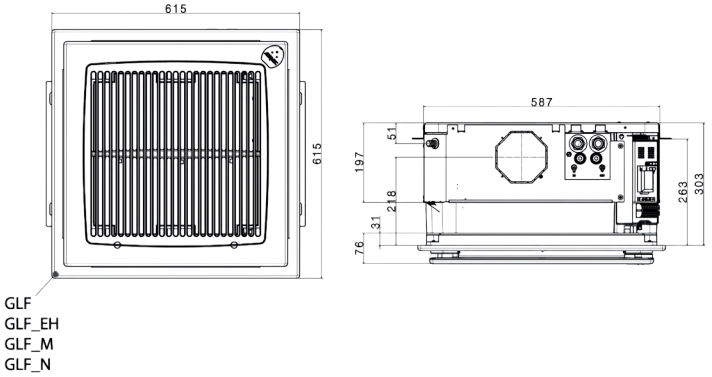
4-pipe

		FCL34			FCL38			FCL44			FCL64			FCL84			FCL104			FCL124		
		1	2	3	1	2	3	1	2	3	1	2	4	1	2	4	1	2	4	1	2	4
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)																						
Heating capacity	kW	1,74	1,95	2,32	1,74	1,95	2,32	1,75	2,04	2,44	2,21	2,50	3,19	4,73	5,71	7,59	5,27	6,53	8,93	6,30	8,31	11,17
Water flow rate system side	l/h	152	171	203	152	171	203	153	178	240	194	219	279	414	500	664	461	571	782	551	727	977
Pressure drop system side	kPa	6	7	10	6	7	10	6	7	10	10	10	19	6	8	12	7	10	17	9	15	25
Cooling performance 7 °C / 12 °C																						
Cooling capacity	kW	1,14	1,44	1,86	1,63	2,05	2,73	1,79	2,31	2,95	2,43	2,93	4,51	2,76	3,97	5,85	3,45	4,84	7,05	4,52	6,11	8,63
Sensible cooling capacity	kW	0,97	1,22	1,48	1,28	1,63	2,20	1,25	1,65	2,13	1,69	2,06	3,43	1,86	2,69	4,05	2,43	3,45	5,15	3,32	4,57	6,60
Water flow rate system side	l/h	200	253	327	284	358	476	314	396	626	424	510	793	482	695	1032	602	845	1238	786	1068	1513
Pressure drop system side	kPa	4	7	10	5	8	13	6	10	15	11	16	35	6	12	25	7	13	26	12	22	38
Fan																						
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			1			1			1			1			1			1		
Air flow rate	m^3/h	300	410	600	300	410	600	260	360	530	380	500	880	460	680	1100	560	830	1350	750	1100	1750
Sound power level (2)	dB(A)	35,0	38,0	46,0	35,0	38,0	46,0	35,0	39,0	46,0	41,0	47,0	61,0	39,0	43,0	50,0	40,0	45,0	54,0	46,0	50,0	60,0
Input power	W	21	31	45	21	31	45	22	32	47	32	45	101	45	80	150	50	80	155	55	105	175
Diametre hydraulic fittings																						
Type	type	Gas - F			Gas - F			Gas - F			Gas - F			Gas - F			Gas - F			Gas - F		
Secondary heat exchanger	Ø	1/2"			1/2"			1/2"			1/2"			1/2"			1/2"			1/2"		
Main heat exchanger	Ø	3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Finned pack heat exchanger																						
Water content main heat exchanger	l	0,8			0,8			0,8			1,1			2,6			2,6			2,6		
Water content secondary heat exchanger	l	0,2			0,2			0,2			0,2			1,4			1,4			1,4		
Power supply																						
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

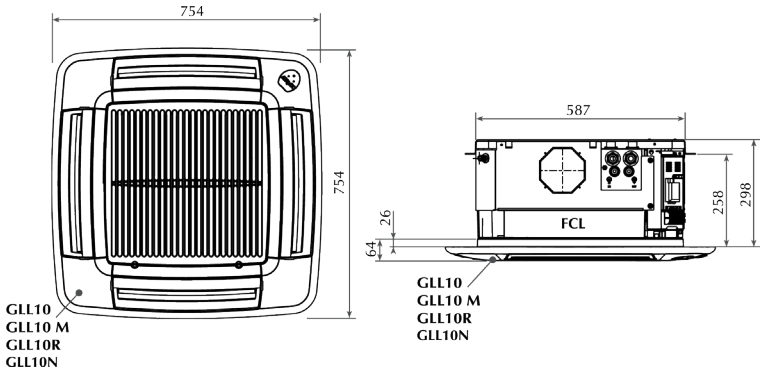
(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS

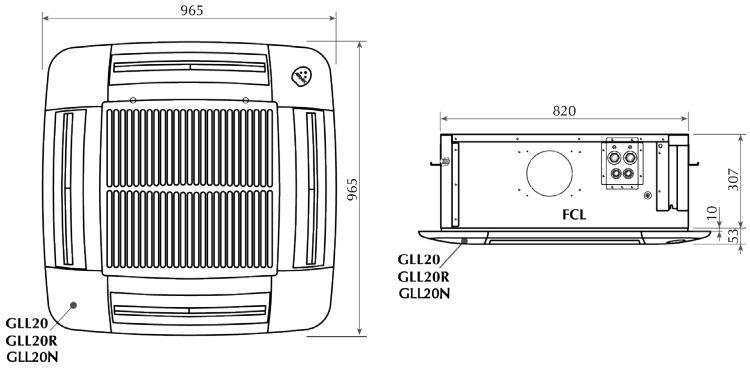
Dimensions FCL 32 - 34 - 36 - 38 - 42 - 44 - 64 - 72 con GLF



Dimensions FCL 32 - 34 - 36 - 38 - 42 - 44 - 64 - 72 con GLL



Dimensions FCL 82 - 84 - 102- 104 - 122 - 124 con GLL



Size			102	104	122	124	32	34	36	38	42	44	62	64	72	82	84
Dimensions and weights																	
Empty weight	FCL	kg	36	36	36	36	20	21	20	21	21	21	22	22	22	35	36
	V2	kg	36	36	36	36	20	21	20	21	20	21	21	22	22	35	36
	VL	kg	35	35	35	35	20	20	20	20	20	20	22	22	22	34	35

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FCLI

Cassette Type Fan Coil Unit

- **Electric saving equal to 50% with respect to a fan coil with 3-speed motor**
- **Total comfort: reduced variations in temperature and relative humidity**
- **Standard internal three-way valve**
- **Version with 2-way valve for variable water flow rate systems**
- **Version without valves**

DESCRIPTION

4-way cassettes that can be installed in any type of 2- or 4-pipe system with any heat generator, even at low temperatures. Thanks to the selection of versions and configurations, it's easy to choose the best solution for every need.

FEATURES

Intake grid and distribution of the air

The recovery and air diffusion grille has an elegant design. In plastic, RAL 9010. The dimensions of the first 5 sizes comply with the 600x600 mm modularity of false ceilings, whereas the larger sizes measuring 840x840 mm are designed for quiet operation and optimum performance of these large models.

Load-bearing structure

Models with a 600x600 mm module have a reinforced load-bearing structure with side panels in galvanised steel sheet, thermally insulated with internal polystyrene foam elements.
The structure of models with a 840x840 mm module is made entirely of galvanised steel sheet, thermally insulated with polyethylene foam on the inside and with an anti-condensate felt coating.

Ventilation group

Formed of a particularly quiet axial-centrifugal fan, statically and dynamically balanced.
The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.
The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Heat exchanger coil

Heat exchanger with shaped profile to increase the exchange surface, and easily accessible drain valves.
There are models with a single coil for 2-pipe systems, with the possibility to add an electric heater too, and models with two coils for 4-pipe systems.
There is the possibility to combine outside air with the inlet ambient air, and to distribute it in separate rooms.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Condensate drip

Condensation drip tray in one piece, with V0 self-extinguishing level and overmoulding to insulation in expanded polystyrene with flame retardant additive.

Air filter

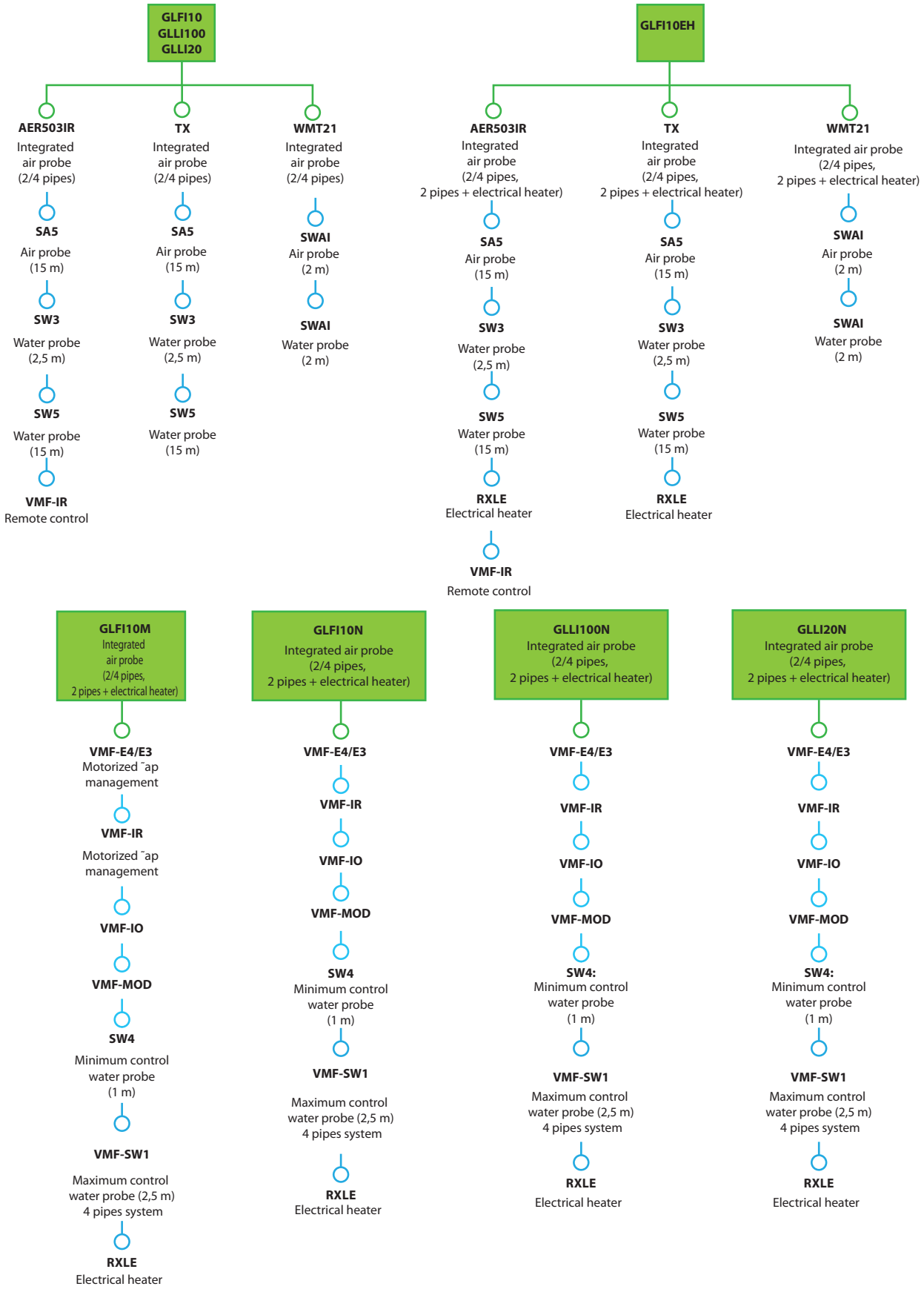
Air filter easily removed and cleaned, self-supporting structure, characterised by a high efficiency and low pressure drops, with class-V0 fire resistance (UL 94).

Versions

FCLI Standard
V2 With internal 2-way valve
VL Without internal valve

ACCESSORIES

Accessories that can be combined with the grilles



RXLE it can be installed only at the factory.

Intake grids and distribution of the air, compulsory accessory

GLFI10: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without over-

lapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated louvers. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLFI10EH: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLFI10M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. It is equipped with an infrared receiver with an emergency operation button, a thermostat card which also requires the installation of the VMF-E4 panel or the VMF-IR remote control. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be orientated with the remote control. (size 840x840 not available).

GLFI10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4 or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 800x800 mm not available).

GLLI100: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLLI100EH: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLLI100N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X panel as well, and suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLLI20: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLLI20N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-MOD: Expansion board for the management of modulating valves.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Control panels and their accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW4: Water temperature probe allowing automatic season change on electronic controllers supplied with water-side change over.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

SWAI: External air or water temperature probe.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

WMT21: Electronic thermostat for inverter fancoils.

Electric heaters

RXLE: Electric heater for heating, can be installed on board the units.

RXLE20: Electric heater for heating, can be installed on board the units.

Water valve kit

VCFLX4: 3-way valve kit for single-coil fan coil for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings.

VHL1: 3-way motorised valve kit with 4 connections including the actuator. 230V~50Hz power supply.

VHL124: 3-way motorised valve kit with 4 connections including the actuator. 24V power supply.

VHL20: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 230V~50Hz power supply.
VHL2024: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.
VHL2: 2-way motorised valve kit with 2 connections including the actuator. Power supply 230V~50Hz;
VHL22: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. Power supply 230V~50Hz;
VHL2224: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.
VHL224: 2-way motorised valve kit with 2 connections including the actuator. 24V power supply.

Installation accessories

KFL: Delivery flange, allowing the air to be directed to an adjacent room.
KFL20: Delivery flange, allowing the air to be directed to an adjacent room. Up to three KFL20 can be assembled on a single unit.
KFLD: Suction flange, allows to introduce external air directly into the room without mixing.
KFLD20: Suction flange, allows to introduce external air directly into the room without mixing. Up to two KFL20D can be assembled on a single unit.
FCLMC10: Perimeter housing in painted galvanised sheet metal, 600x600 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.
FCLMC20: Perimeter housing in painted sheet metal, 840x840 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.
FCLMC20IK: Installation kit for the inverter controller. Mandatory for units with FCLMC20.

ACCESSORIES COMPATIBILITY

Intake grids and distribution of the air

Model	Ver	32	34	42	44	62	64	82	122	124
GLFI10 (1)	FCLI,V2,VL	•	•	•	•	•	•			
GLFI10EH (2)	FCLI,V2,VL	•	•	•	•	•	•			
GLFI10M (3)	FCLI,V2,VL	•	•	•	•	•	•			
GLFI10N (3)	FCLI,V2,VL	•	•	•	•	•	•			

(1) Not compatible with the VMF system and electric heaters.
(2) Not compatible with the VMF system, but compatible with electric heaters.
(3) Compatible with the VMF system and electric heaters.

Intake grid and distribution of the air

Model	Ver	32	34	42	44	62	64	82	122	124
GLLI100 (1)	FCLI,V2,VL	•	•	•	•	•	•			
GLLI100EH (2)	FCLI,V2,VL	•	•	•	•	•	•			
GLLI100N (3)	FCLI,V2,VL	•	•	•	•	•	•			
GLLI20 (1)	FCLI,V2,VL							•	•	•
GLLI20N (4)	FCLI,V2,VL							•	•	•

(1) Not compatible with the VMF system and electric heaters.
(2) Not compatible with the VMF system, but compatible with electric heaters.
(3) Compatible with the VMF system and electric heaters.
(4) Compatibility with VMF system.

VMF system

Model	Ver	32	34	42	44	62	64	82	122	124
DI24	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-E3	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-E4DX	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-E4X	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-IO	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-IR	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-MOD	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-SW	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-SW1	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMHI	FCLI,V2,VL	•	•	•	•	•	•	•	•	•

Control panels and dedicated accessories

Model	Ver	32	34	42	44	62	64	82	122	124
AER503IR (1)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
SA5 (2)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
SW3 (2)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
SW4	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
SW5 (2)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
SWAI (3)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
TX (4)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
WMT21	FCLI,V2,VL	•	•	•	•	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Probe for thermostat WMT21.
(4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

3 way valve kit

Model	Ver	32	34	42	44	62	64	82	122	124
VHL1 (1)	VL		•		•		•			
VHL124 (1)	VL		•		•		•			
VHL20 (1)	VL									•
VHL2024 (1)	VL									•

(1) Obligatory accessory in 4-pipe systems.

2 way valve kit

Model	Ver	32	34	42	44	62	64	82	122	124
VHL2 (1)	VL		•		•		•			
VHL22 (1)	VL									•
VHL2224 (1)	VL									•
VHL224 (1)	VL		•		•		•			

(1) Compulsory accessory in 4-pipe systems with variable flow rate.

Valve Kit for 4 pipe systems

Model	Ver	32	34	42	44	62	64	82	122	124
VCFLX4 (1)	VL	•		•		•				

(1) The valve must be commanded via command panels enabled for valve control.

Delivery and suction flange

Model	Ver	32	34	42	44	62	64	82	122	124
KFL	FCLI,V2,VL	•	•	•	•	•	•			
KFL20	FCLI,V2,VL							•	•	•
KFLD	FCLI,V2,VL	•	•	•	•	•	•			
KFLD20	FCLI,V2,VL							•	•	•

Perimeter case

Model	Ver	32	34	42	44	62	64	82	122	124
FCLMC10 (1)	FCLI,V2,VL	•	•	•	•	•	•			
FCLMC20 (1)	FCLI,V2,VL							•	•	•
FCLMC20IK (2)	FCLI,V2,VL							•	•	•

(1) Can only be combined with GLL/GLLI grilles
(2) Mandatory for units with FCLMC20.

PERFORMANCE SPECIFICATIONS

2-pipe

		FCLI32			FCLI42			FCLI62			FCLI82			FCLI122		
		1	2	3	1	2	4	1	2	4	1	2	4	1	2	4
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																
Heating capacity	kW	2,22	2,95	4,00	3,32	4,47	7,34	5,19	6,37	10,49	5,88	8,12	11,88	10,53	14,73	21,75
Water flow rate system side	l/h	194	258	350	290	391	642	454	558	918	514	710	1039	921	1289	1903
Pressure drop system side	kPa	4	6	10	6	10	24	12	17	42	7	13	26	11	21	42
Heating performance 45 °C / 40 °C (2)																
Heating capacity	kW	1,10	1,47	1,98	1,67	2,21	3,64	2,58	3,21	5,21	2,94	4,05	5,90	5,28	7,37	10,80
Water flow rate system side	l/h	192	254	345	287	386	633	448	550	905	507	701	1025	909	1271	1877
Pressure drop system side	kPa	4	6	11	5	9	21	10	17	41	7	13	23	12	21	41
Cooling performance 7 °C / 12 °C																
Cooling capacity	kW	1,15	1,46	1,88	1,95	2,52	3,90	2,65	3,19	4,92	2,79	4,04	5,97	5,34	7,47	10,87
Sensible cooling capacity	kW	0,98	1,24	1,50	1,37	1,80	3,11	1,85	2,25	3,75	1,89	2,76	4,17	4,02	5,70	8,34
Water flow rate system side	l/h	200	253	327	337	437	679	458	551	856	482	695	1032	921	1292	1893
Pressure drop system side	kPa	4	4	13	7	11	25	12	16	36	7	12	28	10	19	38
Fan																
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	Inverter			Inverter			Inverter			Inverter			Inverter		
Number	no.	1			1			1			1			1		
Air flow rate	m^3/h	300	410	600	260	360	700	380	500	880	460	680	1100	750	1100	1750
Input power	W	10	13	18	12	16	55	14	20	61	10	14	33	16	33	135
Signal 0-10V	%	42	62	90	34	46	90	40	52	90	38	54	90	38	54	90
Cassettes sound data (3)																
Sound power level (4)	dB(A)	35,0	38,0	46,0	35,0	38,0	53,0	41,0	47,0	61,0	39,0	43,0	50,0	44,0	50,0	60,0
Sound pressure level (5)	dB(A)	26,0	29,0	37,0	26,0	30,0	44,0	32,0	38,0	52,0	30,0	34,0	41,0	35,0	41,0	51,0
Diametre hydraulic fittings																
Main heat exchanger	Ø	3/4"			3/4"			3/4"			3/4"			3/4"		
Secondary heat exchanger	Ø	-			-			-			-			-		
Power supply																
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) For the cassettes, Aermec determines the value of the sound power on the basis of measurements carried out in accordance with the standard UNI EN 16583:15, in observance of the EUROVENT certification and the level of sound pressure (weighed A) measured in an environment with volume V=100m3, reverberation time t=0.5s direction factor Q=2; distance r=2.5m.
(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.
(5) Sound pressure (weighed A) measured in an environment with volume V=100m3, reverberation time t=0.5s direction factor Q=2; distance r=2.5m.

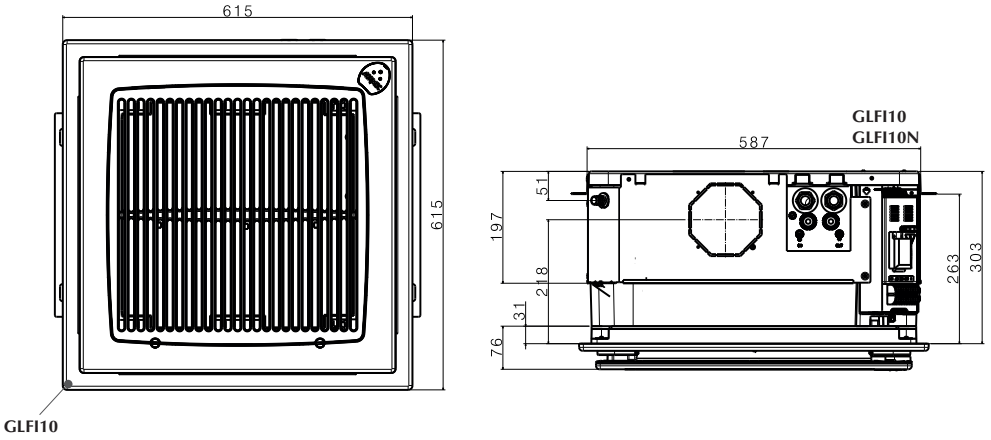
4-pipe

		FCLI34			FCLI44			FCLI64			FCLI124		
		1	2	3	1	2	3	1	2	4	1	2	4
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 65 °C / 55 °C (1)													
Heating capacity	kW	1,70	1,97	2,32	1,70	2,02	2,74	2,05	2,76	3,14	6,46	8,30	11,10
Water flow rate system side	l/h	152	171	203	153	178	240	194	219	279	551	727	977
Pressure drop system side	kPa	5	7	9	6	7	12	9	11	19	10	15	25
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	1,15	1,46	1,88	1,80	2,32	3,59	2,29	2,76	4,25	4,55	6,19	8,67
Sensible cooling capacity	kW	0,98	1,24	1,50	1,26	1,66	2,87	1,59	1,93	3,22	3,35	4,64	6,64
Water flow rate system side	l/h	200	253	327	314	396	626	424	510	793	786	1068	1513
Pressure drop system side	kPa	4	7	10	6	10	23	16	23	50	10	20	38
Fan													
Type	type	Centrifugal											
Fan motor	type	Inverter											
Number	no.	1			1			1			1		
Air flow rate	m^3/h	300	410	600	260	360	700	380	500	880	750	1100	1750
Input power	W	10	13	18	12	16	55	14	20	61	16	33	135
Signal 0-10V	%	42	62	90	34	46	90	40	52	90	38	58	90
Cassettes sound data (2)													
Sound power level (3)	dB(A)	35,0	38,0	46,0	35,0	39,0	53,0	41,0	47,0	61,0	44,0	52,0	60,0
Sound pressure level (4)	dB(A)	26,0	29,0	37,0	26,0	30,0	44,0	32,0	38,0	52,0	35,0	41,0	51,0
Diametre hydraulic fittings													
Main heat exchanger	Ø	3/4"											
Secondary heat exchanger	Ø	1/2"											
Power supply													
Power supply		230V~50Hz											

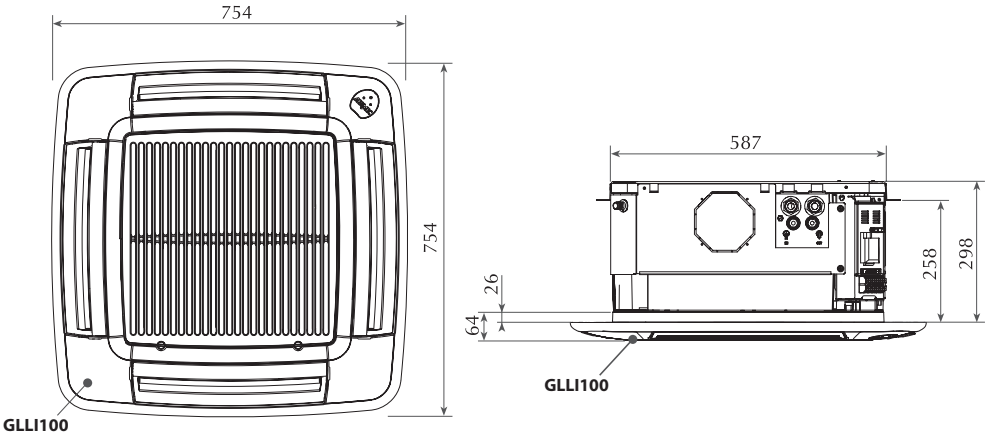
(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) For the cassettes, Aermec determines the value of the sound power on the basis of measurements carried out in accordance with the standard UNI EN 16583:15, in observance of the EUROVENT certification and the level of sound pressure (weighed A) measured in an environment with volume V=100m3, reverberation time t=0.5s direction factor Q=2; distance r=2.5m.
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.
(4) Sound pressure (weighed A) measured in an environment with volume V=100m3, reverberation time t=0.5s direction factor Q=2; distance r=2.5m.

DIMENSIONS

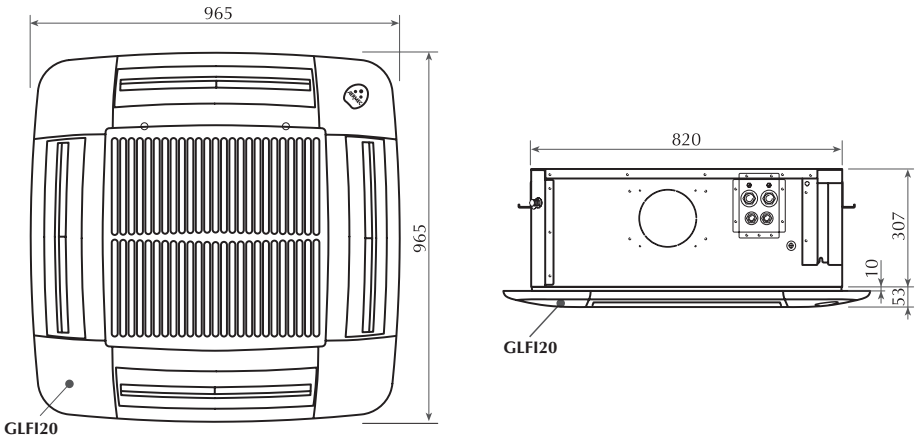
Dimensions FCLI 32 - 34 - 42 - 44 - 62 - 64 con GLFI



Dimensions FCLI 32 - 34 - 42 - 44 - 62 - 64 con GLLI



Dimensions FCLI 82 - 122 - 124 con GLLI



Size			122	124	32	34	42	44	62	64	82
Dimensions and weights											
Empty weight	FCLI	kg	36	36	21	21	22	21	22	23	35
	V2	kg	36	36	21	21	21	21	22	23	35
	VL	kg	35	35	20	21	20	21	22	22	34

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FCW

Fan coils wall-mount installation

- **Versions with internal 2 or 3-way valve**
- **Compact dimensions**

DESCRIPTION

Fan coil model for wall-mount installations, whose elegance and reduced dimensions make it aesthetically pleasing; this terminal is thus suitable for applications in residential or light commercial sectors.
To respond to the various system requirements, the product is configurable and available with or without (2- or 3-way) valve, as well as with or without control board, which ensures compatibility with various system requirements. Fan coils without control board must be necessarily combined with an external control device.

VERSIONS

2V Internal 2-way valve and microprocessor control
2VN Internal 2-way valve without microprocessor control
3V Internal 3-way valve and microprocessor control
3VN Internal 3-way valve without microprocessor control
VL Without internal valve but with microproccessor control
VLN Without internal valve and microproccessor control

FEATURES

Case

Aesthetically styled with flat panel:
— Microprocessor control
— Air flow louvered louvers with horizontal adjustment facility
— Colors pure white pantone GRIS 1C RAL 9010.

Ventilation group

Consisting of a tangential fan, especially quiet and directly coupled to the motor shaft.
Three-speed cross flow fan.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Air filter

Fan coils are fitted with air filters easy to remove and clean.

Control

The versions with microprocessor control have:
— Timer for programming switch-off or switch-on (TLW4 e PFW5)
— Program for operation in automatic, cooling, heating, ventilation and air ionising mode (TLW4 e PFW5)
— Night time Well-being Program (TLW4)
— Automatic season change (TLW4 e PFW5)
— Automatic re-start after power cut.

ACCESSORIES

FCWCP: Cold plasma mounting kit
For models with control board installed
FCW_2V, 3V, VL it is mandatory to select among the user interfaces designed for the FCW series (TLW4 o PFW5)
PFW5: This accessory is essential for fan coil operation (as an alternative to TLW4). The PFW5 wired panel is supplied separately from the fan coil. It is used to set the main device operating parameters, and is essential for setting the Modbus address of the unit (handy only if you want to command the unit via the RS-485 port).
TLW4: Mandatory accessory. Infrared remote control with liquid crystal display for controlling all unit functions. The remote control is delivered separately from the fan coil; with a single remote control it is possible to control more than one fan coil. The remote control is equipped with a support that allows you to hang it on the wall, from which it can be operated without having to be removed.


PFW5


TLW4

For models without control board installed
FCW_2VN, 3VN, VLN a user interface must be mounted outside the fan coil, using either a visible or a recessed wall-mount installation.
To make the selection please refer to the "control panels" or "VMF system shett" where you will find comprehensive information on this topic.

VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
PFW5 (1)	•	•	•	•	•	•
TLW4 (1)	•	•	•	•	•	•

Accessory	FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
PFW5 (1)	•	•	•	•	•	•
TLW4 (1)	•	•	•	•	•	•

(1) Mandatory accessory.

Cold plasma mounting kit

Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW232VN	FCW233V	FCW233VN	FCW332V	FCW332VN
FCWCP	•	•	•	•	•	•	•	•	•	•

Accessory	FCW333V	FCW333VN	FCW432V	FCW432VN	FCW433V	FCW433VN	FCW532V	FCW532VN	FCW533V	FCW533VN
FCWCP	•	•	•	•	•	•	•	•	•	•

VMF system

Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
VMF-485LINK	•	•	•	•	•	•

Accessory	FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
VMF-485LINK	•	•	•	•	•	•

The VMF-485LINK accessory is not compatible with radiant floor heating systems.

PERFORMANCE SPECIFICATIONS

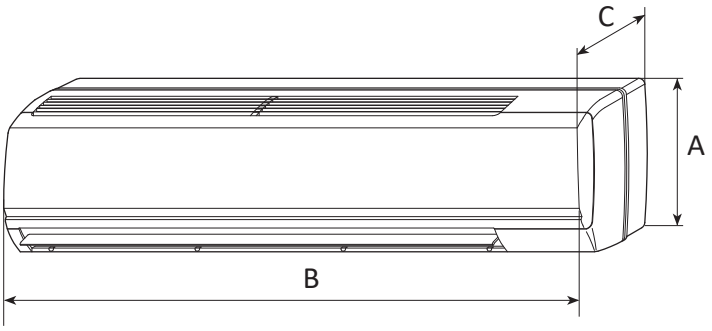
2-pipe

		FCW23VL			FCW33VL			FCW43VL			FCW53VL			FCW232V			FCW233V		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	2,85	3,66	4,29	3,73	4,51	5,24	6,44	7,84	8,56	8,20	13,06	15,28	2,35	3,02	4,03	2,35	3,02	4,03
Water flow rate system side	l/h	250	321	377	328	396	460	565	688	751	718	1145	1339	206	265	354	206	265	354
Pressure drop system side	kPa	4	6	9	9	12	16	16	22	26	10	23	30	9	14	24	9	14	24
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,42	1,82	2,14	1,85	2,24	2,61	3,21	3,90	4,26	4,10	6,50	7,60	1,17	1,50	2,00	1,17	1,50	2,00
Water flow rate system side	l/h	246	316	371	322	390	453	556	677	739	712	1129	1320	203	261	348	203	261	348
Pressure drop system side	kPa	4	6	8	9	12	16	15	22	25	10	22	29	9	14	24	9	14	24
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	1,37	1,74	2,05	1,78	2,15	2,50	3,07	3,74	4,08	4,40	6,50	7,45	1,10	1,45	1,90	1,10	1,45	1,90
Sensible cooling capacity	kW	1,16	1,47	1,73	1,51	1,82	2,04	2,59	3,10	3,47	3,30	5,05	5,80	0,92	1,20	1,55	0,92	1,20	1,55
Water flow rate system side	l/h	236	299	353	306	370	430	528	643	702	755	1115	1278	189	249	327	189	249	327
Pressure drop system side	kPa	5	7	9	8	11	15	15	21	26	12	24	30	9	14	23	9	14	23
Fan																			
Type	type	Tangential			Tangential			Tangential			Tangential			Tangential			Tangential		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			1			1			1			1			1		
Air flow rate	m^3/h	280	340	389	330	400	446	476	602	684	592	945	1179	270	330	380	270	330	380
Input power	W	23	24	27	22	23	27	31	41	48	38	55	75	23	24	27	23	24	27
Fan coil sound data (3)																			
Sound power level	dB(A)	42,0	48,0	53,0	42,0	48,0	53,0	44,0	49,0	54,0	44,0	54,0	60,0	42,0	48,0	53,0	42,0	48,0	53,0
Sound pressure level	dB(A)	34,0	39,5	44,5	34,0	39,5	44,5	35,5	40,5	45,5	35,5	45,5	51,5	34,0	39,5	44,5	34,0	39,5	44,5
Diametre hydraulic fittings																			
Main heat exchanger	Ø	1/2"			1/2"			1/2"			3/4"			1/2"			1/2"		
Power supply																			
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

		FCW332V			FCW333V			FCW432V			FCW433V			FCW532V			FCW533V		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	3,25	4,36	5,03	3,25	4,36	5,03	6,29	7,23	7,97	6,29	7,23	7,97	8,04	11,80	14,00	8,04	11,80	14,00
Water flow rate system side	l/h	286	383	442	286	383	442	552	635	699	552	635	699	704	1034	1227	704	1034	1227
Pressure drop system side	kPa	13	22	29	13	22	29	21	27	32	21	27	32	10	21	28	10	21	28
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,62	2,17	2,50	1,62	2,17	2,50	3,13	3,60	3,96	3,13	3,60	3,96	4,00	5,90	7,00	4,00	5,90	7,00
Water flow rate system side	l/h	281	377	434	281	377	434	543	624	688	543	624	688	695	1025	1216	695	1025	1216
Pressure drop system side	kPa	13	22	29	13	22	29	20	26	31	20	26	31	11	22	30	11	22	30
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	1,55	2,08	2,40	1,55	2,08	2,40	3,00	3,45	3,80	3,00	3,45	3,80	4,00	6,00	7,00	4,00	6,00	7,00
Sensible cooling capacity	kW	1,28	1,68	1,97	1,28	1,68	1,97	2,01	2,50	2,85	2,01	2,50	2,85	2,85	4,50	5,30	2,85	4,50	5,30
Water flow rate system side	l/h	267	358	413	267	358	413	516	593	654	516	593	654	686	1030	1201	686	1030	1201
Pressure drop system side	kPa	13	22	29	13	22	29	21	27	32	21	27	32	11	23	30	11	23	30
Fan																			
Type	type	Tangential			Tangential			Tangential			Tangential			Tangential			Tangential		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			1			1			1			1			1		
Air flow rate	m^3/h	320	390	440	320	390	440	370	470	540	370	470	540	535	859	1082	535	859	1082
Input power	W	22	23	27	22	23	27	31	41	48	31	41	48	38	55	75	38	55	75
Fan coil sound data (3)																			
Sound power level	dB(A)	42,0	48,0	53,0	42,0	48,0	53,0	44,0	49,0	54,0	44,0	49,0	54,0	44,0	54,0	60,0	44,0	54,0	60,0
Sound pressure level	dB(A)	34,0	39,5	44,5	34,0	39,5	44,5	35,5	40,5	45,5	35,5	40,5	45,5	35,5	45,5	51,5	35,5	45,5	51,5
Diametre hydraulic fittings																			
Main heat exchanger	Ø	1/2"			1/2"			1/2"			1/2"			3/4"			3/4"		
Power supply																			
Power supply		230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
Dimensions and weights							
A	mm	298	305	360	365	298	298
B	mm	880	990	1170	1450	880	880
C	mm	205	210	220	230	205	205
Empty weight	kg	9	10	19	28	9	9

		FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
Dimensions and weights							
A	mm	305	305	360	360	365	365
B	mm	990	990	1170	1170	1450	1450
C	mm	210	210	220	220	230	230
Empty weight	kg	10	10	19	19	28	28

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FCWI

Fan coils wall-mount installation

- **Versions with internal 2 or 3-way valve**
- **Electric saving equal to 50% with respect to a fan coil with 3-speed motor**
- **Total comfort: reduced temperature and humidity oscillations**
- **Fully silent operation**

DESCRIPTION

Fan coil model for wall-mount installations, whose elegance and reduced dimensions make it aesthetically pleasing; this terminal is thus suitable for applications in residential or light commercial sectors.
The product is configurable and available with or without (2- or 3-way) valve which ensures compatibility with various system requirements.

VERSIONS

2V Internal 2-way valve and microprocessor control
3V Internal 3-way valve and microprocessor control
VL Without internal valve but with microproccessor control

FEATURES

Case

Aesthetically styled with flat panel:
— Air flow louvered louvers with horizontal adjustment facility
— Motorised deflector louvers that can be activated by remote control TLW3 for vertical orientation of the outlet air with steps fixed positions and continuous oscillation
— Colors pure white pantone GRIS 1C RAL 9010.

Ventilation group

Consisting of a tangential fan, especially quiet and directly coupled to the motor shaft.
Brushless motor with continuous speed variation 0-100%.
Inverter motor allows precise adaptation to the real indoor environment requirements without temperature oscillations.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Air filter

Fan coils are fitted with air filters easy to remove and clean.

Control

The versions with microprocessor control have:
— Timer for programming switch-off or switch-on (TLW4/ PFW4)
— Program for operation in automatic, cooling, heating, ventilation and air ionising mode (TLW4/ PFW4)
— Night time Well-being Program (TLW4/ PFW4)
— Automatic season change (TLW4/ PFW4)
— Automatic re-start after power cut.
— Possibility of using a contact on the board to switch off the unit (window contact) or change the set point (presence contact) via microswitch.
— Controllable via RS485 port with Modbus RTU communication protocol.

ACCESSORIES

FCWCP: Cold plasma mounting kit
For models with control board installed
FCWI_2V, 3V, VL it is mandatory to select among the user interfaces designed for the FCWI series (TLW4 o PFW4)
PFW4: This accessory is essential for fan coil operation (as an alternative to TLW4). The PFW4 wired panel is supplied separately from the fan coil. It is used to set the main device operating parameters, and is essential for setting the Modbus address of the unit (handy only if you want to command the unit via the RS-485 port).
TLW4: Mandatory accessory. Infrared remote control with liquid crystal display for controlling all unit functions. The remote control is delivered separately from the fan coil; with a single remote control it is possible to control more than one fan coil. The remote control is equipped with a support that allows you to hang it on the wall, from which it can be operated without having to be removed.

VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	FCWI23VL	FCWI33VL	FCWI43VL	FCWI53VL	FCWI232V	FCWI233V
PFW4 (1)	•	•	•	•	•	•
TLW4 (1)	•	•	•	•	•	•

Accessory	FCWI332V	FCWI333V	FCWI432V	FCWI433V	FCWI532V	FCWI533V
PFW4 (1)	•	•	•	•	•	•
TLW4 (1)	•	•	•	•	•	•

(1) Mandatory accessory.

Plasmacluster mounting kit

Accessory	FCWI23VL	FCWI33VL	FCWI43VL	FCWI53VL	FCWI232V	FCWI233V	FCWI332V	FCWI333V	FCWI432V	FCWI433V	FCWI532V	FCWI533V
FCWCP	•	•	•	•	•	•	•	•	•	•	•	•

VMF system

Accessory	FCWI23VL	FCWI33VL	FCWI43VL	FCWI53VL	FCWI232V	FCWI233V
VMF-485LINK	•	•	•	•	•	•

Accessory	FCWI332V	FCWI333V	FCWI432V	FCWI433V	FCWI532V	FCWI533V
VMF-485LINK	•	•	•	•	•	•

The VMF-485LINK accessory is not compatible with radiant floor heating systems.

PERFORMANCE SPECIFICATIONS

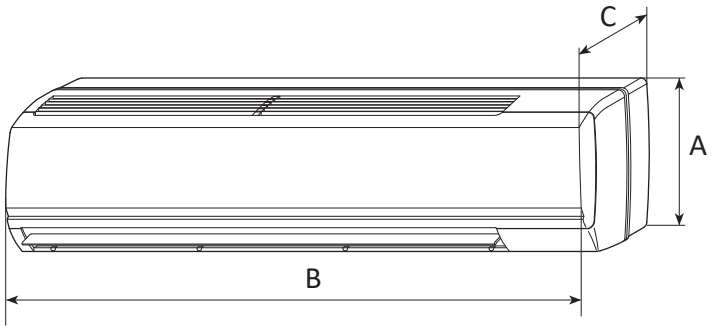
2-pipe

		FCWI23VL			FCWI33VL			FCWI43VL			FCWI53VL			FCWI232V			FCWI233V		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	3,12	4,52	4,75	3,46	5,33	5,74	6,36	9,24	9,86	8,31	13,80	15,24	2,57	3,73	4,46	2,57	3,73	4,46
Water flow rate system side	l/h	274	397	417	304	468	504	558	811	865	728	1147	1335	226	327	392	226	327	392
Pressure drop system side	kPa	8	16	17	9	19	22	16	30	34	10	23	30	11	21	29	11	21	29
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,55	2,25	2,37	1,71	2,65	2,86	3,17	4,60	4,91	4,16	6,51	7,58	1,28	1,85	2,21	1,28	1,85	2,21
Water flow rate system side	l/h	269	390	411	298	461	496	549	798	851	722	1131	1316	222	323	385	222	323	385
Pressure drop system side	kPa	8	16	17	9	19	21	15	30	32	10	22	29	11	21	29	11	21	29
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	1,50	2,15	2,27	1,65	2,54	2,74	3,03	4,41	4,70	4,46	6,51	7,43	1,20	1,79	2,10	1,20	1,79	2,10
Sensible cooling capacity	kW	1,27	1,82	1,92	1,40	2,15	2,24	2,38	3,43	3,61	3,34	5,06	5,78	1,02	1,51	1,78	1,02	1,51	1,78
Water flow rate system side	l/h	258	369	391	284	437	471	521	758	809	765	1117	1275	207	308	362	207	308	362
Pressure drop system side	kPa	8	15	16	8	18	20	17	27	30	12	22	28	10	19	26	10	19	26
Fan																			
Type	type	Tangential																	
Fan motor	type	Inverter																	
Number	no.	1			1			1			1			1			1		
Air flow rate	m^3/h	250	400	440	290	450	490	450	690	760	590	960	1210	200	300	400	200	300	400
Input power	W	9	17	19	9	17	20	13	27	34	17	35	58	9	17	19	9	17	19
Fan coil sound data (3)																			
Sound power level	dB(A)	37,0	50,0	52,0	38,0	50,0	52,0	41,0	53,0	55,0	44,0	54,0	60,0	37,0	50,0	52,0	37,0	50,0	52,0
Sound pressure level	dB(A)	29,0	42,0	44,0	30,0	42,0	44,0	33,0	45,0	47,0	36,0	46,0	52,0	29,0	42,0	44,0	29,0	42,0	44,0
Diametre hydraulic fittings																			
Main heat exchanger	Ø	1/2"			1/2"			1/2"			3/4"			1/2"			1/2"		
Power supply																			
Power supply		230V~50Hz																	

		FCWI332V			FCWI333V			FCWI432V			FCWI433V			FCWI532V			FCWI533V		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	3,01	5,15	5,51	3,01	5,15	5,51	6,21	8,53	9,18	6,21	8,53	9,18	8,15	11,82	13,96	8,15	11,82	13,96
Water flow rate system side	l/h	265	452	484	265	452	484	545	749	805	545	749	508	714	1036	1224	714	1036	1224
Pressure drop system side	kPa	11	30	34	11	30	34	21	36	41	21	36	41	10	21	28	10	21	28
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,50	2,56	2,74	1,50	2,56	2,74	3,09	4,24	4,56	3,09	4,24	4,56	4,05	5,91	6,98	4,05	5,91	6,98
Water flow rate system side	l/h	260	445	476	260	445	477	536	736	793	536	736	793	704	1027	1213	704	1027	1213
Pressure drop system side	kPa	11	30	34	11	30	34	20	35	40	20	35	40	11	22	30	11	22	30
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	1,44	2,46	2,63	1,44	2,46	2,63	2,96	4,07	4,38	2,96	4,07	4,38	4,05	6,01	6,98	4,05	6,01	6,98
Sensible cooling capacity	kW	1,22	2,08	2,15	1,22	2,08	2,15	2,32	3,16	3,36	2,32	3,16	3,36	3,04	4,67	5,44	3,04	4,67	5,44
Water flow rate system side	l/h	248	423	453	248	426	453	509	699	753	509	699	753	695	1032	1198	695	1032	1198
Pressure drop system side	kPa	11	28	32	11	28	32	18	32	37	18	32	37	11	23	30	11	23	30
Fan																			
Type	type	Tangential																	
Fan motor	type	Inverter																	
Number	no.	1			1			1			1			1			1		
Air flow rate	m^3/h	250	430	460	250	430	460	430	620	690	430	620	690	530	870	1110	530	870	1110
Input power	W	9	17	20	9	17	20	13	27	34	13	27	34	17	35	58	17	35	58
Fan coil sound data (3)																			
Sound power level	dB(A)	38,0	50,0	52,0	38,0	50,0	52,0	41,0	53,0	55,0	41,0	53,0	55,0	44,0	54,0	60,0	44,0	54,0	60,0
Sound pressure level	dB(A)	30,0	42,0	44,0	30,0	42,0	44,0	33,0	45,0	47,0	33,0	45,0	47,0	36,0	46,0	52,0	36,0	46,0	52,0
Diametre hydraulic fittings																			
Main heat exchanger	Ø	1/2"			1/2"			1/2"			1/2"			3/4"			3/4"		
Power supply																			
Power supply		230V~50Hz																	

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		FCWI23VL	FCWI33VL	FCWI43VL	FCWI53VL	FCWI232V	FCWI233V
Dimensions and weights							
A	mm	298	305	360	365	298	298
B	mm	880	990	1170	1450	880	880
C	mm	205	210	220	230	205	205
Empty weight	kg	9	10	19	28	9	9

		FCWI332V	FCWI333V	FCWI432V	FCWI433V	FCWI532V	FCWI533V
Dimensions and weights							
A	mm	305	305	360	360	365	365
B	mm	990	990	1170	1170	1450	1450
C	mm	210	210	220	220	230	230
Empty weight	kg	10	10	19	19	28	28

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VENTILCASSAFORMA

Template for recessed installation of fancoils in the wall

- **Ideal for residential or office solutions**

DESCRIPTION

Ventilcassaforma has been designed to respond to the needs to rationalise spaces to suit modern interior architecture. Ventilcassaforma is a galvanised template that makes it possible to make a space to house fan coils in the wall.

The template will make masonry work easier during the construction of a niche where the fan coil will be installed. When the work is finished, the fan coil will be completely hidden from view.

VERSIONS

CHU-L: For fan coils in the Omnia ULI_P series.
CHF: For fan coils in the FCZ P, FCZI P series

FEATURES

Ventilcassaforma is made up of the following parts to be assembled:

— Recess box;
— Closure panel;
— Outer frame with deflector;
— Cover bases, cross-members, covers.

All parts are made of galvanised steel and treated with epoxy-polyester resin-based thermo-hardening base paint in grey with rough glazed finish in order to hold the paint. The final colour can be chosen by the client.

Socket box embedded in the wall

Made of galvanised steel, this is the box housing the fan coil. The box is recessed in the wall during building work making the construction of a niche where the fan coils will be installed much easier.
Holes for fitting the fan coil and preparing an electric plant with a socket and GEWISS fuse holder are already present on the back panel.
The box can accommodate the hydraulic system pipes and condensation drain pipes thanks to the presence of several easily-removable elements on the sides and base.

Closure panel

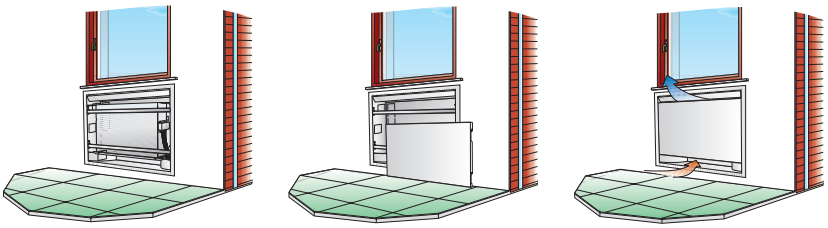
Made of steel pre-treated with base paint and no slots present. Easily removable for servicing and cleaning the air filter.

Outside frame

The perimeter of the box has an outer frame made of pre-treated steel making it possible to cover the perimeter part of the wall and hide any imperfections that overtime show possible crumbling on the edge of the plaster work.

Deflector

Manual, with which the flow of air can be directed into the room. The deflector is incorporated in the frame.



ACCESSORIES COMPATIBILITY

FCZ-H

Ver	200	300	400	500	600	900	950
HP	CHF22	CHF32	CHF42	CHF42	CHF62	CHF62	CHF62

FCZI-H

Ver	200	250	300	350	400	450	500	550	700	750	900	950
HP	CHF22	CHF22	CHF32	CHF32	CHF42	CHF42	CHF42	CHF42	CHF62	CHF62	CHF62	CHF62

FCZ-P

Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
P, PR	CHF17	CHF17	CHF17	CHF17	CHF22	CHF22	CHF22	CHF22	CHF32	CHF32	CHF32	CHF32	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42
PO, POR	-	-	-	-	CHF22	CHF22	CHF22	CHF22	CHF32	CHF32	CHF32	CHF32	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42
PPC	CHF17	-	-	CHF17	CHF22	-	-	CHF22	CHF32	-	-	CHF32	CHF42	-	-	CHF42	CHF42	-	-	CHF42

The accessory cannot be fitted on the configurations indicated with -

Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
P, PR	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62
PO, POR	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	-	-	-	-	CHF62	CHF62	CHF62	-	-
PPC	CHF62	-	-	CHF62	CHF62	-	-	CHF62	CHF62	-	-	CHF62	CHF62	-	CHF62	CHF62	-

The accessory cannot be fitted on the configurations indicated with -

FCZI-P

Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
P, PR	CHF22	CHF22	CHF22	CHF22	CHF32	CHF32	CHF32	CHF32	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62	CHF62

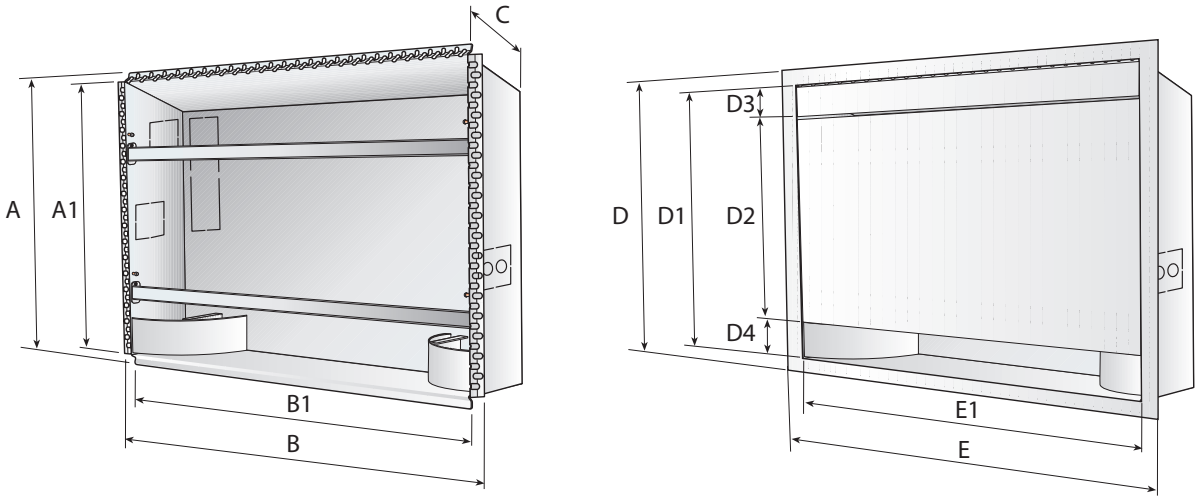
UL-P

Ver	11	16	26	36
P	CHU12L	CHU17L	CHU27L	CHU37L

ULI-P

Accessory	ULI16P	ULI26P	ULI36P
CHU17L	•		
CHU27L		•	
CHU37L			•

DIMENSIONS



		CHU12L	CHU17L	CHU27L	CHU37L
Dimensions jig					
A	mm	691	691	691	691
A1	mm	648	648	648	648
B	mm	692	802	1032	1252
B1	mm	644	754	984	1204
C	mm	186	186	186	186
D	mm	724	724	724	724
D1	mm	634	634	634	634
D2	mm	494	494	494	494
D3	mm	70	70	70	70
D4	mm	-	-	-	-
E	mm	713	823	1053	1273
E1	mm	633	743	973	1193

		CHF17	CHF22	CHF32	CHF42	CHF62
Dimensions jig						
A	mm	728	728	728	728	833
A1	mm	684	684	684	684	789
B	mm	732	842	1073	1293	1414
B1	mm	684	794	1025	1245	1366
C	mm	240	240	240	240	240
D	mm	760	760	760	760	865
D1	mm	680	680	680	680	785
D2	mm	493	493	493	493	598
D3	mm	93	93	93	93	93
D4	mm	94	94	94	94	94
E	mm	753	863	1094	1314	1435
E1	mm	673	783	1014	1234	1355

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Control panels

Range of control panels for fan coils

- **Wide range of panels for the simple, complete control of all the fan coil functions.**

ACCESSORIES

AERCAB: 100 meter skein of shielded cable (4-pole wire + shield) for connection with RS485 serial port and CAN.

T-TOUCH AND T-TOUCH-I

Characteristics and equipment supplied as standard

— Installation on the fan coil.
— Air and water probes supplied as standard.
— RS485 serial port for connection with the VMF network (MASTER).
— Connection with VMF-E4X user interface.
— Control of the 3 speeds of the asynchronous motors.
— 0-10 V and/or PWM output for brushless motors.
— Two triac outputs for control of valves and/or accessories.
— MS input (micro switch).
— Inverter fault input.
— Visualisation of the speeds and the temperature set-point.

Compatibility with the hydronic terminals

Thermostat	Unit	Range
T-TOUCH	FCZ	AS - U - UA - DS
T-TOUCH-I	FCZI	AS - U

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	supplied as standard	supplied as standard
with 2-way valve		
with 3-way valve		
with Cold Plasma purifier		
with 2-way valve and Cold Plasma purifier		
with 3-way valve and Cold Plasma purifier		
with heater		
with 2-way valve and heater		
with 3-way valve and heater		
cooling only, with heater for heating		
cooling only, with heater for heating and 3-way valve		
4-pipe systems		
with 2-way valve	supplied as standard	supplied as standard
with 3-way valve		

AER503IR

Characteristics and equipment supplied as standard

— Flush installation (503-502 module box, or plasterboard boxes).
— Management of fan coils with asynchronous and brushless motor.
— Automatic / manual season changeover.
— Control of up to 2 On/Off valves.
— Control of 1 modulating valve 0-10.
— Temperature and ventilation control.
— Internal air probe.
— Compatibility with VMF-IR.
— Overall dimensions (mm): H=86 - W=125 - D=46.

Compatibility with the hydronic terminals

Compatible with all ON/OFF fancoil and INVERTER fancoil, without on board controls.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	SA5	SW5
with 2-way valve		
with 3-way valve		
with Cold Plasma purifier		
with 2-way valve and Cold Plasma purifier		
with 3-way valve and Cold Plasma purifier		
with heater		
with 2-way valve and heater		
with 3-way valve and heater		
cooling only, with heater for heating		
cooling only, with heater for heating and 3-way valve		
with 2-way valve and radiant panel (heating)		
radiant panel only (heating)		
4-pipe systems		
with 2-way valve	SA5	SW5
with 3-way valve		

TX

Characteristics and equipment supplied as standard

— Wall-mount installation.
— Management of fan coils with asynchronous and brushless motor.
— Automatic / manual season changeover.
— Control of up to 2 On/Off valves.
— Temperature and ventilation control (3 speeds).
— Internal air probe
— Management of fins and external contact.
— Overall dimensions (mm): H=148 - W=70 - D=27.5.

Compatibility with the hydronic terminals

Compatible with all ON/OFF fancoil and INVERTER fancoil, without on board controls.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	SA5	SW3/ SW5
with 2-way valve		
with 3-way valve		
with Cold Plasma purifier		
with 2-way valve and Cold Plasma purifier		
with 3-way valve and Cold Plasma purifier		
with heater		
with 2-way valve and heater		
with 3-way valve and heater		
cooling only, with heater for heating		
cooling only, with heater for heating and 3-way valve		
with 2-way valve and radiant panel (heating)		
radiant panel only (heating)		
with twin delivery (Dualjet)		
4-pipe systems		
with 2-way valve	SA5	SW3/ SW5
with 3-way valve		

PXAI

Characteristics and equipment supplied as standard

— Installation on the fan coil.
— Automatic / manual season changeover.
— Control of up to 2 On/Off valves.
— Temperature and ventilation control (3 speeds).
— Internal water probe (2.5m) and air probe (2.3m).
— Management of fins and external contact.
— Overall dimensions (mm): H=148 - W=70 - D=27.5.

Compatibility with the hydronic terminals

Compatible with all fancoil of the series FCZ-P, FCZI-P.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	supplied as standard	supplied as standard
with 2-way valve		
with 3-way valve		
with Cold Plasma purifier		
with 2-way valve and Cold Plasma purifier		
with 3-way valve and Cold Plasma purifier		
with heater		
with 2-way valve and heater		
with 3-way valve and heater		
cooling only, with heater for heating		
cooling only, with heater for heating and 3-way valve		
4-pipe systems		
with 2-way valve	supplied as standard	supplied as standard
with 3-way valve		

TXB/TXBI - TXBIS

TXB-TXBI **TXBIS**

Characteristics and equipment supplied as standard

— Installation on the fan coil.
— Automatic / manual season changeover.
— Control of up to 2 On/Off valves.
— Temperature and ventilation control (3 speeds).
— Internal air probe.
— Water probe (supplied) for controlling the minimum or maximum depending on the system, with the possibility to fit an external air probe (SA5).

Compatibility with the hydronic terminals

TXB
Compatible with all fancoil of the series FCZ.
TXBI
Compatible with all fancoil of the series FCZI.
TXBIS
Compatible with all fancoil of the series ULSI_B and ULSI_BR.

■ *For ULSI_BR units add the mandatory EC-TXBI accessory.*

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	supplied as standard	supplied as standard
with 2-way valve		
with 3-way valve		
with Cold Plasma purifier		
with 2-way valve and Cold Plasma purifier		
with 3-way valve and Cold Plasma purifier		
with heater		
with 2-way valve and heater		
with 3-way valve and heater		
cooling only, with heater for heating		
cooling only, with heater for heating and 3-way valve		
with 2-way valve and radiant panel (heating)		
radiant panel only (heating)		
with twin delivery (Dualjet)		
4-pipe systems		
with 2-way valve	supplied as standard	supplied as standard
with 3-way valve		

WMT16 - 16V

Characteristics and equipment supplied as standard

— Wall-mount installation.
— Manual season changeover.
— Temperature and ventilation control (3 speeds).
— Thermostat-controlled ventilation WMT16 - Continuos WMT16CV
— Internal air probe.
— Overall dimensions (mm): H=130 - L=85 - P=40.

Compatibility with the hydronic terminals

Compatible with all ON/OFF fancoil without on board controls.

Compatibility with 2 pipe systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	internal	-
with 2-way valve		
4-pipe systems		
with 2-way valve	internal	-

WMT10

Characteristics and equipment supplied as standard

— Wall-mount installation.
— Manual season changeover.
— Control of up to 2 On/Off valves.
— Temperature and ventilation control (3 speeds).
— Internal air probe.
— Overall dimensions (mm): H=75 - W=127 - D=25.

Compatibility with the hydronic terminals

Compatible with all ON/OFF fancoil without on board controls.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	internal	-
with 2-way valve		
with heater		
with 2-way valve and heater		
cooling only, with heater for heating		
4-pipe systems		
with 2-way valve	internal	-

FMT10

Characteristics and equipment supplied as standard

— Wall-mount installation.
— Automatic / manual season changeover.
— Control of up to 2 On/Off valves, or 1 valve and 1 heater.
— Temperature and ventilation control (3 speeds).
— Air probe (supplied) to be installed on the fan coil intake.
— Overall dimensions (mm): H=80 - W=118 - D=40.

Compatibility with the hydronic terminals

Compatible with all ON/OFF fancoil without on board controls.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	supplied as standard	-
with 2-way valve		
with heater		
with 2-way valve and heater		
cooling only, with heater for heating		
4-pipe systems		
with 2-way valve	supplied as standard	-

DSKT/DSKTI - DSKTS

DSKT-DSKTI **DSKTS**

Characteristics and equipment supplied as standard

— Installation on the fan coil.
— Air and water probes supplied as standard.
— RS485 serial port for connection with the VMF network (MASTER).
— Control of the 3 speeds of the asynchronous motors.
— 0-10 V and/or PWM output for brushless motors.
— MS input (micro switch).
— Inverter fault input.
— Visualisation of the speeds and the temperature set-point.
— Air purification device management.

Compatibility with the hydronic terminals

DSKT
Compatible with all fancoil of the series FCZ-AS.
DSKTI
Compatible with all fancoil of the series FCZI-AS.
DSKTS
Compatible with all fancoil of the series ULSI_B and ULSI_BR.

■ *For ULSI_BR units add the mandatory EC-DSKT accessory.*

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	supplied as standard	supplied as standard
with 2-way valve		
with 3-way valve		
with Cold Plasma purifier		
with 2-way valve and Cold Plasma purifier		
with 3-way valve and Cold Plasma purifier		
with heater		
with 2-way valve and heater		
with 3-way valve and heater		
cooling only, with heater for heating		
cooling only, with heater for heating and 3-way valve		
4-pipe systems		
with 2-way valve	supplied as standard	supplied as standard
with 3-way valve		

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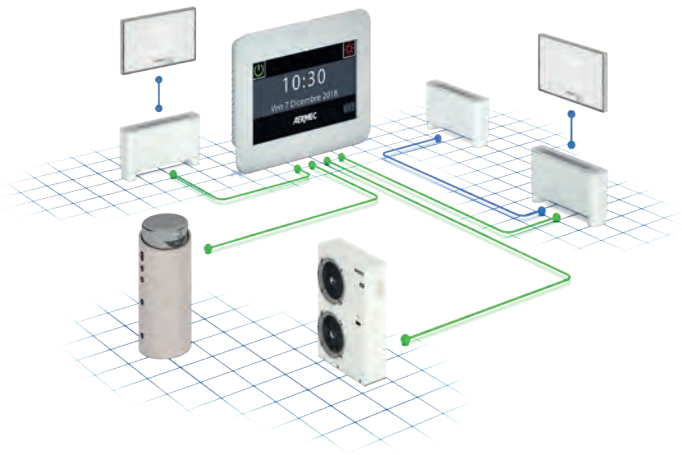
www.aermec.com

VMF

Multi Flow Variable Systems

- **Components for plant management**
- **Air conditioning**
- **Heating**
- **Hot domestic water (HDW)**



DESCRIPTION

Hydronic system management and control unit for air conditioning, heating and domestic hot water production.
The VMF system ensures the complete control of every single component of a hydronic system, both local and centralised, through communication between the various system components, managing the performance without neglecting the end user's request for comfort at any time, but reaching it as efficiently as possible, with consequent energy savings.
Summing up the advantages of a such an innovative control with the flexibility of a hydronic system, you achieve a more effective and efficient alternative to variable refrigerant volume (VRF) systems.
The VMF system can manage different areas, each of which has one of the following types of terminals:
— Fancoil;
— Radiant only (heating only);
— Fancoil + Radiant;
— MZC Zone;
— MZC Zone + Radiant.

FEATURES

The VMF system is extremely flexible, to the extent that it offers various control and management steps, also expandable at different times:
1. Control of a single zone;
2. Control of a Master/Slave zone (one MASTER fancoil and up to 5 SLAVE fancoils);
3. Control of a network consisting of several independent zones (one MASTER fancoil and up to 5 SLAVE fancoils for each zone, or another of the types of terminals provided);
4. Control of several zones, plus heat pump management (if compatible with the VMF system);
5. Control of several zones, of heat pumps and management of the domestic hot water;
6. Control of several zones, heat pumps, domestic hot water production and additional pumps (up to a maximum of 12 using 3 additional VMF-CRP modules);
7. Control of several zones, heat pumps, domestic hot water production, additional pumps and management of up to 3 heat recovery units (with the possibility to manage up to 3 VMF-VOC probes) and/or a boiler;

CONTROL PANELS

The VMF system can pilot and manage a different number of areas, depending on the panel used:
— **VMF-E6/VMF-E5**: maximum 64 zones (so a maximum of 64 Master Fancoil, each of which will pilot 5 Slave, for a total of 384 Fancoil);
— **VMF-RCC**: maximum 10 zones (then a maximum of 10 Master Fancoil, each of which will pilot 5 Slave, for a total of 50 Fancoil).
In addition to the centralised control provided by the VMF-E6/VMF-E5/VMF-RCC panel, the MASTER system terminal must be equipped with a local control interface; this interface can be mounted on board the terminal itself or on a wall panel.
Via panel VMF-E6/VMF-E5/VMF-RCC it is possible to control several functions:
— Identify the various zones by giving each of them a name that characterises it;
— Control and set the ON-OFF function and the temperature setting of each zone;
— Set and manage the heat pump temperature;
— Schedule time slots.
Simple installation of the fancoil network thanks to the SELF-DETECTION function of the MASTER fancoils.

SYSTEM COMPONENTS

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

Command interfaces

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
VMF-E2D: Machine user interface to be combined with VMF-E19 accessory, dedicated to the DUALJET range. It has 2 selector switches, one for temperature and the other for speed control.
VMF-E2H: User interface on the machine, to be combined with the VMF-E19 accessory, dedicated to the HL series. It has 2 selector switches, one for temperature and the other for speed control.
VMF-E2S: User interface on the fan coil, with two selectors - one for temperature and the other for speed control. For operation, the installation of either the VMF-E19 or VMF-E19I accessory is required.
VMF-E2Z: User interface on the fan coil, with two selectors, one for temperature and the other for speed control; to be combined with accessories VMF-E19 and VMF-E19I.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
VMF-E4DX: A wall-mounted user interface to be combined with VMF-E19, VMF-E19I, VMF-E24 ed VMF-E24I accessories. Featuring an innovative, extremely slim and cost-effective design, it allows running functions via a capacitive touchscreen keyboard with LCD display. You can choose to adjust the environment temperature with a panel-mounted sensor probe (standard), or with the VMF-E19/E19I probe, or through mediated reading. It also enables the activation of an air purifier (Cold Plasma/ UV lamp) and a heating element. Light grey front panel PANTONE 425C (METAL).
VMF-E4X: A wall-mounted user interface to be combined with VMF-E19, VMF-E19I, VMF-E24 ed VMF-E24I accessories. Featuring an innovative, extremely slim and cost-effective design, it allows running functions via a capacitive touchscreen keyboard with LCD display. You can choose to adjust the environment temperature with a panel-mounted sensor probe (standard), or with the VMF-E19/E19I probe, or through mediated reading. It also enables the activation of an air purifier (Cold Plasma/ UV lamp) and a heating element. Light grey front panel PANTONE COOL GRAY 1C.
VMF-E5: Black recessed panel with backlit graphic LCD display and capacitive keyboard, it allows the centralised command/control of a complete hydronic system consisting of Fan coils: up to 64 fan coil zones consisting of 1 master + up to 5 slaves; Chiller/heat pump (accessory required for RS 485 interface), pumps: up to 12 configurable zone pumps; boiler: boiler hook-up management for hot water production; heat recovery units: up to 3 hook-ups per programmable recovery units based on time periods and/or by measuring air quality with the VMF-VOC accessory; domestic water module: complete management of the domestic hot water production through the control of: diverter valve/pump, integrated heating element, storage tank temperature sensor, anti-legionella circuit system. The panel is available in both white (VMF-E5B) and black (VMF-E5N).
VMF-E6: White flush-mounting panel with 4.3 inch colour touchscreen. For the centralised command/control of a complete hydronic/aeraulic system consisting of: fan coils (up to 64 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (up to 4), MZC accessories (up to 5) for the management of radiant panels (using a suitable number of VMF-REB accessories, up to 64 radiant panels associated with the fan coil zones and up to 32 radiant panels associated with the zones served by MZC), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/Os, control of heat recovery units and VOC probes (up to 4).
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMF-RCC: Flush-mounting panel for the centralised command/control of a complete hydronic system consisting of: fan coils (up to 10 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (if you want to manage up to 4 outdoor units, the MULTICONTROL accessory must be provided), MZC accessories (up to 3) for the management of radiant panels using a suitable number of VMF-REB 1/VMF-REB 2/VMF-REB 3 accessories, (up to 28 zones total), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/O, control of heat recovery units and VOC probes (up to 3).
VMF-VOC: Air quality detection accessory.
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Thermostats

VMF-E19: Thermostat, accessory to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe, it controls systems with 2 pipes, 4 pipes, 2 pipes + Cold Plasma, 2 pipes + UV lamps, 2 pipes + Heating element. Equipped with an external contact to be used as a remote ON-OFF at low voltage. By means of 2-wire serial communication, it allows for the creation of a single fan coil area (1 master + maximum 5 slaves). Compared to the previous model, thanks to a different dip switch configuration, it allows implementing new features: 1. In systems with two pipes and a heating element, the latter can be activated as a complete replacement, allowing you to warm the environment exclusively with this accessory. 2. Dualjet features are available in standard software and can be set via dip switch. 3.Economy contact/presence sensor. 4. Additional water sensor for overall control in 4-pipe systems (with VMF-SW1 accessory). 5. Serial RS485, ModBus RTU protocol, for centralised control. 6. Possibility of inserting expansion boards for future developments. The VMF-E19 accessory must be therefore used in masters in the presence of multiple zones, or for communication with the chiller/heat pump. 7. Compatibility with the VMF-IO accessory. Compatibility with VMF-LON expansion board. The thermostat is protected by a fuse.
VMF-E19I: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe, it controls systems with 2 pipes, 4 pipes, 2 pipes + Cold Plasma, 2 pipes + UV lamps, 2 pipes + Heating element. Equipped with an external contact to be used as a remote ON-OFF at low voltage. By means of 2-wire serial communication, this thermostat allows for the creation of a single fan coil area (1 master + maximum 5 slaves). Compared to the previous model, thanks to a different dip switch configuration, it allows implementing new features:In systems with two pipes and a heating element - the latter can be activated as a complete replacement - allowing you to warm the environment exclusively with this accessory - Dualjet features are available in standard software and can be set via dip switch - Economy contact/presence sensor - Additional water sensor for overall control in 4-pipe systems (with VMF-SW1 accessory) - Serial RS485, ModBus RTU protocol, for centralised control - Possibility of inserting expansion boards for future developments. The VMF-E19 accessory must be therefore used in masters in the presence of multiple zones, or for communication with the chiller/heat pump - Compatibility with the VMF-IO accessory - Compatibility with VMF-LON expansion board.The thermostat is protected by a fuse.
VMF-E19Y: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe, it controls systems with 2 pipes, 4 pipes, 2 pipes + Cold Plasma, 2 pipes + UV lamps, 2 pipes + Heating

element. Equipped with an external contact to be used as a remote ON-OFF at low voltage. By means of 2-wire serial communication, this thermostat allows for the creation of a single fan coil area (1 master + maximum 5 slaves). Compared to the previous model, thanks to a different dip switch configuration, it allows implementing new features: 1. In systems with two pipes and a heating element - the latter can be activated as a complete replacement - allowing you to warm the environment exclusively with this accessory. 2. Economy contact/presence sensor. 3. Additional water sensor for overall control in 4-pipe systems (with VMF-SW1 accessory). 4. Serial RS485, ModBus RTU protocol, for centralised control. 5. Possibility of inserting expansion boards for future developments. The VMF-E19Y accessory must be therefore used in masters in the presence of multiple zones, or for communication with the chiller/heat pump. 6. Compatibility with the VMF-IO accessory - Compatibility with VMF-LON expansion board.The thermostat is protected by a fuse.

VMF-FMD: The VMF-FMD panel is a flush-mounted thermostat that, when used in stand-alone mode or within a centralised supervisory system (BMS), can manage plant requirements where an actuator (a heating furniture valve, radiant system head, zone valve, zone circulator) is to be controlled as a function of room temperature.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-LON: Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.

VMF-YCC: Electric on/off completion unit for the VMF-E19Y accessory (mandatory for the unit with options P and X).

VMF-YCCH: Electric on/off completion unit for the VMF-E19Y accessory (mandatory for the unit with option H).

VMF-YCCK: Electric on/off completion unit for the VMF-E19Y accessory, mandatory for FCY units with GKY accessory.

VMF-YICC: Electric inverter completion unit for the VMF-E19Y accessory (mandatory for the unit with options P and X).

VMF-YICCH: Electric inverter completion unit for the VMF-E19Y accessory (mandatory for the unit with option H).

VMF-YICCK: Electric inverter completion unit for the VMF-E19Y accessory, mandatory for FCYI units with GKY accessory.

Intake grids and distribution of the air, compulsory accessory

GLF10M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. It is equipped with an infrared receiver with an emergency operation button, a thermostat card which also requires the installation of the VMF-E4 panel or the VMF-IR remote control. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be orientated with the remote control. (size 840x840 not available).

GLF10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4 or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 800x800 mm not available).

GLFI10M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. It is equipped with an infrared receiver with an emergency operation button, a thermostat card which also requires the installation of the VMF-E4 panel or the VMF-IR remote control. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be orientated with the remote control. (size 840x840 not available).

GLFI10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4 or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 800x800 mm not available).

GLL10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLL20N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLLI100N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X panel as well, and suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLLI20N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

Probes

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

Modules

AERCAB: 100 meter skein of shielded cable (4-pole wire + shield) for connection with RS485 serial port and CAN.

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.

VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

VMF-REB: Only available for VMF-E6, manages the heads of the radiant panels (each module can manage up to 8), one pump and up to 3 thermostats through digital input.

VMF-REB 1: Only available for VMF-RCC, manages the heads of 10 radiant panels associated with fancoil and up to 10 thermostats through digital input

VMF-REB 2: Only available for VMF-RCC, manages the heads of 10 radiant panels associated with MZC and up to 10 thermostats through digital input

VMF-REB 3: Only available for VMF-RCC, manages the heads of 8 radiant panels associated with MZC and up to 10 thermostats through digital input

VMF-SIT3: Interface boards that allow connecting thermostats to a fan coil with a high-power motor (for selection, see all the thermostat and fan coil documentation); if a VMF-E19 thermostat is used, this accessory will be replaced by the normal SIT3.

VMF-SIT3V: Relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.

Electrical panels for DHW (Domestic hot water management for other suppliers' storage tanks, not available for VMF-E6)

VMF-ACS3KM: Electrical panel for the complete command/control of a hot water storage tank (3-way control valve, integrated single phase 3kW resistor command, anti-legionella function and temperature sensor)

VMF-ACS3KTN: Quadro elettrico per il comando / controllo completo di un accumulo acqua sanitaria (comando valvola 3 vie , comando resistenza integrativa da 3kW trifase, antilegionella e sonda di temperatura).

VMF-ACS6KTN: Quadro elettrico per il comando / controllo completo di un accumulo acqua sanitaria (comando valvola 3 vie , comando resistenza integrativa da 6kW trifase, antilegionella e sonda di temperatura).

VMF-ACS8KTN: Quadro elettrico per il comando / controllo completo di un accumulo acqua sanitaria (comando valvola 3 vie , comando resistenza integrativa da 8kW trifase, antilegionella e sonda di temperatura).

Heat storage tank with integrated domestic hot water management (no need to be combined with a VMF-ACS accessory)

SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.

Control systems

AERCONNECT: Web server allowing local and remote supervision of the VMF-E6 system (by appropriately configuring the DNS service supplied with the purchase of the accessory) via web pages; allows simultaneous access for up to 8 users

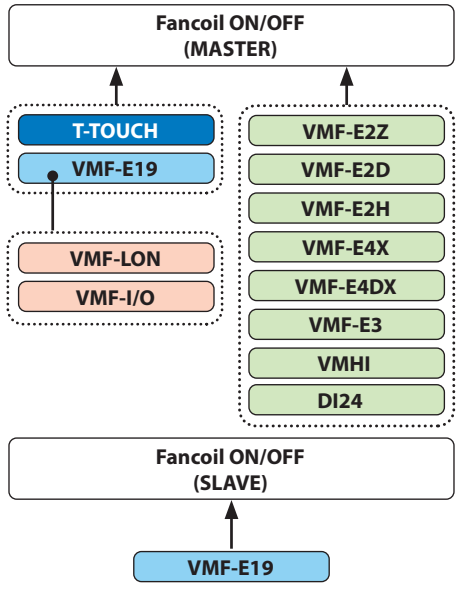
VMF-485EXP: This accessory, specifically mounted in the VMF-E5/RCC panel, adds an RS485 serial communication port to external supervision (BMS, Aerweb or Aermec supervision systems). Not available for VMF-E6.

VMF-MONITORING: PC software to monitor and control the operation of one or several VMF controlled systems. Through the VMF-E5/RCC expansion board, the VMF-485EXP panel provides the RS485 serial communication port used by the VMF-MONITORING application for controlling the hydronic system. The maximum number of controllable systems, each with VMF-E5 and VMF-485EXP expansion, is 10 (not available for VMF-E6).

AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.

BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.

COMPATIBILITY OF VMF COMPONENTS WITH ON/OFF FAN COILS



Type of component:

- Thermostat board
- Thermostat board + Command interface
- Expansion board
- Command interfaces

Note:

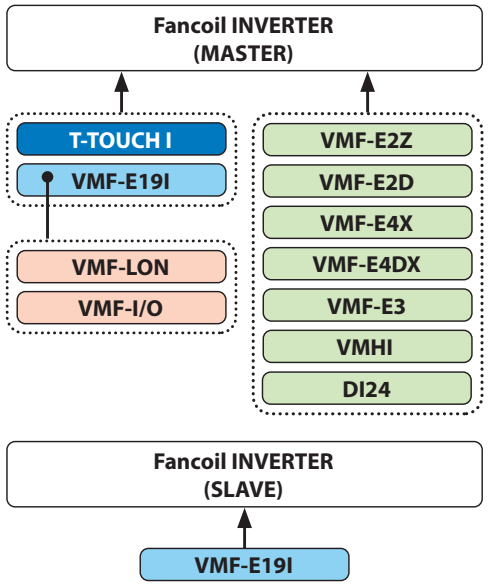
— Each fan coil (Master or Slave) may have just one thermostat board, selected from those that are compatible;

— The E19 thermostat board can manage just one expansion board, selected from those available;

— Each Master fan coil must have just ONE command interface, selected from those that are compatible:

Command interfaces	Compatible ranges or models
VMF-E2Z	FCZ (AS-AF-U-UA-UF)
	FCZ-D (DS)
	FCZ-H
VMF-E2D	Omnia UL (S)
VMF-E2H	Onmia HL (S-SM)
VMF-E4X (E4DX) / VMF-E3	FCZ (AS-AF-U-UA-UF)
	FCZ-D (DS)
	FCZ-H
	Omnia UL (S)
	Omnia radiant
	FCW
T-TOUCH	FCZ (AS-AF-U-UA-UF-DS)
	FCZ-D (DS)
	FCZ-H
VMHI / DI24	FCZ (AS-AF-U-UA-UF)
	FCZ-D (DS)
	FCZ-H
	Omnia UL (S)
	Omnia radiant

COMPATIBILITY OF VMF COMPONENTS WITH INVERTER FAN COILS



Type of component:

- Thermostat board
- Thermostat board + Command interface
- Expansion board
- Command interfaces

Note:

— Each fan coil (Master or Slave) may have just one thermostat board, selected from those that are compatible;

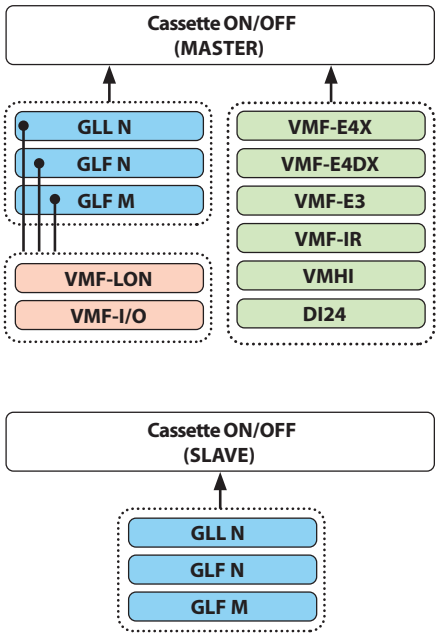
— The E19I thermostat board can manage just one expansion board, selected from those available;

— Each Master fan coil must have just ONE command interface, selected from those that are compatible:

Command interfaces	Compatible ranges or models
VMF-E2Z	FCZI (AS-AF-U-UF)
	FCZI-H

Command interfaces	Compatible ranges or models
VMF-E2D	Omnia ULI (S)
VMF-E4X (E4DX) / VMF-E3	FCZI (AS-AF-U-UF)
	FCZI-D (DS)
	Omnia ULI (S)
	Omnia radiant plus
	FCWI
T-TOUCH-I	FCZI (AS-AF-U-UF)
VMHI / DI24	FCZI (AS-AF-U-UF)
	FCZI-D (DS)
	Omnia ULI (S)
	Omnia radiant plus

COMPATIBILITY OF VMF COMPONENTS WITH ON/OFF CASSETTES



Type of component:

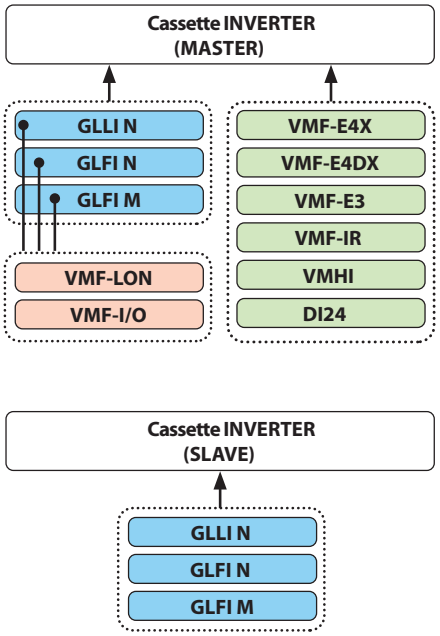
- Delivery suction grille with thermostat board
- Expansion board
- Command interfaces

Note:

— Each Cassette (Master or Slave) must have a delivery recovery grille (fitted with a VMF thermostat board) selected from those that are compatible;
— The delivery recovery grilles can manage just one expansion board, selected from those available;
— Each Master Cassette must have just ONE command interface, selected from those that are compatible:

Command interfaces	Compatible ranges or models
VMF-E4X (E4DX) / VMF-E3	FCL
	VEC
VMF-IR	FCL
	VEC
VMHI / DI24	FCL
	VEC

COMPATIBILITY OF VMF COMPONENTS WITH INVERTER CASSETTES



Type of component:

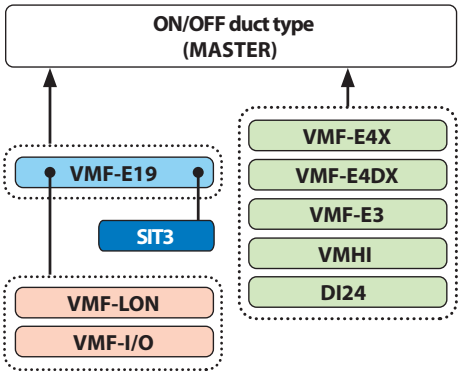
- Delivery suction grille with thermostat board
- Expansion board
- Command interfaces

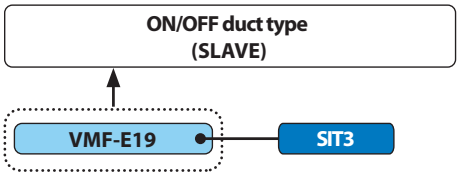
Note:

— Each Cassette (Master or Slave) must have a delivery recovery grille (fitted with a VMF thermostat board) selected from those that are compatible;
— The delivery recovery grilles can manage just one expansion board, selected from those available;
— Each Master Cassette must have just ONE command interface, selected from those that are compatible:

Command interfaces	Compatible ranges or models
VMF-E4X (E4DX) / VMF-E3	FCLI
	VEC-I
VMF-IR	FCLI
	VEC-I
VMHI / DI24	FCLI
	VEC-I

COMPATIBILITY OF VMF COMPONENTS WITH ON/OFF DUCT TYPE FAN COILS





Type of component:

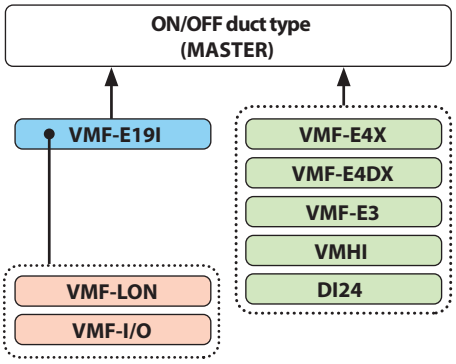
- Thermostat board
- Motor control board
- Expansion board
- Command interfaces

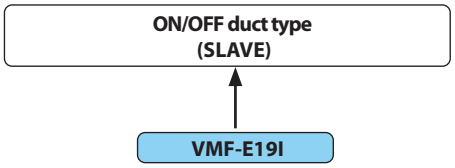
Note:

— Each duct type fan coil (Master or Slave) may have just one thermostat board, selected from those that are compatible;
— The VMF-E19 thermostat board can manage just one expansion board, selected from those available;
— Depending on the size of the duct type fan coil, a motor control board (VMF-SIT3 or SIT3) may be needed;
— Each Master fan coil must have just ONE command interface, selected from those that are compatible:

Command interfaces	Compatible ranges or models
VMF-E4X (E4DX) / VMF-E3	VED
	VES
	FCZ PO
	FCY
	Omnia UL (P - PAF)
	FCZ-H (P-PO)
VMHI / DI24	VED
	VES
	FCZ PO
	FCY
	Omnia UL (P - PAF)
	FCZ-H (P-PO)

COMPATIBILITY OF VMF COMPONENTS WITH INVERTER DUCT TYPE FAN COILS





Type of component:

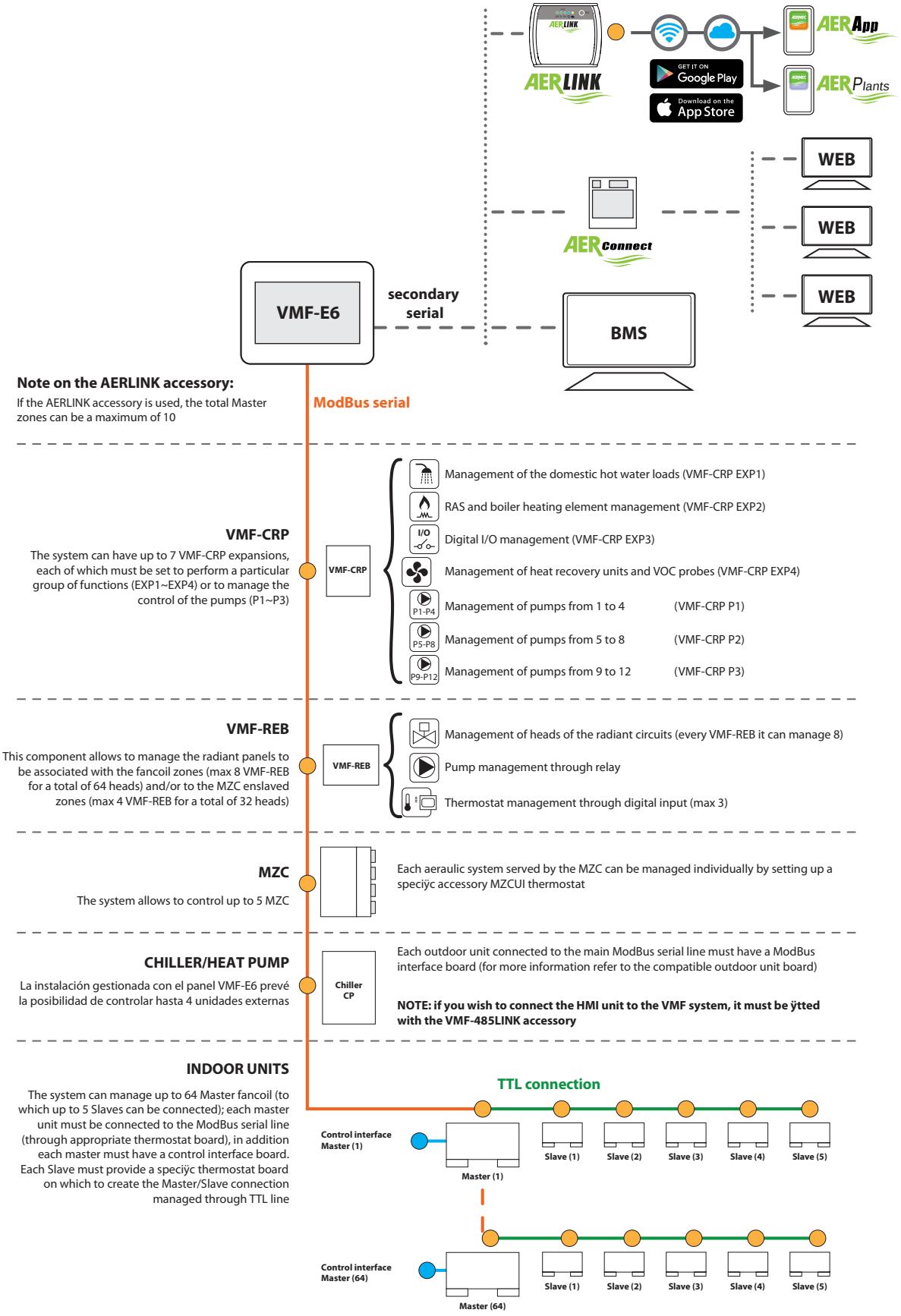
- Thermostat board
- Expansion board
- Command interfaces

Note:

— Each duct type fan coil (Master or Slave) may have just one thermostat board, selected from those that are compatible;
— The VMF-E19I thermostat board can manage just one expansion board, selected from those available;
— Each Master fan coil must have just ONE command interface, selected from those that are compatible:

Command interfaces	Compatible ranges or models
VMF-E4X (E4DX) / VMF-E3	VED I
	VES I
	FCZI P
	FCYI
	Omnia UL (P - PAF)
	FCZI-H (P-PO)
VMHI / DI24	VED I
	VES I
	FCZI P
	FCYI
	Omnia UL (P - PAF)
	FCZI-H (P-PO)

EXAMPLE OF SYSTEM COMPONENTS WITH VMF-E6



ATTENTION: if one (or more) areas are controlled with an FCWI fan coil (each of which require the VMF-485LINK interface), these areas cannot have a Slave unit.

EXAMPLE OF SYSTEM COMPONENTS WITH VMF-E5

Note on the AERLINK accessory:

If the AERLINK accessory is used, the total Master zones can be a maximum of 10

VMF-CRP

The system can have up to 4 VMF-CRP expansions, each of which must be set to manage the control of pumps or heat recovery units, VOC probes and boiler

VMF-CRP

- Management of heat recovery units, VOC probes and boiler
- P1-P4 — Management of pumps from 1 to 4
- P5-P8 — Management of pumps from 5 to 8
- P9-P12 — Management of pumps from 9 to 12

VMF-ACS

This component, supplied as an electrical panel, allows to manage all the loads associated with the production of domestic hot water. Remember that if the MULTICONTROL accessory is provided, the domestic hot water production will be mandatorily managed by the same, making the VMF-ACS electrical panel not compatible

VMF-ACS

- System storage tank probe management
- Domestic hot water storage tank probe management
- 3-way valve or domestic hot water pump management
- Electric resistance management for domestic hot water production (RAS)
- Boiler, 3-way valve or system pump management
- I/O — Multi-function output management

CHILLER/HEAT PUMP

The system managed by the VMF-E5 panel foresees the possibility to control one outdoor unit (if you want to manage up to 4 outdoor unit, it will be necessary to provide the MULTICONTROL accessory)

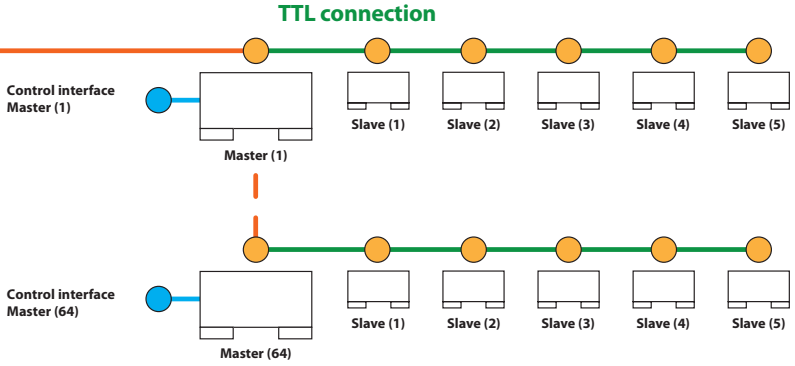
Chiller CP

The outdoor unit connected to the main ModBus serial line must have a ModBus interface board (for more information refer to the compatible outdoor unit board); if the MULTICONTROL accessory is provided, remember that each outdoor unit connected must be supplied with appropriate ModBus serial interface board

NOTE: if you wish to connect the HMI unit to the VMF system, it must be ÿtted with the VMF-485LINK accessory

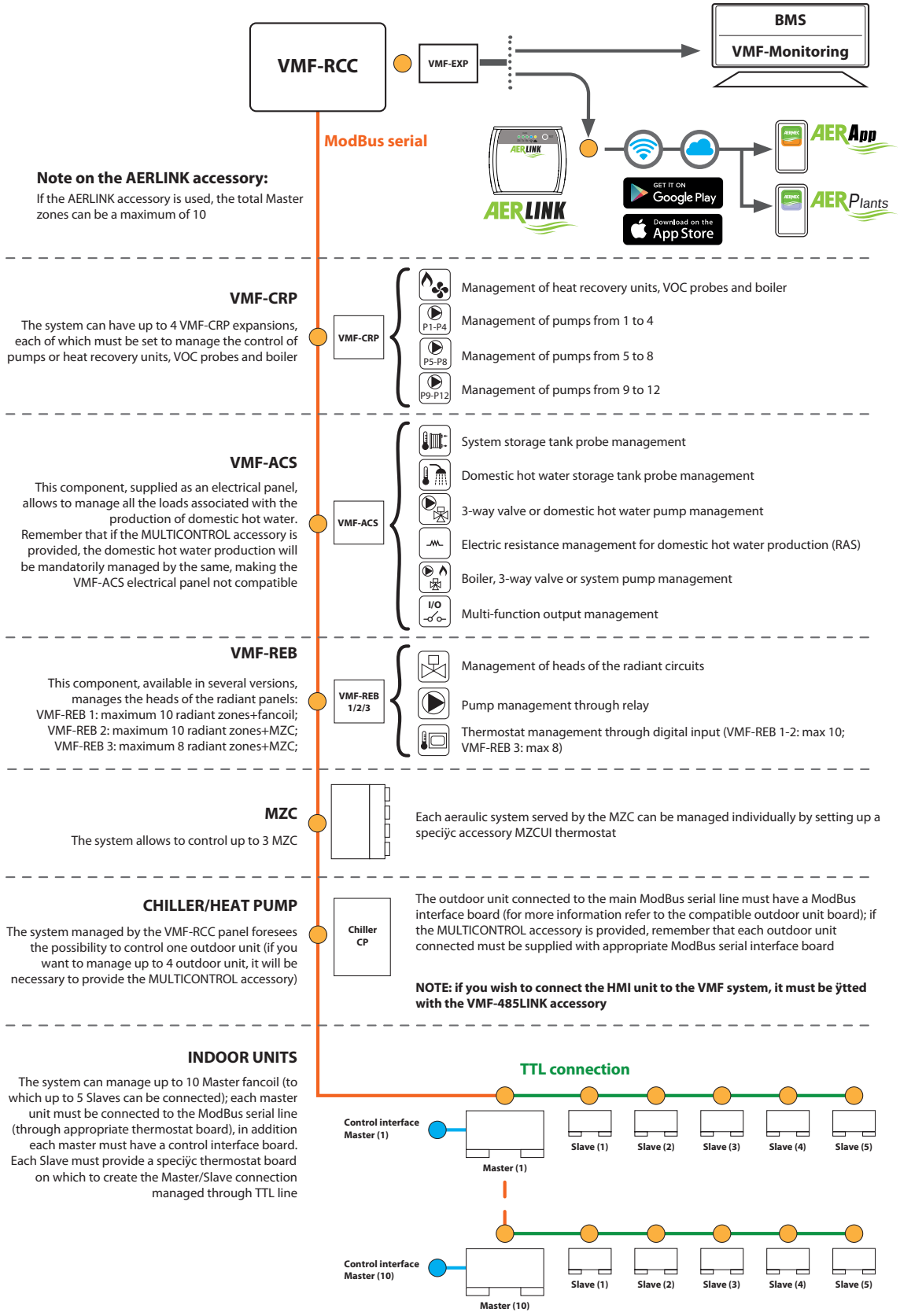
INDOOR UNITS

The system can manage up to 64 Master fancoil (to which up to 5 Slaves can be connected); each master unit must be connected to the ModBus serial line (through appropriate thermostat board), in addition each master must have a control interface board. Each Slave must provide a speciÿc thermostat board on which to create the Master/Slave connection managed through TTL line



ATTENTION: if one (or more) areas are controlled with an FCWI fan coil (each of which require the VMF-485LINK interface), these areas cannot have a Slave unit.

EXAMPLE OF SYSTEM COMPONENTS WITH VMF-RCC



ATTENTION: if one (or more) areas are controlled with an FCWI fan coil (each of which require the VMF-485LINK interface), these areas cannot have a Slave unit.

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HEAT RECOVERY UNIT

Objective air quality and energy saving: Aermec offers a large range of air-air heat recovery units for industrial and commercial systems and for Controlled Mechanical Ventilation Systems for residential.
The heat recovery units, provided with appropriate accessories (heat exchange coils, heat pump refrigerant circuit, etc.), actively participate in the air treatment providing an important contribution to the air conditioning of the spaces served.
The catalogued range of nominal available air flow rates is from 100 to around 16.100 m^3/h.

HEAT RECOVERY UNITS		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
RPS	Counter-current flow heat recovery unit with inverter motor	800	-	-	224
REPURO	With cross-flow exchanger	100-650	-	-	229
TRS	Heat recovery unit with enthalpy exchanger	250-1300	-	-	235
RPLI	Counter-current flow heat recovery unit with inverter motor	200-3900	-	-	237
RTD	Thermodynamic recovery unit with integrated heat pump	1100-3200	-	-	242
RPF	High performance heat recovery unit with cross-current recuperator	790-4250	-	-	246
URX-CF	With cross-flow exchanger and refrigerant circuit	750-3300	-	-	250
URHE-CF	High efficiency version with cross-flow exchanger and refrigerant circuit	1000-3300	-	-	254
ERSR	High-efficiency heat recovery with rotary recovery unit	1000-30000	-	-	258

RPS

Counter-current flow heat recovery unit with inverter motor

Nominal air flow rate 800 m³/h

- **VMC solution for classrooms, bars, restaurants, offices, hotels, shops**
- **Minimum air flow rate 800 m³/h**
- **Fully silent operation**
- **Ventilation management by VOC probe**
- **Photocatalytic device**

DESCRIPTION

RPS is a counter-current heat recovery unit ideal for retrofit solutions for classrooms, offices, hotels, bars, restaurants, shops. With versatile installation and compact dimensions, it can be adapted to any existing space by drilling just two 300mm holes in one of the perimeter walls of the building, thus avoiding outside air ducts.
Thanks to the high thermal efficiency of the heat recovery unit, the appropriately filtered and treated fresh air is introduced at a temperature close to that of the room.

VERSIONS

RPS800A: With rear external air inlets and upper air delivery
RPS800B: With side external air inlets and upper air delivery

FEATURES

Structure

The external metal casing is treated with RAL9003 anti-corrosion polyester paint and insulated internally with a 12mm thick high sound-absorbing mattress with low thermal conductivity.
The natural anodised aluminium delivery air distribution grille is adjustable. The stale air is suctioned through special micro-punched grilles directly in the unit casing.

Ventilation group

The ventilation unit consists of fan plug fans with rear-facing blades and a directly coupled Ec-type electric motor.
The use of fan plug fans reduces the power input compared to fans with front-facing blades.

Heat exchanger

Plate heat exchanger with counter-current flow.

Condensate drip

The aluminium condensate drip tray is thermally insulated and must be connected to a condensate discharge system.

Air filtration

As standard the fresh air is filtered through an ePM1 50% filter in accordance with ISO 16890 (F7 in accordance with EN 779).
As standard the exhaust air is filtered through an ePM10 50% filter in accordance with ISO 16890 (M5 in accordance with EN 779).

For version A only, other Coarse 30% filters in accordance with ISO 16890 (G2 in accordance with EN 779) are fitted to the outside air vents to protect the unit from large components such as pollen, leaves and insects. The filters are easily accessible for maintenance and cleaning.

Air sanitisation

As standard, the fresh air flow has a latest-generation device with a photo-catalytic UV lamp for active sanitisation.
The hydrogen peroxide produced by the photo-catalytic reaction, disseminated and carried by the air flow, makes this sanitisation action effective on the surfaces of the unit as well as in the air in the place of installation and by contact with the surfaces of the rooms treated.

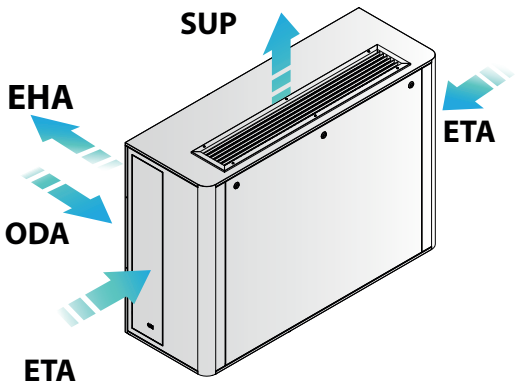
Regulation

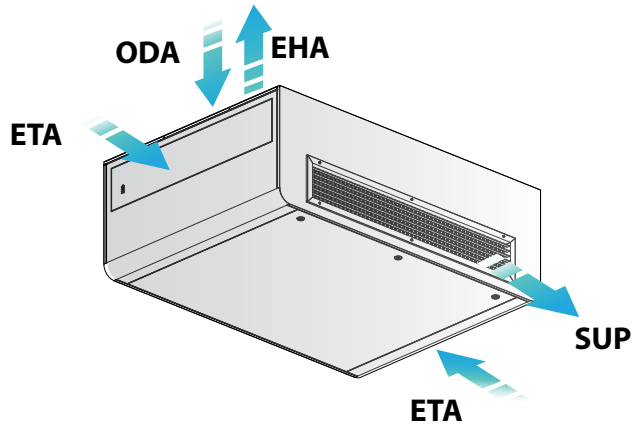
The power is supplied through the control board positioned on the inside panel of the heat recovery unit.
The unit is managed by a microprocessor control card and is controlled by the ultra-thin, flush-mounted control panel, which controls the functions from a capacitive touch screen with an LCD display.
The main adjustment functions are as follows:

- Manual fresh and exhaust air ventilation speed control
- Fresh and exhaust air ventilation speed control according to the air quality (by VOC probe)
- Freecooling
- Heat recovery unit anti-freeze function
- Ambient air cleaning function
- Photo-catalytic device management
- ON/OFF from digital input
- Management via RS485 serial with Modbus RTU protocol

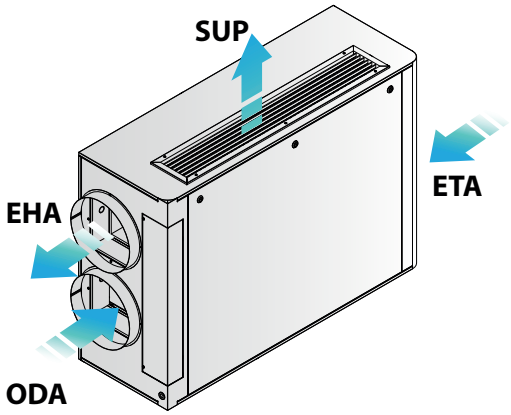
POSSIBLE INSTALLATIONS

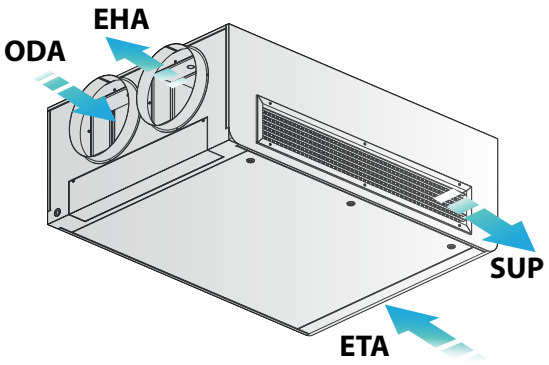
RPS800A





RPS800B





ODA = External air
ETA = Extracted air
SUP = Air introduced
EHA = Exhaust air

ACCESSORIES

AVM: Anti-vibration supports.

KVOC: The kit consists of the VOC probe, the 230V/24V power supply and cables for connecting the VOC probe, power supply and controller.

ACCESSORIES COMPATIBILITY

VOC probe kit

Accessory	RPS800A	RPS800B
KVOC800	•	•

Antivibration

Accessory	RPS800A	RPS800B
AVM	•	•

The accessory is not required for horizontal installation.

PERFORMANCE SPECIFICATIONS

SIZE			RPS800
Power supply			230V ~ 50Hz
Unit type			UVNR - UVB (Non-residential 2-way ventilation unit)
Nominal/maximum fresh air rate		m3/h	800
Nominal/maximum exhaust air rate		m3/h	750
Heat recovery system type			Statico a flussi controcorrente
Winter thermal efficiency	(1)	%	81
Heat capacity recovered in winter	(1)	kW	4,4
Summer thermal efficiency	(2)	%	77
Heat capacity recovered in summer	(2)	kW	1,9
Maximum electric input power		kW	0,300
Sound power L_wA		dB(A)	59,0
Fans			
Type			Plug fan EC
Number			1+1
Filters			
Fresh air filter			EPM1 50% (F7)
Exhaust air filter			EPM10 50% (M5)

(1) Fresh air: Tbs = 0°C; RH = 80%; Exhaust air Tbs = 20°C; RH = 50%; nominal air flow rate
(2) Fresh air: Tbs = 35°C; RH 50%; Exhaust air Tbs = 26°C; RH = 50%; nominal air flow rate

ROOM VENTILATION AIR FLOW RATES

School classrooms

For the calculation of the ventilation rate in school classrooms, reference can be made to the UNI 10339 standard (which sets the air renewal flow rate per student and by type of institution) and to Decree No. 81 of 20/03/2009 (which establishes the minimum and maximum number of students per class and by type of institution).

	UNI10339 - Sheet 3	Presidential decree no. 81 of 20/03/2009		Fresh air rate		Max occupants (fresh air rate 800 m3/h)
	Air flow rate per person	Pupils per class				Persons
	M3/h per person	Min	Max	Min	Max	No.
Schools						
Nursery school	14	18	29	259	418	56
Primary school	18	15	27	270	486	44
Middle school	22	18	30	389	648	37
High school	25	27	30	680	756	32

Bar, restaurants, officies, hotels, shops or stores

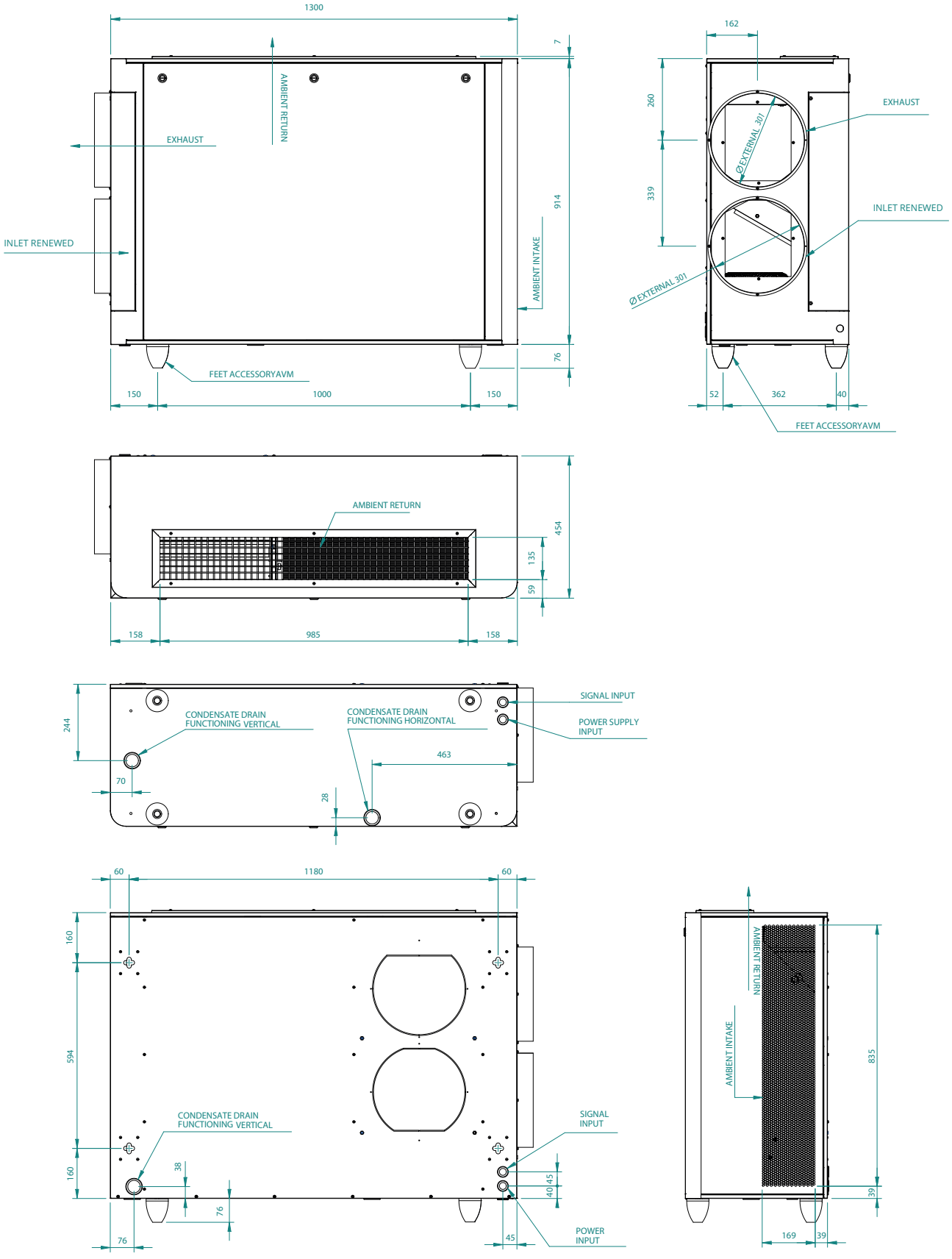
For the calculation of the ventilation rate in other types of buildings, reference can be made to the UNI 10339 standard, which sets the air renewal flow rate per person based on the type of indoor space.

	UNI10339 - Sheet 3	Max occupants (fresh air rate 800 m3/h)
	Air flow rate per person	Persons
	M^3/h per person	No.
Bars, Restaurants		
Bar	40	20
Dining rooms restaurants	36	22
Offices		
Open space offices	40	20
Hotels		
Hall, lounges	40	20
Dining rooms	36	22
Shops		
Beauty salons	50	16
Stores	41	19

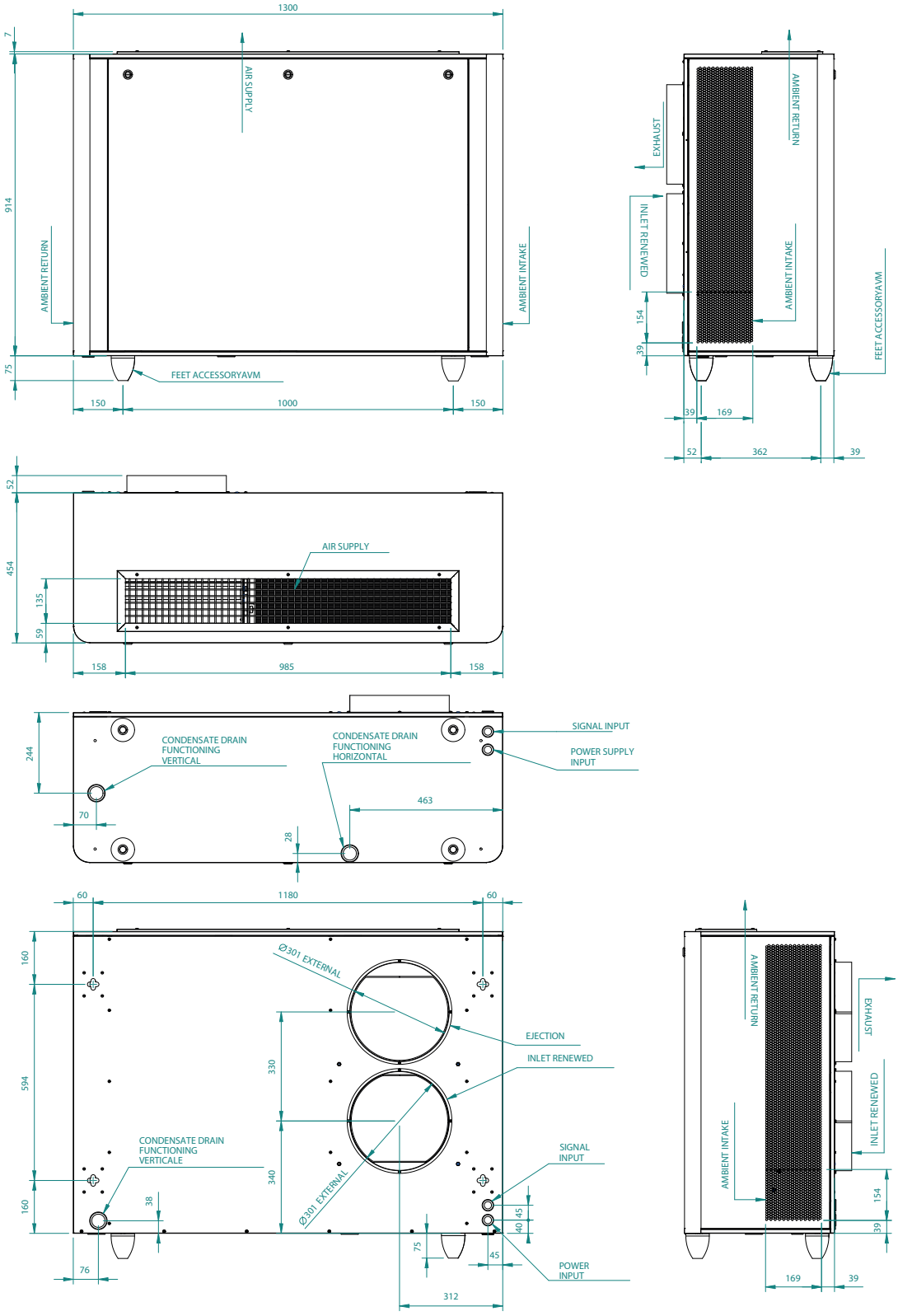
N.B.: the values given are indicative, assess the correct VMC sizing during the design phase.

DIMENSIONS

RPS800B



RPS800A



		RPS800A	RPS800B
Dimensions and weights			
Empty weight	kg	116	120

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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REPURO

Duct-type residential 2-way ventilation unit with heat recovery

- **Compact dimensions**
- **High efficiency, reaching 90%+ (UNI EN 308)**
- **Cold Plasma purifier**

DESCRIPTION

REPURO it's an innovative counter-current heat recovery system that ensures the right air renewal in closed areas.
Thanks to the use of high-efficiency heat exchangers, REPURO allows fresh air to be delivered at a temperature close to that of the room itself, thereby cutting the energy costs that would be incurred with a traditional air renewal system or mechanical ventilation alone.

VERSIONS

. Standard
R With electric heater
Installation:
— **Ceiling or wall**: (100 - 170)
— **Floor or wall**: (250 - 650)

FEATURES

— Hexagonal heat recovery unit with a wider heat exchange surface;
— Free-standing sheet metal panels with internal insulation;
— Standard G4 filter on the fresh air;
— Standard G2 filter on the exhaust air;
— The filters can be removed for cleaning or replacement;
— The unit has in-built protection against frost formation with temperatures > -10°C;
— High efficiency, reaching 90%+ (UNI EN 308);
— Free cooling in the intermediate seasons, thanks to the automatic bypass function (not available for sizes 100 - 170);
— "No frost" bypass (RePuro 450-550-650), with PLSNF accessory;
— Air purification guaranteed by the Cold Plasma purifier: this is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionised air, free of foul odours;
— Nominal flow rate regulation from 0 to 100%;
— Centrifugal fans, directly coupled with the EC high-efficiency brushless electric motors with variable speed (ERP2015);
— Microprocessor control card that interfaces with the VMF system;
— Unit control by means of a wired panel (supplied as standard) with an innovative, extremely thin design. The functions are controlled via the capacitive touch keypad with an LCD display. Electric heater activation in the RePuro_R versions. Light grey front panel PANTONE COOL GRAY 1C;
— The 6-metre wired cable is provided as standard;
— Easy mounting on the wall (with the plate (provided), or on the floor (with the AVM accessory);
— Can adapt to an existing system;
— Compact dimensions;
— Silent operation;
— Filter change warning;
— Installation requires a condensate discharge system.

ACCESSORIES

VCH: 3-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.
VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.
BC: Condensate drip.
AVM: Anti-vibration supports.
SSR: Wall mounting kit
FF7: Filter with F7 efficiency class for the fresh air.
BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.
KSAE: External air sensor.
VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

Plenum with multi-way flange

PLS350: Vacuum delivery plenum with sound-absorbent covering and multi-way flange.
PLS350E: Delivery plenum with sound-absorbent covering and multi-way flange. An electric heater is housed inside.

PLS350L: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp is housed inside.
PLS350LE: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp and an electric heater are housed inside.
PLS350W: Delivery plenum with sound-absorbent covering and multi-way flange. A water coil with condensate collection tray is housed inside; it is mandatory to fit the water valve as well.
PLS350WE: Delivery plenum with sound-absorbent covering and multi-way flange. An electric heater and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.
PLS350WL: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.
PLS350WLE: Delivery plenum with sound-absorbent covering and multi-way flange. A water coil with condensate collection tray, a germicidal lamp, and an electric heater are housed inside; it is mandatory to fit the water valve as well.
PLS650: Vacuum delivery plenum with sound-absorbent covering and multi-way flange.
PLS650E: Delivery plenum with sound-absorbent covering and multi-way flange. An electric heater is housed inside.
PLS650L: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp is housed inside.
PLS650LE: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp and an electric heater are housed inside.
PLS650W: Delivery plenum with sound-absorbent covering and multi-way flange. A water coil with condensate collection tray is housed inside; it is mandatory to fit the water valve as well.
PLS650WE: Delivery plenum with sound-absorbent covering and multi-way flange. An electric heater and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.
PLS650WL: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.
PLS650WLE: Delivery plenum with sound-absorbent covering and multi-way flange. A water coil with condensate collection tray, a germicidal lamp, and an electric heater are housed inside; it is mandatory to fit the water valve as well.

Plenum with 1-way flange

PLSM350: Vacuum delivery plenum with sound-absorbent covering and 1-way flange.
PLSM350E: Delivery plenum with sound-absorbent covering and 1-way flange. An electric heater is housed inside.
PLSM350L: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp is housed inside.
PLSM350LE: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp and an electric heater are housed inside.
PLSM350W: Delivery plenum with sound-absorbent covering and 1-way flange. A water coil with condensate collection tray is housed inside; it is mandatory to fit the water valve as well.
PLSM350WE: Delivery plenum with sound-absorbent covering and 1-way flange. An electric heater and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.
PLSM350WL: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.
PLSM350WLE: Delivery plenum with sound-absorbent covering and 1-way flange. A water coil with condensate collection tray, a germicidal lamp, and an electric heater are housed inside; it is mandatory to fit the water valve as well.
PLSM650: Vacuum delivery plenum with sound-absorbent covering and 1-way flange.
PLSM650E: Delivery plenum with sound-absorbent covering and 1-way flange. An electric heater is housed inside.
PLSM650L: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp is housed inside.
PLSM650LE: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp and an electric heater are housed inside.
PLSM650W: Delivery plenum with sound-absorbent covering and 1-way flange. A water coil with condensate collection tray is housed inside; it is mandatory to fit the water valve as well.
PLSM650WE: Delivery plenum with sound-absorbent covering and 1-way flange. An electric heater and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.
PLSM650WL: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.
PLSM650WLE: Delivery plenum with sound-absorbent covering and 1-way flange. A water coil with condensate collection tray, a germicidal lamp, and an electric heater are housed inside; it is mandatory to fit the water valve as well.

VMF system

VMF-E5B: White recessed panel with backlit graphic LCD display and capacitive keypad for centralised command/control of a complete hydronic system.
VMF-E5N: Black recessed panel with backlit graphic LCD display and capacitive keypad for centralised command/control of a complete hydronic system.
VMF-VOC: Air quality detection accessory.

ACCESSORIES COMPATIBILITY

Model	Ver	100	170	250	350	450	550	650
BMConverter	.,R	•	•	•	•	•	•	•
KSAE	.,R	•	•	•	•	•	•	•
VMF-CRP	.,R	•	•	•	•	•	•	•

Plenum with multi-way flange

Model	Ver	100	170	250	350	450	550	650
PLS350	.	•						
PLS350E	.	•						
PLS350L	.	•						
PLS350LE	.	•	•	•	•			
	R	•	•	•				
PLS350W (1)	.	•						
PLS350WE (1)	.	•						
PLS350WL (1)	.	•						
PLS350WLE (1)	.	•						
PLS650	.,R					•	•	•
PLS650E	.,R					•	•	•
PLS650L	.,R					•	•	•
PLS650LE	.,R					•	•	•
PLS650W (1)	.,R					•	•	•
PLS650WE (1)	.,R					•	•	•
PLS650WL (1)	.,R					•	•	•
PLS650WLE (1)	.,R					•	•	•

(1) It is mandatory to also provide for the water valve.

Water valves

3 way valve kit

Ver	100	170	250	350	450	550	650
., R	VCH	VCH	VCH	VCH	VCH	VCH	VCH

2 way valve kit

Ver	100	170	250	350	450	550	650
., R	VCHD	VCHD	VCHD	VCHD	VCHD	VCHD	VCHD

Installation accessories

Condensate drip

Model	Ver	100	170	250	350	450	550	650
BC10 (1)	.,R	•	•	•	•	•	•	•
BC20 (2)	.,R	•	•	•	•	•	•	•

(1) For vertical installation.
(2) For horizontal installation.

Anti-vibration support feet

Ver	100	170	250	350	450	550	650
., R	-	-	AVM	AVM	AVM	AVM	AVM

The accessory cannot be fitted on the configurations indicated with -

Wall mounting kit

Ver	100	170	250	350	450	550	650
., R	-	-	SSR	SSR	SSR	SSR	SSR

The accessory cannot be fitted on the configurations indicated with -

External air sensor

Ver	100	170	250	350	450	550	650
., R	BMConverter	BMConverter	BMConverter	BMConverter	BMConverter	BMConverter	BMConverter

Accessories

Plenum with multi-way flange

Model	Ver	100	170	250	350	450	550	650
PLS350	.	•						
PLS350E	.	•						
PLS350L	.	•						
PLS350LE	.	•	•	•	•			
	R	•	•	•				
PLS350W (1)	.	•						
PLS350WE (1)	.	•						
PLS350WL (1)	.	•						
PLS350WLE (1)	.	•						
PLS650	.,R					•	•	•
PLS650E	.,R					•	•	•
PLS650L	.,R					•	•	•
PLS650LE	.,R					•	•	•
PLS650W (1)	.,R					•	•	•
PLS650WE (1)	.,R					•	•	•
PLS650WL (1)	.,R					•	•	•
PLS650WLE (1)	.,R					•	•	•

(1) It is mandatory to also provide for the water valve.

Plenum with 1-way flange

Model	Ver	100	170	250	350	450	550	650
PLSM350	.,R	•	•	•	•			
PLSM350E	.,R	•	•	•	•			
PLSM350L	.,R	•	•	•	•			
PLSM350LE	.,R	•	•	•	•			
PLSM350W (1)	.,R	•	•	•	•			
PLSM350WE (1)	.,R	•	•	•	•			
PLSM350WL (1)	.,R	•	•	•	•			
PLSM350WLE (1)	.,R	•	•	•	•			
PLSM650	.,R					•	•	•
PLSM650E	.,R					•	•	•
PLSM650L	.,R					•	•	•
PLSM650LE	.,R					•	•	•
PLSM650W (1)	.,R					•	•	•
PLSM650WE (1)	.,R					•	•	•
PLSM650WL (1)	.,R					•	•	•
PLSM650WLE (1)	.,R					•	•	•

(1) It is mandatory to also provide for the water valve; if you intend to use the system with post heating battery, or in any case in all those cases in which the air temperature in the channels could cause condensation on the external surfaces of the pipes, it is mandatory to adequately isolate the components of the system.

VMF system

Model	Ver	100	170	250	350	450	550	650
VMF-E5B	.,R	•	•	•	•	•	•	•
VMF-E5N	.,R	•	•	•	•	•	•	•
VMF-VOC	.,R	•	•	•	•	•	•	•

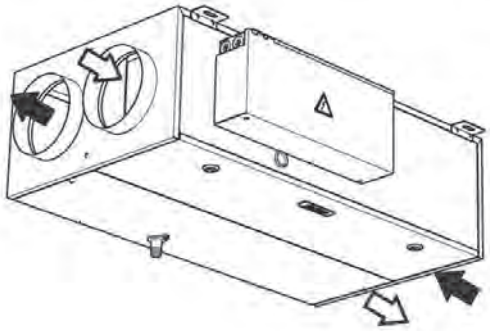
PERFORMANCE SPECIFICATIONS

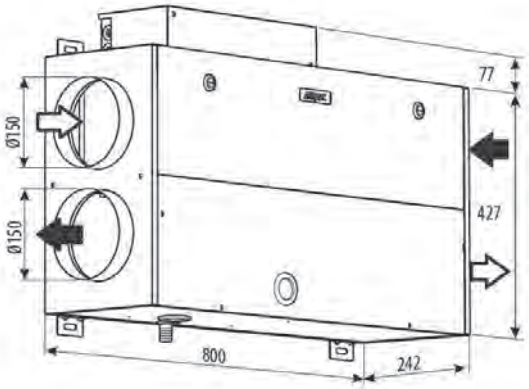
Size		100 (1)	170 (1)	250 (2)	350 (2)	450 (2)	550 (2)	650 (2)
Heat recovery unit								
Power supply					230V ~ 50Hz			
Summer recovery (3)								
Recovery efficiency	%	90	85	86	82	83	81	78
Recovered heating power	W	180	289	430	573	750	887	1015
Winter recovery (4)								
Recovery efficiency	%	94	91	91	89	90	88	87
Recovered heating power	W	957	1573	2329	3171	4118	4940	5734
General data								
SEC	kWh/(m^{2}a)	-36	-38	-37	-40	-40	-40	-40
CLASS					A			
Total input power	W	45	65	160	180	220	280	360
Heat recovery unit performance								
Nominal air flow rate	m^3/h	100	170	250	350	450	550	650
High static pressure	Pa	85	20	195	133	100	120	70

(1) Ceiling or wall installation
(2) Floor or wall installation
(3) Exhaust air temperature 26°C D.B., 50% R.H; Fresh air temperature 32°C D.B., 50% R.H.
(4) Exhaust air temperature 20°C D.B., 50% R.H; Fresh air temperature -10°C D.B., 80% R.H.

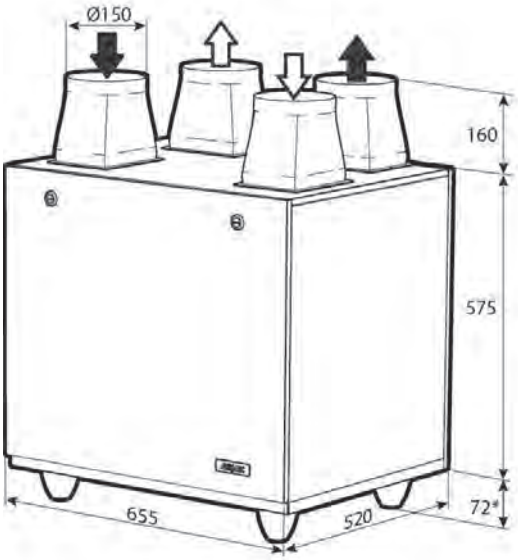
DIMENSIONS (MM) AND WEIGHTS

RePuro 100 - 170

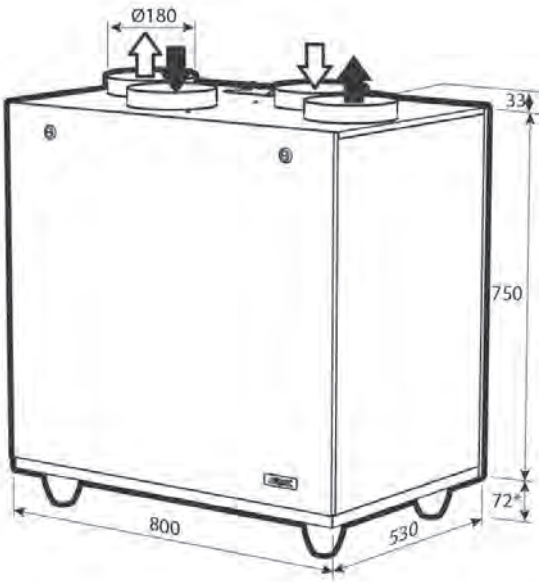


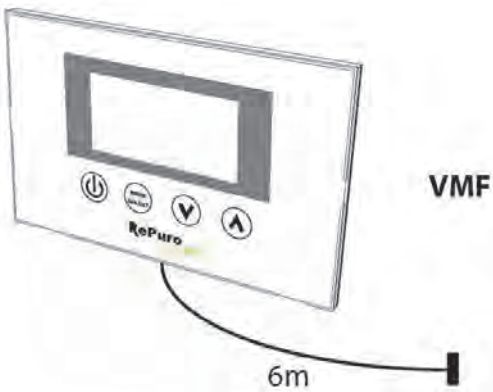


RePuro 250 - 350



RePuro 450 - 550 - 650





VMF - E4 RePuro

Size			100 (1)	170 (1)	250 (2)	350 (2)	450 (2)	550 (2)	650 (2)
Dimensions and weights									
Empty weight	.,R	kg	25	25	48	48	55	55	55

(1) Ceiling or wall installation
(2) Floor or wall installation

RePuro Distribution

A complete range for air distribution which, combined with the innovative RePuro heat recovery and air purification units, provides designers, installers and users with an efficient, practical installation solution that guarantees optimum comfort throughout the lifecycle of the system.

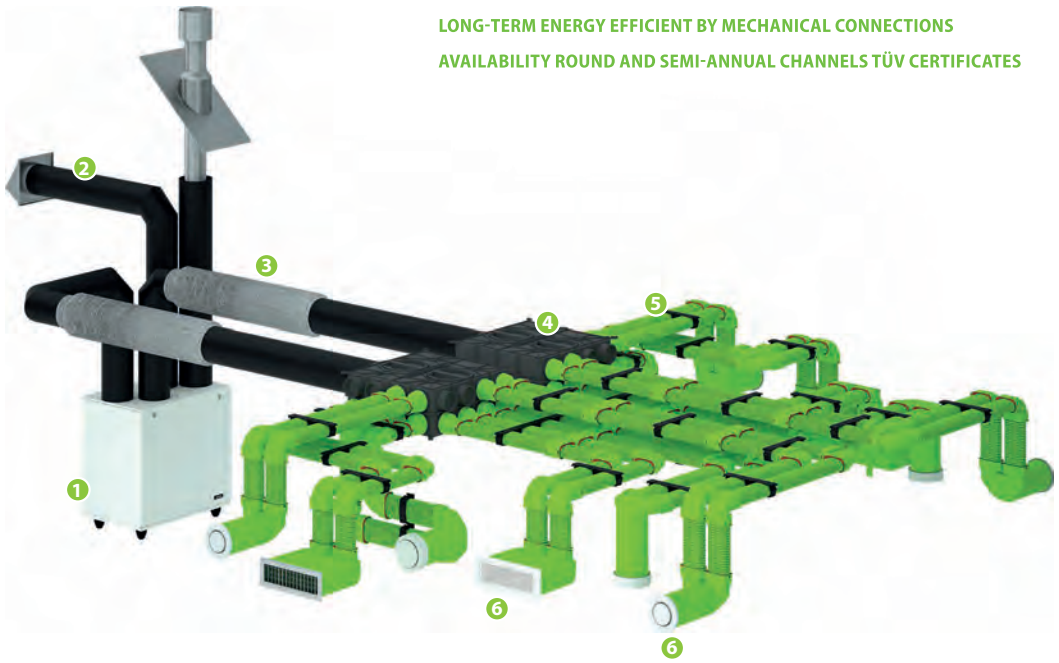
EASY "PLUG & PLAY" INSTALLATION

LOW DUCT HEIGHT FOR IN-WALL AND SCREED-FLOOR APPLICATION

ANTI-STATIC AND ANTI-BACTERIAL PROPERTIES

LONG-TERM ENERGY EFFICIENT BY MECHANICAL CONNECTIONS

AVAILABILITY ROUND AND SEMI-ANNUAL CHANNELS TÜV CERTIFICATES



The picture is intended purely as an example of a system with semi-rigid, semi-oval, antibacterial ducts. This example consists of:

1 RePuro heat recovery units
2 Duct with fresh/exhaust air intake
3 Interconnection between RePuro and the distribution box
4 Hydronic box
5 Air distribution with semi-rigid, semi-oval, antibacterial ducts
6 Terminals with designer intakes or grilles

In addition to point 5, the Aermec range also includes a further 2 air distribution systems:

— Air distribution with semi-rigid, round ducts
— Air distribution with rigid, rectangular ducts

For more information about all the types and solutions available, refer to the "AerDistribution" selection program and the technical documentation, both available at www.aermec.com

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TRS

Heat recovery unit with enthalpy exchanger

- **Compact dimensions**
- **Fans coupled to brushless Ec motors with low energy consumption**
- **Easy installation**
- **Horizontal installation**

DESCRIPTION

The TRS heat recoveries, for horizontal inside installation allow the combination of maximum comfort with a safe energy saving.
It is more and more necessary in modern systems to create a forced ventilation, but also involves the expulsion of climate-controlled air, thus determining a higher energy consumption.
TRSintends to solve these problems using a static heat recovery unit that saves most of the energy that would otherwise be lost.
The unit adopts high-efficiency heat recovery with countercurrent flows which consists of flat sheets of special paper that allow you to recover both sensible and latent heat (humidity). Therefore, no condensate drip tray or the relative drain pipe is required.
The high static pressures available allow ducts to be mounted, thereby allowing the extraction or input of air across multiple environments simultaneously.
They can be integrated in the direct expansion and hydronic systems both in heating and cooling mode.

FEATURES

— Very compact units that can only be installed horizontally, which require simple maintenance of the heat exchanger and filters both removable from the side.
— Free-cooling in mid-season thanks to the automatic by-pass function;
— Centrifugal fans with Brushless EC motor, with the possibility to adjust the speed on 10 different levels through the obligatory accessory TRSPTS1, touch screen control panel. In the absence of this accessory it will only be possible, by acting on the remote on-off contact, to operate the fans always at maximum speed;
— Built-in electrical panel with electronic board for the control of ventilation and free-cooling functions;
— Hexagonal-shaped enthalpy recovery unit to increase the exchange surface;
— Self-supporting panels in galvanized sheet with insulation, both internal and external. Access via the side door;
— ISO 16890 ePM$_{25}$ 95% efficiency class filter with synthetic cleanable media and COARSE 50% pre-filter on fresh air, COARSE 50% filter on return air intake;
— Pressure switch with integrated dirty filter signal;
— Connections to funnels with plastic fittings;
— Silent operation;
— The installation does not require a condensate drain system.

ACCESSORIES

The following accessories are available for complete control of the TRS recovery units:
TRSPTS1: Control panel with Touch Screen. Mandatory accessory.
TRSQSW: Wall CO2 probe.
TRSUSW: Wall humidity probe.

ACCESSORIES COMPATIBILITY

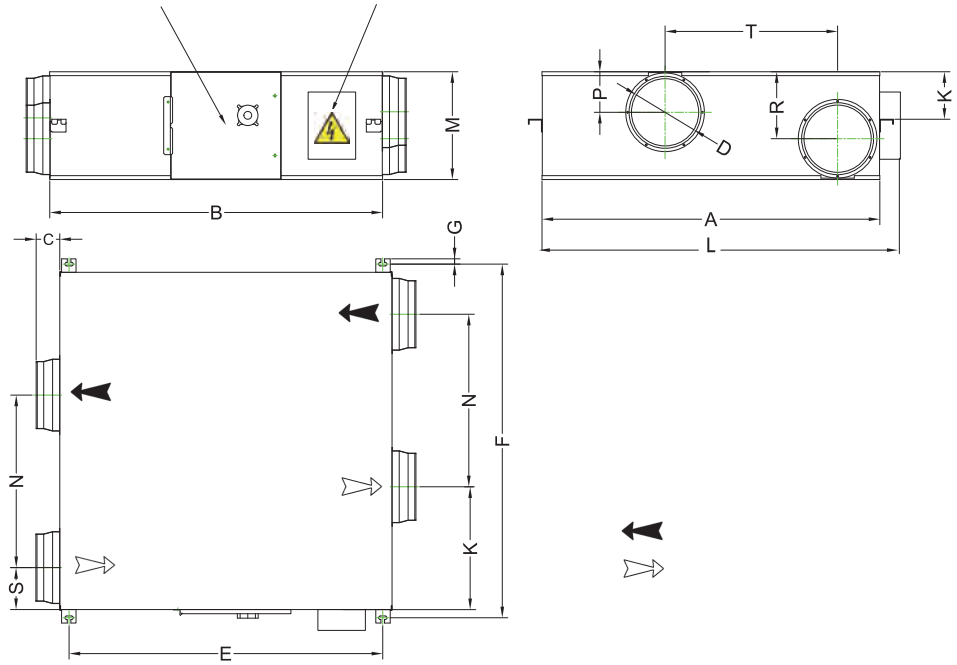
Accessory	TRS252	TRS352	TRS502	TRS652	TRS802	TRS1002	TRS1302
TRSPTS1	•	•	•	•	•	•	•
TRSQSW	•	•	•	•	•	•	•
TRSUSW	•	•	•	•	•	•	•

PERFORMANCE SPECIFICATIONS

		TRS252	TRS352	TRS502	TRS652	TRS802	TRS1002	TRS1302
Fans (1)								
Nominal air flow rate	m^3/h	250	350	500	650	800	1000	1300
Nominal useful head	Pa	90	140	110	100	140	140	140
Maximum input power	A	0,5	0,6	0,6	1,2	1,4	2,1	2,7
Type	type				EC			
Speed number	no.	10	10	10	10	10	10	10
SFP int.	$W/(m^3/s)$	812,00	670,00	547,00	846,00	865,00	881,00	873,00
Maximum input power	kW	0,08	0,13	0,15	0,23	0,32	0,39	0,50
Sound data (2)								
Sound pressure level (1 m)	dB(A)	34,0	37,0	39,0	40,0	42,0	43,0	44,0
Heating performances (3)								
Winter thermal efficiency	%	73,0	74,0	76,0	74,0	76,0	76,0	74,2
Enthalpy winter efficiency	%	65,0	65,0	67,0	65,0	65,0	62,0	59,0
Cooling performances (4)								
Summer thermal efficiency	%	73,0	74,0	76,0	74,0	76,0	76,0	74,0
Summer enthalpy efficiency	%	62,0	62,0	63,0	60,0	63,0	60,0	58,0
Heat recovery unit								
Dry heating efficiency (5)	%	73,0	74,0	76,0	74,0	76,0	76,0	74,0
Power supply					230V~50Hz - 60Hz			

(1) Performances referring to clean filters
(2) Sound pressure level assessed at 1m from suction / discharge ports and the inspection side at nominal conditions in free field.
(3) Recovery air 20 °C 50%; External air 5 °C 80%.
(4) Recovery air 26 °C 50%; External air 34 °C 50%.
(5) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K , excluding the heating gain generated by the fan motors and the internal leakage.

DIMENSIONS AND WEIGHTS



Model	Dimension / [mm]																Net weight / Gross weight [kg]
	A	B	C	D	E	F	G	L	T	K	M	N	P	R	S	Y	
TRS252	599	814	100	150	675	657	19	650	315	111	270	315	111	111	142	142	30/33
TRS352	804	814	100	150	675	862	19	855	480	111	270	480	111	111	162	162	37/41
TRS502	904	894	107	200	754	960	19	955	500	135	270	500	135	135	202	202	43/47
TRS652	884	1186	85	250	1115	940	19	945	428	170	388	428	170	170	228	228	65/70
TRS802	1134	1186	85	250	1115	1190	19	1200	678	170	388	678	170	170	228	228	71/76
TRS1002	1216	1199	85	250	1130	1273	19	1290	621	171	388	621	146	241	151	442	83/88
TRS1302	1216	1199	85	250	1130	1273	19	1290	621	171	388	621	146	241	151	442	83/88

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RPLI

Counter-current flow heat recovery unit with inverter motor

- **Compact dimensions**
- **EC fan Plug-fan**
- **Versions with water coil or electric for the post-heating**
- **Horizontal installation**

DESCRIPTION

The RPLI heat recoveries, for horizontal inside installation allow the combination of maximum comfort with a safe energy saving.
It is more and more necessary in modern systems to create a forced ventilation, but also involves the expulsion of climate-controlled air, thus determining a higher energy consumption.
The unit is equipped with a counter-current heat recovery unit and allows an effective heat exchange between the expulsion air flow and fresh air that is pre-heated or pre-cooled, depending on the season, thus saving the energy that would otherwise be lost with the expelled exhaust air.
They can be integrated in the direct expansion and hydronic systems both in heating and cooling mode.

VERSIONS

Horizontal installation:
RPLI (L o P): L low , P high, useful static pressure
RPLI_E: With electric heating coil.
RPLI_W: With water coil:Cooled / hot
Also to be used with cooled water:
— For sizes 030-100 in flow orientation 1 (°);
— Sizes 070-100 with flow orientation 2 (X), **in this configuration, the coil is not available for sizes 030-050;**
The following can only be used with hot water:
— **Sizes 140-400 with any type of flow configuration (° and X).**

FEATURES

— Plug-fan radial fan with EC motors;
— **Aluminium plate counter-current flow heat recovery unit with heating efficiency in compliance with the European regulation 1253, housing in condensate collection basin;**
— **Ventilation by-pass of the external air flow equipped with internal damper, with free cooling and even anti-freeze function;**
— **Synthetic filter class M5 according to EN779 placed on the expelled air intake;**
— **Synthetic filter class F7 according to EN779 placed on the external air inlet;**
— Filters fouling pressure switches assembled;
— Self-supporting sandwich panels in galvanised sheet metal with injected polyurethane insulation density 45 kg/m^3 and a thickness of 25 mm. The polyurethane is in compliance with the standard UL 94 class HBF and the panel with the standard NF P 512: 1986 in class M1;
— Condensate collection basin in galvanised steel;
— Easy accessible fans, from bottom for the sizes 030-100, from the side for the sizes 140-400;
— Accessible filters, from the top and from the bottom for the sizes 030-100, from the side for the sizes 140-400;
— The fan can be controlled with a 0-10 Vdc controller, RVC or RVCL accessory.

ACCESSORIES

Regulation

HRB: Electrical panel (IP56) to be installed outside the heat recovery unit. It is formed of a plastic electric box 300x220x120. It houses an electronic board for controlling the loads, 4 NTC temperature probes (6m long), a 4-pole serial cable + shield for connecting the control card to the user interface of the system, and an interface panel. Via the configuration of 10 DIP switches, the electronic board in the kit can control: an electric heater for pre-warming the air taken in from the room; up to 2 electric heaters (with cascade management) for the post-treatment of the fresh air delivered back into the room; a component for air purification (e.g. UV lamp, Plasmacluster, etc.).
RVC: Speed regulator supplied in n°2 pieces.

Additional modules

M4F: External module equipped with pre-filters class G4 (according to EN779) to be placed on the external air inlet.
MBF: External module with water cooling coil and condensate collection basin (only for sizes 140-400).
MBF_X: External module with water cooling coil and condensate collection basin (only for sizes 140X-400X).
MBP: Module with post-heating water coil.
MBE: Module with electric coil (anti-freeze and/or post-heating function).
MSU: Module equipped with silencer baffles. The accessory is supplied in n°1 piece.
FGC: Circular flanges. The accessory is supplied in n°1 piece.

Adjustment accessories

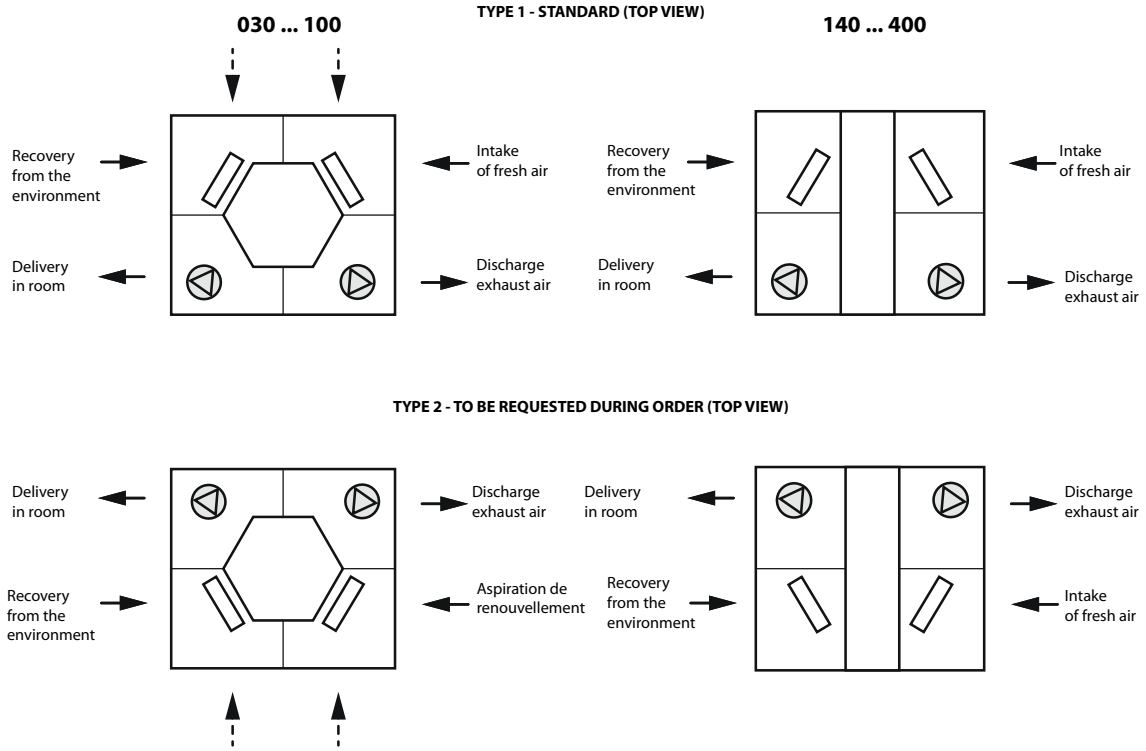
TWWV050: 3-way valve (the valve body only - does not include the pipe kit for connection to the heat recovery unit or external module with coil) PN16 KVS 1.0 DN15.
TWWV100: 3-way valve (the valve body only - does not include the pipe kit for connection to the heat recovery unit or external module with coil) PN16 KVS 2.5 DN15.
TWWV400: 3-way valve (the valve body only - does not include the pipe kit for connection to the heat recovery unit or external module with coil) PN16 KVS 6.3 DN20.
TF100: DN15 threaded couplings with shank and flat-seal idle nut for heat recovery unit / external module with coil.
TF400: DN20 threaded couplings with shank and flat-seal idle nut for heat recovery unit / external module with coil.
TWWVA: Actuator for 3-way valve 24V, for receiving ON-OFF or modulating commands (0-10V), for correct operation provide the VMF-MOD accessory.
FCDA: Servomotor for free cooling damper.

CONFIGURATOR

Field	Description
1,2,3,4	**RPLI**
5,6,7	**Size** 030, 050, 070, 100, 140, 200, 300, 400
8	**Version**
L	Low useful static pressure
P	High useful static pressure
9	**Installation**
°	Horizontal
10	**Flow orientation**
X	Type 2
°	Type 1
11	**Exchanger**
E	Post-heating electric internal coil
W	Water coil (1)
°	No internal coil

(1) Can also be used with chilled water: with sizes 030-100 in flow orientation 1 (°), 070-100 in flow orientation 2 (X); the coil is not available for sizes 030-050 with flow orientation 2 (X). Sizes 140-400 can only be used with hot water.

AVAILABLE ORIENTATION



ACCESSORIES COMPATIBILITY

Regulation

Regulation and control panel (outside the heat recovery unit)

Ver	030	050	070	100	140	200	300	400
L, P	HRB	HRB	HRB	HRB	HRB	HRB	HRB	HRB

Speed regulator

Ver	030	050	070	100	140	200	300	400
L	RVC40	RVCL	RVCL	RVC40	RVCL	RVC40	RVC40	RVC40
P	RVC40	RVC40	RVC40	RVC40	RVC40	RVC40	RVC40	RVC40

Additional modules

External module equipped with pre-filters

Ver	030	050	070	100	140	200	300	400
L, P	M4F03	M4F05	M4F07	M4F10	M4F14	M4F20	M4F30	M4F40

External module with water cooling coil

Ver	030	050	070	100	140	200	300	400
L, P	-	-	-	-	MBF14	MBF20	MBF30	MBF40

The accessory cannot be fitted on the configurations indicated with -

Ver	030	050	070	100	140	200	300	400
L, P	-	-	-	-	MBF14X	MBF20X	MBF30X	MBF40X

The accessory cannot be fitted on the configurations indicated with -

3 way valve kit

Accessory	MBF14	MBF14X	MBF20	MBF20X	MBF30	MBF30X	MBF40	MBF40X
TWWV020	•	•	•	•				
TWWV400					•	•	•	•

Threaded coupling

Accessory	MBF14	MBF14X	MBF20	MBF20X	MBF30	MBF30X	MBF40	MBF40X
TF100	•	•	•	•				
TF400					•	•	•	•

Actuator for valves

Accessory	MBF14	MBF14X	MBF20	MBF20X	MBF30	MBF30X	MBF40	MBF40X
TWWVA	•	•	•	•	•	•	•	•

Module with post-heating water coil.

Ver	030	050	070	100	140	200	300	400
L, P	MBP03	MBP05	MBP07	MBP10	MBP14	MBP20	MBP30	MBP40

Module with electric coil

Ver	030	050	070	100	140	200	300	400
L, P	MBE03	MBE05	MBE07	MBE10	MBE14	MBE20	MBE30	MBE40

Module equipped with silencer baffles

Ver	030	050	070	100	140	200	300	400
L, P	MSU03	MSU05	MSU07	MSU10	MSU14	MSU20	MSU30	MSU40

Circular flanges

Ver	030	050	070	100	140	200	300	400
L, P	FGC030	FGC050	FGC070	FGC100	FGC140	FGC200	FGC300	FGC400

Accessories

3 way valve kit

Ver	030	050	070	100	140	200	300	400
L, P	TWWV050	TWWV050	TWWV100	TWWV100	TWWV400	TWWV400	TWWV400	TWWV400

Threaded coupling

Ver	030	050	070	100	140	200	300	400
L, P	TF100	TF100	TF100	TF100	TF400	TF400	TF400	TF400

Actuator for 3-way valves

Ver	030	050	070	100	140	200	300	400
L, P	TWWVA	TWWVA	TWWVA	TWWVA	TWWVA	TWWVA	TWWVA	TWWVA

Free cooling damper actuator

Ver	030	050	070	100	140	200	300	400
L, P	FCDA	FCDA	FCDA	FCDA	FCDA	FCDA	FCDA	FCDA

PERFORMANCE SPECIFICATIONS

RPLI - L

Size		030	050	070	100	140	200	300	400
Heat recovery unit									
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	400V 3~50Hz
Unit type		UVNR (non-residential ventilation unit)							
Heat recovery system type	Type/n°	Static at counter-current flow / 1							
Heat capacity recovered (EN308) (1)	kW	1,6	2,4	3,6	4,8	7,1	10,0	14,9	19,7
Dry heating efficiency (2)	%	81,1	78,1	76,8	75,3	76,0	76,3	75,5	75,6
Information in compliance with Annex V of regulation EU no. 1253/2014									
Nominal air flow rate supply / recovery	m^3/s	0,08	0,13	0,19	0,26	0,39	0,54	0,82	1,08
Nominal air flow rate supply / recovery	m^3/h	300	450	700	950	1400	1950	2950	3900
Minimum air flow rate	m^3/h	200	250	400	550	800	1150	1750	2350
Fans (3)									
Commissioning	type	Analogue signal of EC fan (0-10Vdc)							
Type	type	EC							
Number	no.	2	2	2	2	4	2	2	2
Supplied electrical power consumption	kW	0,07	0,09	0,14	0,21	0,33	0,45	0,47	0,73
Recovered electrical power consumption	kW	0,06	0,09	0,14	0,20	0,31	0,41	0,44	0,69
Total input electric power	kW	0,13	0,17	0,28	0,41	0,64	0,86	0,91	1,42
SFP int.	$W/(m^3/s)$	820,00	953,00	907,00	1120,00	1132,00	1103,00	748,00	928,00
SFP int. lim. 2018	$W/(m^3/s)$	1329	1234	1185	1131	1132	1118	1053	1015
Filters face velocity	m/s	0,8	1,2	1,0	1,4	2,2	2,2	1,9	2,5
Nominal external pressure Δp (3)	Pa	100	100	110	110	110	110	110	110
Useful static supply pressure	Pa	323	401	191	143	112	110	132	196
Useful static recovery pressure	Pa	328	416	198	161	154	149	164	242
Supplied internal pressure drop Δps int.	Pa	115	228	189	293	268	270	245	290
Recovered internal pressure drop Δps int.	Pa	110	213	182	274	228	230	213	244
Fans static efficiency (4)	%	35.8%	57.0%	57.0%	59.7%	57.0%	49.2%	67.2%	66.9%
Internal leakage (5)	%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
External leakage	%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%
Air filter									
Expelled air filter	Type/n°	M5/1							
Delivery air filter	Type/n°	F7/1							
Delivery filter energy classification		On request							
Recovery filter energy classification		On request							

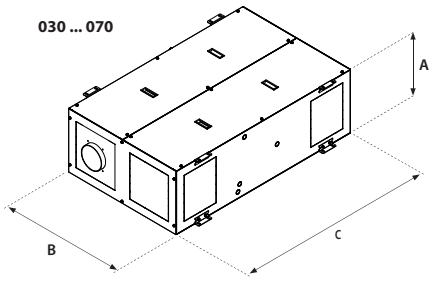
(1) Expelled air: Tdb=25°C; Twb<14°C. Fresh air: Tdb=5°C.
(2) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K , excluding the heating gain generated by the fan motors and the internal leakage.
(3) Performances referring to clean filters
(4) According to regulation EU 327/2011
(5) External leakage test performed at +400 Pa and -400 Pa; internal leakage test performed at 250 Pa

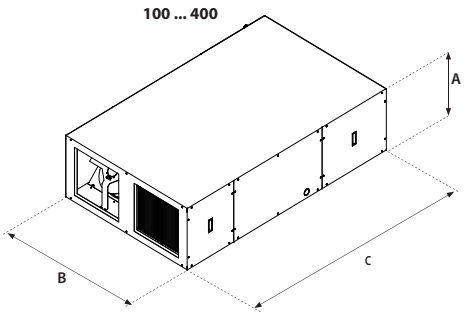
RPLI - P

Size		030	050	070	100	140	200	300	400
Heat recovery unit									
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	400V 3~50Hz	400V 3~50Hz
Unit type		UVNR (non-residential ventilation unit)							
Heat recovery system type	Type/n°	Static at counter-current flow / 1							
Heat capacity recovered (EN308) (1)	kW	1,6	2,4	3,6	4,8	7,1	10,0	14,9	19,7
Dry heating efficiency (2)	%	81,1	78,1	76,8	75,3	76,0	76,3	75,5	75,6
Information in compliance with Annex V of regulation EU no. 1253/2014									
Nominal air flow rate supply / recovery	m^3/s	0,08	0,13	0,19	0,26	0,39	0,54	0,82	1,08
Nominal air flow rate supply / recovery	m^3/h	300	450	700	950	1400	1950	2950	3900
Minimum air flow rate	m^3/h	200	250	400	550	800	1150	1750	2300
Fans (3)									
Commissioning	type	Analogue signal of EC fan (0-10Vdc)							
Type	type	EC							
Number	no.	2	2	2	2	2	4	4	2
Supplied electrical power consumption	kW	0,04	0,08	0,11	0,22	0,35	0,41	0,55	0,87
Recovered electrical power consumption	kW	0,04	0,08	0,11	0,21	0,33	0,38	0,50	0,82
Total input electric power	kW	0,09	0,16	0,23	0,42	0,68	0,79	1,04	1,69
SFP int.	$W/(m^3/s)$	543,00	903,00	694,00	1116,00	1095,00	918,00	770,00	999,00
SFP int. lim. 2018	$W/(m^3/s)$	1329	1234	1185	1131	1132	1118	1053	1015
Filters face velocity	m/s	0,8	1,2	1,0	1,4	2,2	2,2	1,9	2,5
Nominal external pressure Δp (3)	Pa	100	100	125	125	145	145	150	150
Useful static supply pressure	Pa	506	338	279	638	412	469	462	303
Useful static recovery pressure	Pa	511	353	285	656	452	509	493	349
Supplied internal pressure drop Δps int.	Pa	115	228	189	293	268	270	245	290
Recovered internal pressure drop Δps int.	Pa	110	213	182	274	228	230	213	244
Fans static efficiency (4)	%	61,7	61,7	61,7	57,2	57,2	61,8	66,9	62,7
Internal leakage (5)	%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
External leakage	%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%
Air filter									
Expelled air filter	Type/n°	M5/1							
Delivery air filter	Type/n°	F7/1							
Delivery filter energy classification		On request							
Recovery filter energy classification		On request							

(1) Expelled air: Tdb=25°C; Twb<14°C. Fresh air: Tdb=5°C.
(2) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K , excluding the heating gain generated by the fan motors and the internal leakage.
(3) Performances referring to clean filters
(4) According to regulation EU 327/2011
(5) External leakage test performed at +400 Pa and -400 Pa; internal leakage test performed at 250 Pa

DIMENSIONS AND WEIGHTS





Size		030	050	070	100	140	200	300	400
Dimensions and weights									
A	mm	400	400	435	435	460	460	600	600
B	mm	800	800	945	945	1100	1600	1700	2050
C	mm	1300	1300	1600	1600	1800	1800	2350	2350
Empty weight	kg	95	93	125	123	160	210	287	340

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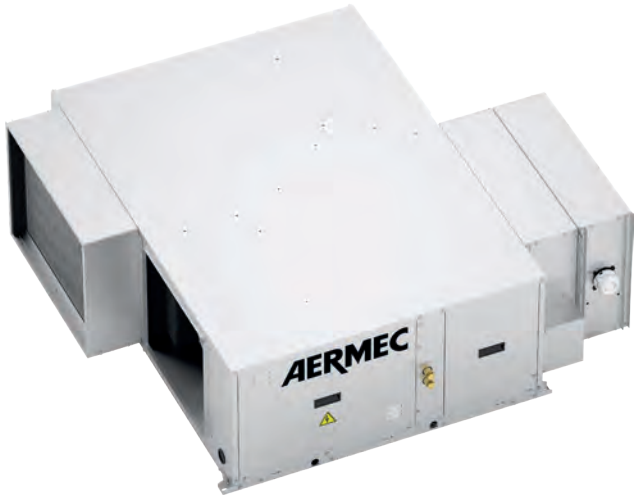
RTD

Thermodynamic recovery unit with integrated heat pump

Air flow rate 1100 - 3200 m³/h

- **Compact dimensions**
- **Compressor with inverter**
- **EC fan Plug-fan**
- **Fixed point adjustment in delivery**
- **Horizontal installation**



DESCRIPTION

Is an air replacement, filtration and treatment unit equipped with high efficiency thermodynamic recovery performed by an integrated cooling circuit. The inverter compressor allows a high energy saving at the same time as maintaining the set delivery temperature.
The unit can be integrated in the direct expansion and hydronic systems both in heating and cooling mode.

FEATURES

Versions

Horizontal installation:

— **RTD**: Standard unit with constant flow-rate control.
— **RTD_Q**: Units with flow modulation according to the concentration of CO_2
— **RTD_W**: Unit with internal hot/cold water coil complete with three-way valve, modulating servo-control and anti-freeze thermostat.

Main components

— Cooling circuit **BLDC inverter compressor.**
— Plug fans with EC inverter motor.
— Safety valve.
— Lower sandwich panels in galvanised sheet metal with injected polyurethane insulation; upper and side panel in galvanised sheet metal internally lined with insulating mat
— Synthetic filter class Coarse 85% according to EN16890 on the outside air inlet complete with fouling detection pressure switch.
— Condensate collection tank in aluminium alloy with side discharge.

Regulation

— **Power and control electrical panel** on the machine.
— Programmable controller able to manage all the advanced functions present on the unit (with fixed point adjustment in delivery; cooling, heating, automatic, free cooling functions; compressor, fans and eventual water coil modulation).
— **Remote panel (mandatory accessory))** in graphic display version or Touch version.

ACCESSORIES

CPVR: Recovery fan constant air flow rate control (accessory supplied separately; the function is enabled on the controller).
PRGD1: Control panel for wall or flush-mount installation with graphic display. Maximum installation distance of 10m.
PRGDX: Touch screen control panel for wall or flush-mount installation complete with black and white frame. Maximum installation distance of 150m.
MRE: Single-stage anti-freeze electric heater module 2 kW to be installed on the external air intake (required for outdoor air temperatures below -5° C).
MF: Coarse 85% efficiency filters module (EN16890) to be positioned in recovery (side extraction) complete with filter clogging pressure switch.

The remote controller is required for unit operation, it is possible to select between PRGD1 and PRGDX.

ACCESSORIES COMPATIBILITY

Recovery fan constant air flow rate control and xontrol panel

Model	Ver	11	14	17	21	26	32
CPVR (1)	.,Q,QW,W	•	•	•	•	•	•
PRGD1 (2)	.,Q,QW,W	•	•	•	•	•	•
PRGDX	.,Q,QW,W	•	•	•	•	•	•

(1) Accessory supplied separately.
(2) The remote controller is required for unit operation, it is possible to select between PRGD1 and PRGDX.

Anti-freeze electric heater module

Model	Ver	11	14	17	21	26	32
MRE2M	.,Q,QW,W	•	•				
MRE3M	.,Q,QW,W			•			
MRE3T	.,Q,QW,W				•		
MRE5T	.,Q,QW,W					•	•

Coarse 85% efficiency filters module (EN16890)

Model	Ver	11	14	17	21	26	32
MF5R1	.,Q,QW,W	•	•				
MF5R2	.,Q,QW,W			•	•		
MF5R3	.,Q,QW,W					•	•
MF7M1	.,Q,QW,W	•	•				
MF7M2	.,Q,QW,W			•	•		
MF7M3	.,Q,QW,W					•	•

CONFIGURATOR

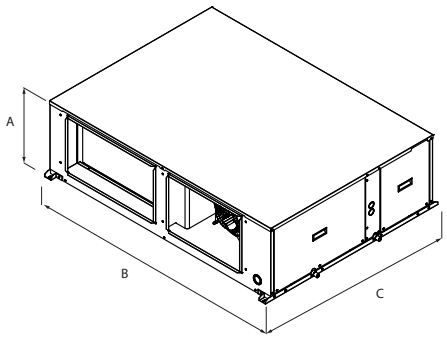
Field	Description
1,2,3	**RTD**
4,5	**Size** 11, 14, 17, 21, 26, 32
6	**Ventilation control type**
Q	Control via air quality probe
°	Constant flow (standard unit)
7	**Internal hot/cold water coil**
W	Internal water coil
°	No coil (standard unit)

PERFORMANCE SPECIFICATIONS

		RTD11	RTD14	RTD17	RTD21	RTD26	RTD32
Air flow rates							
Nominal air flow rate	m^3/h	1100	1400	1700	2100	2600	3200
Minimum air flow rate	m^3/h	950	1200	1450	1800	2200	2700
Maximum air flow rate	m^3/h	1200	1550	1850	2300	2850	3500
Delivery fan							
Type	type	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan
Fan motor	type	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors
Number	no.	1	1	1	1	1	1
Nominal useful head	Pa	150	150	150	150	150	150
Maximum useful head	Pa	510	580	520	360	570	380
Cooling input power	kW	0,19	0,20	0,23	0,32	0,43	0,62
Heating input power	kW	0,18	0,18	0,22	0,30	0,39	0,56
Expulsion fan							
Type	type	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan
Fan motor	type	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors	EC Inverter motors
Number	no.	1	1	1	1	1	1
Nominal useful head	Pa	150	150	150	150	150	150
Maximum useful head	Pa	530	600	520	370	590	400
Cooling input power	kW	0,17	0,16	0,19	0,27	0,33	0,46
Heating input power	kW	0,18	0,18	0,22	0,31	0,39	0,54
Performance in cooling mode at maximum compressor speed (1)							
Cooling capacity	kW	6,70	8,00	8,80	11,20	14,10	16,30
Sensible cooling capacity	kW	5,70	6,80	7,80	9,80	12,10	13,80
Compressors absorbed power	kW	1,80	2,20	2,30	3,20	4,00	4,50
Total input power EN14511 2017	kW	2,09	2,43	2,58	3,55	4,48	5,15
EER EN14511:2017	W/W	3,20	3,30	3,42	3,16	3,14	3,16
EER	W/W	3,11	3,15	3,24	2,96	2,95	2,92
Performance in heating mode at maximum compressor speed							
Heating capacity	kW	7,70	9,30	10,60	13,80	16,90	20,00
Compressors absorbed power	kW	1,60	2,00	2,20	2,90	3,30	4,10
COP refrigerant circuit	W/W	4,83	4,64	4,82	4,74	5,12	4,87
COP EN14511:2017 (2)	W/W	4,07	4,13	4,26	4,20	4,45	4,18
COP	W/W	3,94	3,92	4,02	3,91	4,15	3,84
Total input power EN14511 2017	kW	1,90	2,20	2,50	3,30	3,80	4,80
Total input power	kW	2,00	2,40	2,60	3,50	4,10	5,20
Compressor							
Type	type	Twin-rotary BLDC	Twin-rotary BLDC	Twin-rotary BLDC	Twin-rotary BLDC	Twin-rotary BLDC	Twin-rotary BLDC
Compressor regulation	Type	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
Number	no.	1	1	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A	R410A	R410A
Electric data							
Input power at full load	kW	4,30	4,50	4,50	5,30	6,10	6,10
Input current at full load	A	14,40	13,80	13,80	17,90	16,90	16,90
Power supply							
Power supply		230V 50Hz	230V 50Hz	230V 50Hz	400V 3N 50Hz	400V 3N 50Hz	400V 3N 50Hz

(1) Cooling mode: aire temperature 35°C Tbs / 24 °C Tbh ; ambient air 27°C Tbs /19°C Tbh .
(2) Heating mode: aire temperature 7°C Tbs / 6°C Tbh ; ambient air 20°C Tbs /15°C Tbh.

DIMENSIONS



Size			11	14	17	21	26	32
Dimensions and weights								
A	.,Q,QW,W	mm	430	430	530	530	630	630
B	.,Q,QW,W	mm	1508	1508	1508	1508	1508	1508
C	.,Q,QW,W	mm	1100	1100	1100	1100	1100	1100
Empty weight	.	kg	133	135	148	160	179	179
	Q	kg	135	137	150	162	181	181
	QW	kg	135	142	161	172	197	197
	W	kg	140	142	159	170	195	195
Weight functioning	.	kg	133	135	148	160	179	179
	Q,QW,W	kg	-	-	-	-	-	-

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RPF

High performance heat recovery unit with cross-current recuperator

Air flow rate 790 - 4250 m³/h

- **Cross-current heat recovery with performances superior than 90%**
- **Plug fans coupled with ec brushless motors for energy costs reduction**

DESCRIPTION

Heat recovery units RPF have been designed for commercial applications and permits to combine an excellent ambient comfort with a sure energy saving.
It is more and more necessary in modern systems to create a forced ventilation, but also involves the expulsion of climate-controlled air, thus determining a higher energy consumption.
The units RPF thanks to the cross-current heat recuperator permit to save more than 90% of energy which otherwise would be lost with expelled stuffy air.
RPF could be integrated with traditional systems realized with fan coils, chillers, and could work both in winter and in summer. This series is indicated for both horizontal and vertical installation.

CONFIGURATIONS

O Horizontal right supply
P Horizontal left supply
V Vertical right supply
Z Vertical left supply
Each of the different configurations could be further customized thanks to the choice of the accessories.
For further information, please refer to the technical documentation on the website.

STRUCTURE

The structure is formed by aluminium profiles with thermic cut, connected by nylon angles charged with glassfibre.
The sealing panels, of 50 mm thickness, are of the sandwich type in pre-painted plate RAL 9002 (external) and galvanized sheet iron (internal) insulated with polyurethane with density 45 kg/m^3. The expandent of the polyurethane foam is based on water permitting to reach GWP=0 (Global Warming Potential).
The casing is in fire reaction class M1 according to the French regulation NF P 92-512:1986. Removable panels are also foreseen to access to internal components, equipped with safety locks, condensate drain and internal modulating rolling shutter of motorized and controlled bypass for free-cooling.

Fans

Fans of supply and extract of plug-fan-type with synchronous motor with electronic control permanent magnetos (EC). The impellers are oriented in such a way to grant an optimal air flow which goes through the internal components, with the minimum noise.

Air filters

Air filtration with a filter with G4 efficiency (according to EN779) with low pressure drops on extracted air flow and a compact filter and with efficiency F7 (according to EN779) having a large filtrating surface made of glass microfibre paper, inserted in the intake flow.
The two typologies of filters are positioned upstream of the components to be protected, in order to grant low pressure drops, having a large surface available. The filtrating cells are fixed on a proper bearing frame to avoid any by-pass of non-treated air.
Their extractability is guaranteed from a proper side opening (standard), superior or inferior (optional) [with reference to the horizontal version].

Heat recovery unit

Static high efficiency cross-current heat recovery unit with high efficiency and aluminium plate.
The heat recovery unit guarantees the non-contamination of air flows, because the plates are properly sealed. Its performance is not inferior to 90% (EN308) in function to the external conditions: Air of intake: -10°C/90% - Air of extract 20°C/50% and equal capacities between supply and extract.
It is included also the function of automatic defrosting made easy by the internal modulating rolling shutter and from the possible modulation with intake flow.

REGULATION

Costituted by power electric panel and programmable controller with integrated graphic display. Everything is internally fitted in the unit in an accessible position.
The function of regulation are:
— Ventilation control (manual control of the standard fans speed);
— Thermo-regulation completed with all electric/electronic components (modality of regulation in standard extract);

— Integrated logics of energy savings: modulating free-cooling / free-heating, anti-freeze, night cooling, air quality control, dynamic set point, speed economy of ventilation, ranges of time;
— Complete interfaceability with BMS systems.

FUNCTIONALITY AND TECHNOLOGICAL ADVANTAGES

The elimination from closed rooms of the polluting elements, produced mainly from people and the simultaneous external air input, are at the basis of the concept of controlled mechanical ventilation (VMC) of the internal rooms.
The purpose of ventilation is to raise the standard of internal air quality with consequent positive effects for health and productivity of the occupiers. The change of air has positive effects also on the good maintenance of the building.
For the building to be requalified, the Controlled Mechanical Ventilation is almost a mandatory choice in order to reach high energy standards, which are imposed by the current legislation.

Very high ventilation efficiency

Since the ventilation represents one of the major factor of energy consumption, particular attention has been given to the study and to the creation of the ventilation system.
Fans of the plug-fan type with EC brushless motors have been used both in supply and in extraction; they permit high performances and reduced consumptions. Furthermore, compared with the traditional centrifugal fans, they don't have belts or pulleys with consequent easiness of capacity regulation, compactness, versatility, and an easy maintenance.

A particular adaptative logic permits to adjust the effective air capacity required from the system with more consequent advatages in terms of reduction of consumptions.

Maximum efficiencies

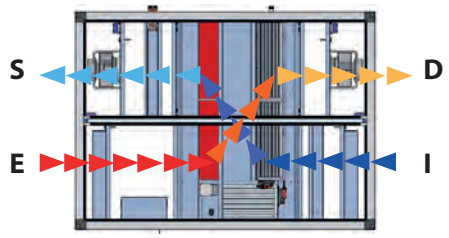
In this context RPF is proposed as the high efficient and performing solution for double flow ventilation systems with heat recovery.
The key-concept on which is based the RPF proposal are:
— Very high efficiency heat recovery attested by EUROVENT certification and maintenance of the complete separation of intake and discharge air flow;
— Reduced ventilation energy consumptions, thanks to a detailed dimensioning of the components in order to have low total values of SFP (Specific Fan Power or rather energy consumption for m^3/h of total processed capacity);
— High efficiency filtration and low pressure drops;
— Advanced electronic management for the energy saving and of controlling of internal pollutants functions VOC (Volatile Organic Compounds);
— Compactness of dimensions and logic of installation "plug and play".

Air quality in room

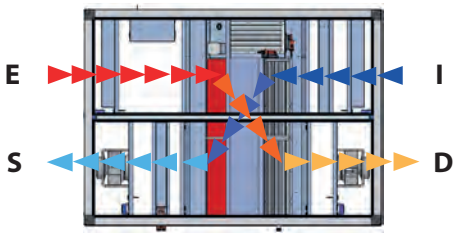
Particular attention has been given naturally also to the quality of air in the room, standard assigned to filters with efficiency G4 on extracted air flow and on compact filter with efficiency F7 included on intake air flow.
Naturally all these technological advantages are controlled by a thermoregulation of last generation, able to manage the different working procedures; assuring the maximum energy saving in every usage condition by using a proper software.

BASIC CONFIGURATION

RPF O Horizontal conÿguration
Right supply (seen from above)

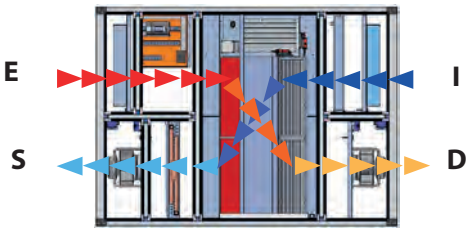


RPF P Horizontal conÿguration
Left supply (seen from above)



RPF V Vertical conÿguration
Right supply (seen from the accessible side)

RPF Z Vertical conÿguration
Left supply (seen from the accessible side)



D = Discharge
I = Intake
S = Supply
E = Extract

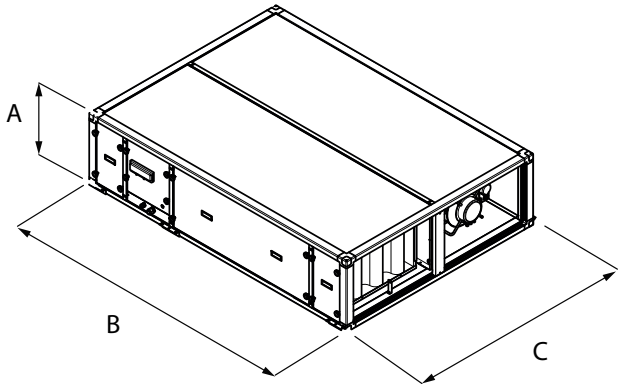
PERFORMANCE SPECIFICATIONS

		RPF008	RPF010	RPF013	RPF020	RPF031	RPF042
Heat recovery unit							
Power supply				230V~50Hz		400V 3~50Hz	
Unit type				UVNR (non-residential ventilation unit)			
Heat recovery system type	Type/n°			Static at counter-current flow / 1			
Heat capacity recovered (EN308) (1)	kW	4,2	5,4	7,0	10,7	16,6	22,8
Dry heating efficiency (2)	%	80,0	79,9	80,0	79,9	79,9	83,8
Information in compliance with Annex V of regulation EU no. 1253/2014							
Nominal air flow rate supply / recovery	m^3/s	0,22	0,28	0,36	0,56	0,86	1,18
Nominal air flow rate supply / recovery	m^3/h	790	1000	1300	2000	3100	4250
Minimum air flow rate	m^3/h	200	200	400	1000	1000	1300
Maximum air flow rate	m^3/h	980	1260	1530	2350	3700	4600
Fans (3)							
Commissioning	type			Analogue signal of EC fan (0-10Vdc)			
Type	type			EC			
Number	no.	2	2	2	2	2	2
Supplied electrical power consumption	kW	0,16	0,24	0,33	0,60	0,79	1,30
Recovered electrical power consumption	kW	0,15	0,23	0,33	0,56	0,76	1,20
Total input electric power	kW	0,31	0,47	0,66	1,16	1,55	2,50
Maximum input power	kW	0,60	1,24	1,26	1,66	5,26	5,26
Maximum input power	A	4,6	7,5	7,5	9,3	11,1	11,1
SFP int.	$W/(m^3/s)$	625,00	667,00	743,00	1142,00	919,00	1211,00
SFP int. lim. 2018	$W/(m^3/s)$	1127	1118	1109	1227	1031	1253
Filters face velocity	m/s	1,8	2,0	1,8	2,2	2,2	2,1
Nominal external pressure Δp (3)	Pa	200	250	250	250	250	225
Useful static supply pressure	Pa	191	218	169	134	215	143
Useful static recovery pressure	Pa	196	233	175	152	255	184
Supplied internal pressure drop Δps int.	Pa	174	198	219	319	304	372
Recovered internal pressure drop Δps int.	Pa	176	189	227	355	293	379
Fans static efficiency (4)	%	61,7	57,2	57,2	61,8	66,9	62,7
Internal leakage (5)	%	0,3	0,3	0,3	0,1	0,3	0,2
External leakage	%	< 3	< 3	< 3	< 3	< 3	< 3
Air filter							
Delivery filter energy classification					B		
Recovery filter energy classification					On request		

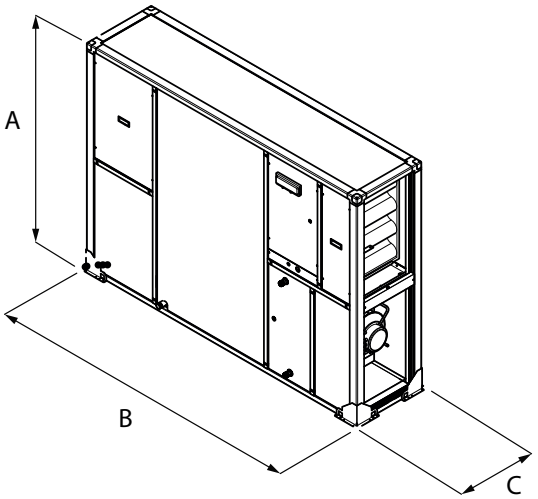
(1) Expelled air: Tdb=25°C; Twb<14°C. Fresh air: Tdb=5°C.
(2) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K , excluding the heating gain generated by the fan motors and the internal leakage.
(3) Performances referring to clean filters
(4) According to regulation EU 327/2011
(5) External leakage test performed at +400 Pa and -400 Pa; internal leakage test performed at 250 Pa

DIMENSIONS

RPF 008 - 031
Horizontal Installation



RPF 008 - 042
Vertical Installation



Size			008	010	013	020	031	042
Dimensions and weights								
A	0,P	mm	450	450	524	560	700	-
	V,Z	mm	1054	1258	1374	1694	1948	1550
B	0,P	mm	1915	1915	2174	2334	2654	-
	V,Z	mm	1915	1915	2174	2334	2654	2974
C	0,P	mm	1054	1258	1374	1694	1948	-
	V,Z	mm	450	450	524	560	700	1130
Empty weight	0,P	kg	194	220	264	328	452	-
	V,Z	kg	194	220	264	328	452	585

The weights are standard configuration units without accessories.

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URX-CF

Heat recovery unit with refrigerant circuit

Air flow rate 750 - 3300 m³/h

- **Heat pump cooling circuit with high yield and low noise scroll compressors.**

DESCRIPTION

The URX-CF series is the mono-bloc solution designed for the installation requirements typical for public spaces like bars, restaurants, offices, meeting rooms.

The URX-CF units combine in one mono-bloc unit, besides the fan, filter, and heat recovery sections, a heat pump refrigerant circuit with scroll compressors of high output and low noise.

The supply air is heated or cooled, based on the season, through the heat pump refrigerant circuit located within the unit and charged with refrigerant R410A.

This allows for a complete machine, with autonomous operation during every season and able to provide both the required air renewal for rooms and an efficient heat recovery.

The careful design of the machine combines very compact dimensions, which permit easy installation in false ceilings, with an excellent accessibility for maintaining all the internal components.

FEATURES

Panels

Self-supporting sandwich panel 20 mm thick in galvanised steel for internal and external surfaces with injected polyurethane insulation (density 40 kg/m³).

Heat recovery

Cross flow plate heat exchanger in aluminium with outputs over 50% in winter conditions.

Air filters

Class G4, located before the heat recovery both in the supply and return air flow.

Fans

Double inlet forward curved blades with direct drive motor. Single phase 230V-50Hz single speed motor. The air flow is controlled, within +/- 15% of the nominal, through an electronic speed controller supplied as standard.

Refrigerant circuit

Heat pump complete with high efficiency low noise scroll compressors, 4 way refrigerant cycle reversing valve, evaporator coil, condenser coil, liquid receiver, liquid separator, double thermostatic expansion valve, liquid sight glass (only for models 150, 210, 330), filter drier, high/low pressure pressostats.

Accessibility

From below for the heat recovery, the filters, the condensate drain tray and the fans.

Regulation

The unit is provided with an electrical panel complete with power and control section (included the control for the 3 way valve for the supplementary hot water coil and associated actuators), ensuring the control of all the refrigerant circuit functions.

Included are:

— NTC return air temperature sensor;
— External air temperature sensor;
— Dampers and actuators in the free-cooling version;
— Pressure switch in the supply air filter;
— Card RS485

Supplied loose is a remote mounted control terminal for automatic control of the unit and an outlet to power and control a light to conform with the current regulation for smoking zones.

ACCESSORIES COMPATIBILITY

Circular flanges

Accessory	URX07CF	URX10CF	URX15CF	URX21CF
FGC07	•			
FGC10		•		
FGC15			•	
FGC21				•

Hot water coil module

Accessory	URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
MBC07	•				
MBC10		•			
MBC15			•		
MBC21				•	
MBC33					•

Free-cooling module

Accessory	URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
FCE07	•				
FCE10		•			
FCE15			•		
FCE21				•	
FCE33					•

Module with electric coil

Accessory	URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
MBX07	•				
MBX10		•			
MBX15			•		
MBX21				•	
MBX33					•

Module equipped with silencer baffles

Accessory	URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
SUF07	•				
SUF10		•			
SUF15			•		
SUF21				•	
SUF33					•

PERFORMANCE SPECIFICATIONS

		URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
Heat recovery unit						
Power supply		230V~50Hz	230V~50Hz	400V~ 3N 50Hz	400V~ 3N 50Hz	400V~ 3N 50Hz
Cooling performances (1)						
Total cooling capacity (heat recovery + refrigerant circuit)	kW	6,1	7,3	10,2	15,0	23,0
Cooling capacity available	kW	1,4	1,7	2,2	3,4	5,1
Cooling capacity recovered	kW	0,9	1,3	2,0	2,8	4,2
Summer thermal efficiency	%	46,2	51,2	53,2	53,6	53,6
Total input power	kW	2,60	2,80	3,80	5,00	6,90
Heating performances (2)						
Heating capacity total (heat recovery + refrigerant circuit)	kW	8,8	10,8	15,8	22,8	33,3
Heating capacity available	kW	2,4	2,3	3,0	4,8	5,2
Recovered heating power	kW	2,9	4,3	7,1	10,1	14,3
Winter thermal efficiency	%	46,2	51,2	53,2	53,6	53,6
Total input power	kW	2,00	2,00	3,30	4,00	5,50
Compressor						
Type	type	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor regulation	Type	On-Off	On-Off	On-Off	On-Off	On-Off
Number	no.	1	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (3)	kg	2,4	2,9	3,0	3,7	4,5
Delivery fan						
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1	1
Nominal air flow rate	m^3/h	750	1000	1500	2100	3300
Minimum air flow rate	m^3/h	640	850	1275	1785	2800
High static pressure	Pa	278	233	239	166	289
Total fan input power	kW	0,37	0,42	0,51	0,62	1,25
Total fan input current	A	2,4	2,4	3,6	3,6	6,6
Recovery fan						
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1	1
Nominal air flow rate	m^3/h	750	1000	1500	2100	3300
Minimum air flow rate	m^3/h	640	850	1275	1785	2800
High static pressure	Pa	248	218	233	163	273
Total fan input power	kW	0,37	0,42	0,51	0,62	1,25
Total fan input current	A	2,4	2,4	3,6	3,6	6,6

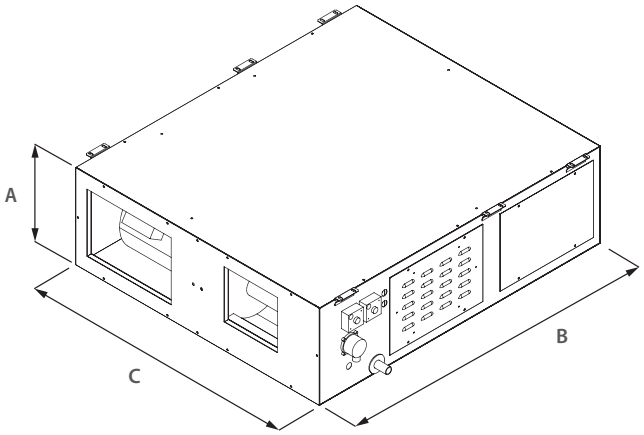
(1) Recovery air 26 °C 50%; External air 34 °C 50%.
(2) Recovery air 20 °C 50%; External air 5 °C 80%.
(3) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

		URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
Hot water coil (accessory)						
Row	no.	2	2	2	2	2
Pressure drop - air side	Pa	11	18	23	42	78
Heating operations 70 °C / 60 °C (1)						
Heating capacity	kW	5,00	6,00	8,70	10,30	16,80
Water flow rate	l/h	442	523	763	902	1475
Pressure drop	kPa	16	22	9	12	31
Heating operations 45 °C / 40 °C (2)						
Heating capacity	kW	1,90	2,20	3,40	3,70	7,50
Water flow rate	l/h	336	382	584	638	1306
Pressure drop	kPa	11	14	6	7	28

(1) Water temperature (in/out) 70°C / 60°C; Compressor operating.
(2) Water temperature (in/out) 45°C / 40°C; Compressor operating.

		URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
Electric heating coil - (accessory)						
Power supply				400V 3 ~ 50Hz		
Stages	no.	1	1	1	1	1
Heating capacity	kW	3,00	4,50	6,00	9,00	12,00
Input current	A	4,6	6,8	11,4	17,2	26,0
Pressure drop - air side	Pa	10	10	10	10	10

DIMENSIONS



		URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
Dimensions and weights						
A	mm	450	450	550	550	600
B	mm	1300	1300	1500	1500	1600
C	mm	1500	1500	1800	1800	1800
Empty weight	kg	205	218	272	298	328

■ *The weights are standard configuration units without accessories.*

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URHE-CF

Heat recovery unit with refrigerant circuit

Air flow rate 1000 - 3300 m³/h

- **Heat pump cooling circuit with high yield and low noise scroll compressors.**
- **High efficiency**

DESCRIPTION

The units of the series URHE-CF are a highly efficient solution for satisfying the requirements of thermohygrometric wellness and air changes in air conditioning systems that are used in civil and service sector environments such as offices, bars, restaurants, etc.

The URHE-CF units are perfectly efficient machines in that they use a high performance plate cross flow heat recovery unit together with a heat pump refrigerant circuit operating with the R410A. refrigerant.

The use of the high performance cross flow heat recovery unit allows you to substantially reduce the start-up period of the refrigerant circuit during the year, thereby minimizing electrical energy consumption.

The unit's small size makes it easy to install also in false ceilings, maintaining excellent accessibility for the upkeep of all its internal components.

The numerous accessories that are available upon request, like for example the compact high efficiency filters, the water coils or the silencers, complete the functions of the machine that is generally combined with an air conditioning system.

FEATURES

Panels

Structure made of aluminium profiles with fibreglass reinforced nylon corners.

Sandwich panels, 25 mm thick, in galvanised sheet metal for the inner surface, pre-painted for the external surface with injected polyurethane insulation (density 42 kg/m³).

Heat recovery

Aluminium cross flow plates optimised to guarantee elevated performance.

Air filters

Class G4, 80% gravimetric efficiency, according to EN 779, thickness 48 mm, located before the heat recovery both in the supply and return air flow.

Fans

Centrifugal fans with forward-curved blades with high pressure head motor directly attached. The air flow rate is kept constant by means of an electronic control device.

Refrigerant circuit

Heat pump with R410A refrigerant, equipped with high performance, quiet rotary or scroll compressors (depending on the size), 4-way cycle inversion valves, evaporator coil, condenser coil, liquid receiver, thermostatic valve, liquid indicator, filter-drier, high pressure switch, low pressure switch, safety valve, bypass valve (for smaller sizes).

Regulation

The unit is provided with an electrical panel complete with power and control section (included the control for the 3 way valve for the supplementary hot water coil and associated actuators), ensuring the control of all the refrigerant circuit functions.

Included are:

— NTC return air temperature sensor;
— External air temperature sensor;
— Dampers and actuators in the free-cooling version;
— Pressure switch in the supply air filter;
— Card RS485

Supplied loose is a remote mounted control terminal for automatic control of the unit and an outlet to power and control a light to conform with the current regulation for smoking zones.

ACCESSORIES COMPATIBILITY

Hot water coil module

Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
MBCH1	•	•	•	
MBCH2				•

Module with electric coil

Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
MBCX1	•			
MBCX2		•		
MBCX3			•	
MBCX4				•

F7 compact high efficiency filters.

Accessory	URHE15CF	URHE25CF	URHE33CF
FCT1	•		
FCT2		•	
FCT3			•

Module equipped with silencer baffles.

Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
MSS1	•	•	•	
MSS2				•

Free-cooling module

Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
FGE1	•	•	•	•

Base for floor installation.

Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
BIT1	•	•		
BIT2			•	
BIT3				•

Base for floor installation of the additional modules.

Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
BIM1	•	•	•	•

Roof for outdoor installation.

Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
TPE1	•	•		
TPE2			•	
TPE3				•

Roof for outdoor installation of the additional modules.

Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
TPM1	•	•	•	
TPM2				•

Kit free-cooling.

Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
FCH1	•	•		
FCH2			•	•

Roof for silencer baffles.

Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
TPMSS1	•	•	•	
TPMSS2				•

PERFORMANCE SPECIFICATIONS

		URHE10CF	URHE15CF	URHE25CF	URHE33CF
Heat recovery unit					
Power supply		230V~50Hz	230V~50Hz	400V~ 3N 50Hz	400V~ 3N 50Hz
Cooling performances (1)					
Total cooling capacity (heat recovery + refrigerant circuit)	kW	6,6	8,7	13,8	19,8
Cooling capacity available	kW	1,8	3,1	3,3	5,4
Cooling capacity recovered	kW	2,2	3,2	4,5	5,8
Summer thermal efficiency	%	82,0	80,0	68,0	65,0
Total input power	kW	2,60	2,90	5,10	6,50
Heating performances (2)					
Heating capacity total (heat recovery + refrigerant circuit)	kW	10,9	14,2	24,8	33,1
Heating capacity available	kW	2,8	2,9	3,9	7,0
Recovered heating power	kW	3,6	10,0	15,3	19,6
Winter thermal efficiency	%	82,0	80,0	73,0	71,0
Total input power	kW	2,20	2,40	4,20	4,90
Compressor					
Number	no.	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A
Delivery fan					
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1
Nominal air flow rate	m^3/h	1000	1500	2500	3300
Minimum air flow rate	m^3/h	800	1100	2000	2500
High static pressure	Pa	320	245	140	220
Total fan input power	kW	0,42	0,46	1,10	1,10
Total fan input current	A	3,1	3,1	5,3	5,3
Recovery fan					
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1
Nominal air flow rate	m^3/h	1000	1500	2500	3300
Minimum air flow rate	m^3/h	800	1100	2000	2500
High static pressure	Pa	320	245	140	220
Total fan input power	kW	0,42	0,46	1,10	1,10
Total fan input current	A	3,1	3,1	5,3	5,3

(1) Recovery air 26 °C 50%; External air 34 °C 50%.
(2) Recovery air 20 °C 50%; External air 5 °C 80%.

Technical data MBCH - Hot water coil (accessory)

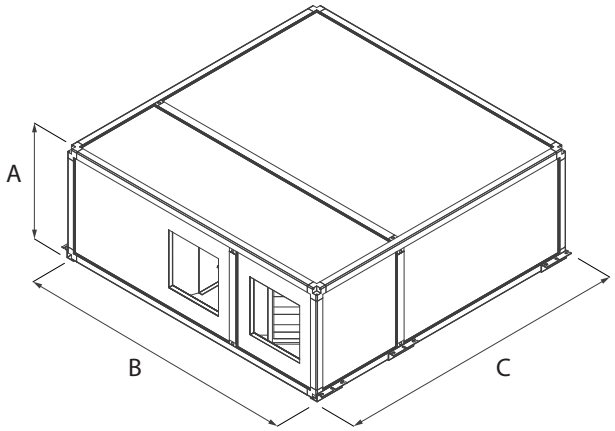
		URHE10CF	URHE15CF	URHE25CF	URHE33CF
Hot water coil (accessory)					
Row	no.	2	2	2	2
Pressure drop - air side	Pa	7	18	37	37
Heating operations 70 °C / 60 °C (1)					
Heating capacity	kW	7,70	10,30	15,60	19,70
Water flow rate	l/h	673	906	1363	1725
Pressure drop	kPa	11	8	18	32
Heating operations 45 °C / 40 °C (2)					
Heating capacity	kW	2,60	4,00	6,50	7,60
Water flow rate	l/h	446	700	1118	1311
Pressure drop	kPa	3	6	14	22

(1) Water temperature (in/out) 70°C / 60°C; Compressor operating.
(2) Water temperature (in/out) 45°C / 40°C; Compressor operating.

Technical data MBCX - Electric heating coil - (accessory)

		URHE10CF	URHE15CF	URHE25CF	URHE33CF
Electric heating coil - (accessory)					
Power supply			400V/3/50Hz		
Stages	no.	1	1	1	1
Heating capacity	kW	5,00	7,50	12,50	10,00
Input current	A	7,6	11,4	19,0	25,1
Pressure drop - air side	Pa	10	10	10	10

DIMENSIONS



		URHE10CF	URHE15CF	URHE25CF	URHE33CF
Dimensions and weights					
A	mm	580	580	580	580
B	mm	1640	1640	1640	1970
C	mm	1500	1500	1990	2310
Empty weight	kg	300	310	373	410

■ *The weights are standard configuration units without accessories.*

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ERSR

High-efficiency heat recovery with rotary recovery unit

Air flow rate 1000 - 30000 m³/h

- **Technology high efficiency**
- **Mechanically controlled ventilation**
- **Recovery of up to 80% of the energy of the expelled air**
- **Air purification**

DESCRIPTION

The ERSR heat recovery units for indoor and outdoor installation are designed for commercial applications and are able to combine maximum environmental comfort with definite energy saving.
It is more and more necessary in modern systems to create a forced ventilation, but also involves the expulsion of climate-controlled air, thus determining a higher energy consumption.
But ERSR units are equipped with a rotary heat recovery unit (upon request, also hygroscopic rotary) that enables you to save more than 80% of the energy that would otherwise be lost with the expelled stale air.
These units can be integrated with fan coils and chillers, and can operate both in winter and summer.

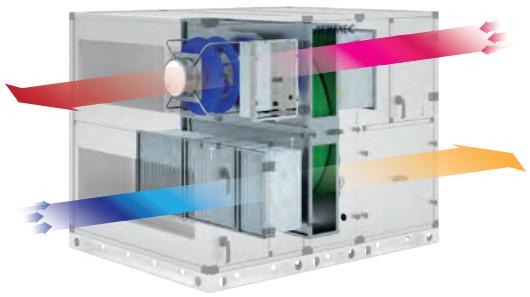
VERSIONS

H With a hygroscopic rotary recovery
T With a sensitive rotary recovery

STRUCTURE

— Rotary heat recovery unit (with the option in hygroscopic material), high-efficiency and low pressure drops.
— Soft air bag F7 filters (flow and recovery) equipped with a standard differential pressure switch, which can be extracted from either side facilitate their periodic cleaning.
— **Fans (intake and flow), Plug fan with back curved blades with a directly coupled, electronically controlled motor for sizes 07-17 and with an inverter for sizes 21-24.**
— Support frame and sandwich panels, 50 mm thick, in galvanised sheet steel for internal surfaces and pre-painted externally, and with mineral wool insulation (density 40 kg/m³). Base in galvanised sheet steel continuous profiles. Sizes 07 to 09 are monoblocs whilst the other sizes are divided into sections. The unit can be inspected from both sides.
— The unit is equipped with a power electric control board on the machine and adjustment purposely designed to reduce energy consumption. Equipped with a communication serial port on RS485 with MODBUS Master/Slave protocol.

FEATURES



- Air expelled
- Air recovery from the room
- Outdoor fresh air
- Air introduced into the room

Quality of the air
Nowadays, the quality of air inside rooms is fundamental. The mechanically controlled ventilation system is not only indispensable from an energetic point of view, but also for the comfort of the rooms. Harmful elements and smells in the air are eliminated by the efficient filtration system with bag filters (F7), which are easily extracted and regenerated.

High-efficiency air circulation thanks to plug-fans with electronically controlled motors or inverters, depending on the sizes

Freecooling: free comfort
During in-between seasons, outdoor climatic conditions can be more pleasant than those indoors. In such situations, the ERSRs stop the recovery unit enabling the intake of fresh outdoor air to air-condition indoor rooms at zero cost.

High-efficiency recovery unit (80% of the energy of the expelled air)
Air heat recovery both in summer and winter, thanks to the rotary recovery unit (hygroscopic version also available). Air introduced into the room is always optimised, thanks to the heat exchange between the air recovery and outdoor fresh air.

State of the art electronic control
Naturally, all these technological advantages are controlled by state of the art heat regulation, thus ensuring maximum energy savings in every condition of use.

ACCESSORIES
CAP: Intake waterproof cover.
BDL: Delivery waterproof cover.
TDP: Roof for outdoor installation.
VRC: Condensate drip tray.
VVR: Variable speed recovery unit.
KDP: Dehumidification and post-heating management kit.
RBC: 3-way valve hot water coil module.
RBF: 3-way valve cold water coil module.
RBE: Electric coil module.
RBP: 3-way valve cold water and post-heating coil module.
MSS: Module equipped with silencer baffles.
FRR: Rectangular flange.
GAR: Rectangular anti-vibration joint.
HSR: Fresh air intake damper with servocontrol.
RSR: Recirculation damper module.
HG4: Flat filters efficiency G4.

ACCESSORIES COMPATIBILITY

Regulation

Rectangular flange.

Ver	07	09	12	15	17	21	24
H, T	FRR09	FRR09	FRR12	FRR15	FRR17	FRR21	FRR24

Condensate drain tray.

Ver	07	09	12	15	17	21	24
H, T	VRC07	VRC09	VRC12	VRC15	VRC17	VRC21	VRC24

Additional modules

Rectangular anti-vibration joint.

Ver	07	09	12	15	17	21	24
H, T	GAR07	GAR09	GAR12	GAR15	GAR17	GAR21	GAR24

Recirculation damper module.

Ver	07	09	12	15	17	21	24
H, T	-	-	RSR12	RSR15	RSR17	RSR21	RSR24

The accessory cannot be fitted on the configurations indicated with -

Flat filters efficiency G4.

Ver	07	09	12	15	17	21	24
H, T	HG407	HG409	HG412	HG415	HG417	HG421	HG424

Fresh air intake damper with servocontrol.

Ver	07	09	12	15	17	21	24
H, T	HSR07	HRS09	HRS12	HRS15	HRS17	HRS21	HRS24

Roof protection for basic unit in the case of outdoor installation.

Ver	07	09	12	15	17	21	24
H, T	TDP07	TDP09	TDP12	TDP15	TDP17	TDP21	TDP24

Delivery waterproof cover.

Ver	07	09	12	15	17	21	24
H, T	BDL07	BDL09	BDL12	BDL15	BDL17	BDL21	BDL24

Accessories

Air quality probe (VOC).

Ver	07	09	12	15	17	21	24
H, T	QP	QP	QP	QP	QP	QP	QP

Variable speed recovery unit.

Ver	07	09	12	15	17	21	24
H, T	VVR07	VVR09	VVR12	VVR15	VVR17	VVR21	VVR24

Dehumidification and post-heating management kit.

Ver	07	09	12	15	17	21	24
H, T	KDP	KDP	KDP	KDP	KDP	KDP	KDP

Intake waterproof cover.

Ver	07	09	12	15	17	21	24
H, T	CAP07	CAP09	CAP12	CAP15	CAP17	CAP21	CAP24

3-way valve hot water coil module.

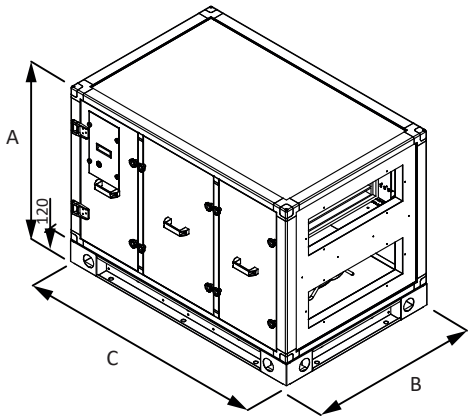
Ver	07	09	12	15	17	21	24
H, T	RBC07	RBC09	RBC12	RBC15	RBC17	RBC21	RBC24

PERFORMANCE SPECIFICATIONS

Size		07	09	12	15	17	21	24
Heat recovery unit								
Power supply					400V 3N ~ 50Hz			
Unit type					UVNR (Unit ventilation not residential)			
Heat recovery system type	Type/n°							
Heat capacity recovered (EN308) (1)	kW	5,8	10,3	19,4	31,4	41,3	64,3	85,0
Dry heating efficiency (2)	%	79,0	78,9	78,3	78,8	78,9	78,5	78,7
Information in compliance with Annex V of regulation EU no. 1253/2014								
Nominal air flow rate supply / recovery	m^3/s	0,31	0,54	1,03	1,65	2,17	3,39	4,47
Nominal air flow rate supply / recovery	m^3/h	1100	1950	3700	5950	7800	12200	16100
Minimum air flow rate	m^3/h	-	-	-	-	-	-	-
Fans (3)								
Commissioning	type				Analog signal of EC fan			
Type	type				Plug-fan			
Number	no.	1	1	1	1	1	1	1
Supplied electrical power consumption	kW	0,27	0,48	0,85	1,31	1,90	2,20	2,80
Recovered electrical power consumption	kW	0,27	0,48	0,86	1,30	1,90	2,20	2,80
Total input electric power	kW	0,84	2,04	6,10	8,78	10,20	22,37	30,37
SFP int.	$W/(m^3/s)$	1061,00	994,00	927,00	733,00	669,00	778,00	759,00
SFP int. lim. 2018	$W/(m^3/s)$	1141	1106	1033	942	887	886	887
Filters face velocity	m/s	1,8	1,9	1,8	1,8	1,8	1,6	1,7
Nominal external pressure Δp (3)	Pa	100	100	100	100	100	100	100
Useful static supply pressure	Pa	360	520	1000	1100	900	1440	1500
Useful static recovery pressure	Pa	360	520	1000	1100	900	1440	1500
Supplied internal pressure drop Δps int.	Pa	269	262	276	222	216	240	241
Recovered internal pressure drop Δps int.	Pa	272	265	280	225	219	243	244
Fans static efficiency (4)	%	64,5	65,5	62,8	64,1	67,2	64,7	65,8
Internal leakage (5)	%	< 3	< 3	< 3	< 3	< 3	< 3	< 3
External leakage	%	0,2	0,2	0,1	0,1	0,1	0,1	0,1
Air filter								
Expelled air filter	Type/n°							
Delivery air filter	Type/n°							
Delivery filter energy classification					D			
Recovery filter energy classification					D			

(1) Expelled air: Tdb=25°C; Twb<14°C. Fresh air: Tdb=5°C.
(2) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K , excluding the heating gain generated by the fan motors and the internal leakage.
(3) Performances referring to clean filters
(4) According to regulation EU 327/2011
(5) External leakage test performed at +400 Pa and -400 Pa; internal leakage test performed at 250 Pa

DIMENSIONS AND WEIGHTS



Size		07	09	12	15	17	21	24
Dimensions and weights								
A	mm	965	1285	1445	1765	2085	2405	2725
B	mm	895	1005	1375	1695	1855	2335	2665
C	mm	1375	1535	2045	2365	2365	3005	3005
Empty weight	kg	240	340	570	820	1010	1610	1980

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www.aermec.com

AIR CONDITIONING

The air handling units customized according to different needs of the installer to carry the best comfort and the best quality in civil commercial and industrial.

AIR HANDLING UNITS

			Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Compact air handling units					
	TVS	Air flow rate 800÷5200 m^3/h	800-5200	4,40-27,80	10,50-66,40	264
	TVH	Air flow rate 800÷5200 m^3/h	800-5200	4,70-29,30	11,60-73,90	273
	TS	Air flow rate 810÷4225 m^3/h	810-4225	4,39-24,93	8,89-52,44	282
	TA	Air flow rate 800÷5000 m^3/h	800-5000	4,2-39,6	3,9-72,8	286
	TN	Air flow rate 3000÷23000 m^3/h	3000-23000	12,6-127,8	14,7-277,3	291
	Modular air handling units					
	NCD	Air handling units	1134-79475	-	-	298
	SPL 025-130	For wellness areas	4000-13000	-	-	301
	SPL 160-250	For wellness areas	16000-25000	-	-	305
	Packaged ROOF-TOP units					
new	**RTG 060X-125X**	For medium crowding applications	-	57,7-128,1	58,1-124,6	308
	RTX N1-N8	For medium crowding applications	-	12,70-49,95	13,50-50,79	314
	RTX 09-16	For medium crowding applications	-	50-135	49-141	319
	RTX 17-23	For medium crowding applications	-	151-307	152-310	325
	RTY 01-10	For high crowding applications	-	30,2-133,6	29,3-137,9	330

TVS

Air handling unit

- Centrifugal fan with EC motor
- Horizontal and vertical installation
- Available units with heat exchanger with 4-6 rows
- Large range of available static pressure
- Ductable unit

DESCRIPTION

TVS it is a thermoventilation unit designed to guarantee high heads in small to medium-sized rooms with nominal air flow rates from 800 to 5200 m^3/h. As standard, it is suitable for 2-pipe systems, however the availability (as an accessory) of the secondary water coil, which can be installed inside the unit downstream of the main coil, makes it also suitable for 4-pipe systems. The unit is suitable for both horizontal installation in suspended ceilings and vertical installation on walls for greater versatility in use.

FEATURES

Structure

The supporting structure is made of galvanised steel sheet panels of suitable thickness. The panels are internally insulated with M1 fire reaction class insulation according to French standard NFP 92-501.
The bottom panels, which can be inspected, are of the sandwich type made of galvanised steel sheet with 15 mm thick polyurethane insulation (density 45 kg/m^3).
The particular formulation of the polyurethane foam provides the sandwich panels with reaction to fire class M1 according to NFP standard 92-501. The polyurethane foam was developed with precise specifications to achieve the exceptional value of GWP = 0 (Global Warming Potential), not contributing to the greenhouse effect.
The presence of sandwich type panels on the bottom of the machine enables to significantly reduce the noise outside the unit in typical horizontal suspended ceiling installations.
The unit is supplied with specific brackets for attaching it to the wall.

Heat exchanger coil

Heat exchanger made with copper pipes and aluminium louvers blocked by the mechanical expansion of the pipes.
The main heat exchanger can be 4 or 6-row.
The secondary heat exchanger, available as an accessory, is 2-row.

Hydraulic connections

The hydraulic connections are on the right and are made with female threaded connections, however male-male threaded sleeves, with air release valves, are supplied to facilitate hydraulic connections.
The side of the hydraulic connections can be reversed on site by turning the coil.

The definition of "RH connections side" or "LH connections side" refers to the position of the coil connections in relation to the air flow direction (convection: air flow from behind a hypothetical operator inserted in the flow).

Condensate drip

The galvanised steel condensate drip tray is thermally insulated and has a double drain on the right and left. The unused condensate drain must be sealed.

Ventilation group

The ventilation unit consists of double intake centrifugal fans with blades facing forwards.
The electric motor, directly coupled to the impeller, is of the EC type. The use of the EC motor allows significant energy savings when compared to traditional AC motors and a continuous control of the rotation speed, simplifying air flow rate calibration operations on site.
Except for the first two sizes, Sensorless fans with integrated flow control are installed, without the need for additional accessories.

Air filtration

Air filtration is provided, as standard, by 48 mm thick corrugated synthetic filters with Coarse 55% efficiency according to EN ISO 16890 (G4 according to EN 779) positioned in the intake.
The filters are easily accessible for servicing and cleaning. Extraction is carried out by pulling them out from below by removing the respective panel.

Electrical wiring

On the side of the hydraulic connections there is an electric box, with IP55 protection rating, for connecting power and the 0-10V control signal or a potentiometer of the ventilation unit.
In the case of reversing the side of the hydraulic connections, there is no need to reverse the position of the electrical connections.

VENTILATION EFFICIENCY

All fans in the range TVS use an EC motor that, operating without slip losses, consumes less energy than conventional AC motors.
This applies to all speeds, i.e. also to partial load operation. The EC motor therefore uses less energy than the AC motor under all operating conditions

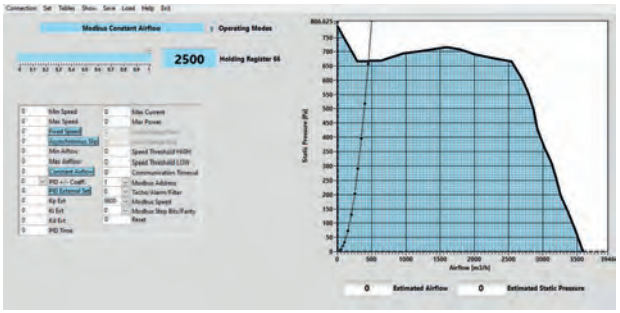
and has a significantly higher level of efficiency of the drive system (motor and control).
In addition, continuous speed control via the 0-10V signal allows the air flow rate to be varied, and the static pressure can be adapted to the system's pressure drop, making unit start-up particularly easy.

Fans in sizes from TVS204 to TVS526 use an innovative "driver" that provides advanced functions that go far beyond simple speed control via the 0-10V signal (factory setting) and monitoring of operating limits to enable safe operation.

In fact, advanced operating modes can be activated through the use of free PC software, an RS485 interface cable and a commercially available USB to RS485 converter.
Particularly innovative is the operating mode with constant flow rate control. The air flow rate can be varied via an analogue 0-10V signal or the desired value can be set via the dedicated software.

Sensorless constant flow rate

Sensorless constant flow rate control is performed without the use of pressure probes.
The driver determines the operating point by measuring the rotational speed and input power of the fan and then adjusts the rotational speed to maintain the set value of the air flow rate within a predetermined range.
This control system can compensate for a change in system pressure loss or a change in unit pressure loss due to e.g. filter fouling.

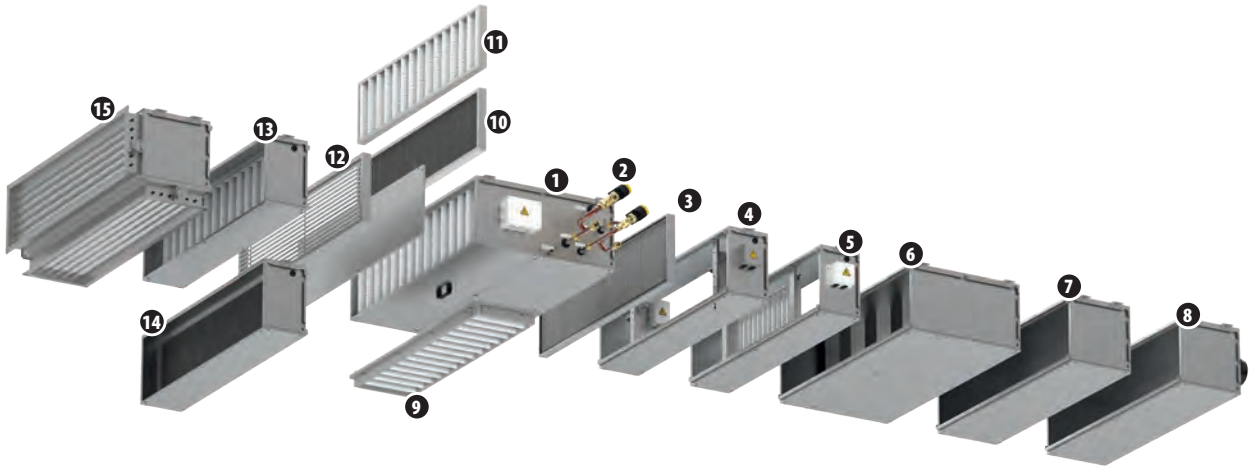


CONFIGURATOR

ACCESSORIES

BS2x: 2 row water coil: 2-row water coil for 4-pipe system, located internally, downstream of the main coil. The threaded sleeves for the hydraulic connections and the air vent valve are supplied.
F7x: filter with ePM1 50% efficiency: Filter with ePM1 50% efficiency according to EN ISO 16890 (F7 according to EN 779) to be placed inside the unit in place of the standard filter.
F7x: filter with ePM1 80% efficiency: Filter with ePM1 80% efficiency according to EN ISO 16890 (F9 according to EN 779) to be placed inside the unit in place of the standard filter.
SMBEx: Electric coil module with double safety thermostat (manual and automatic) to be installed on the unit's flow side. Not compatible for vertical installation.
SMF7x: Filter module with ePM1 50% efficiency according to EN ISO 16890 (F7 according to EN 779) to be positioned at the unit's flow or intake in order to carry out a two-stage filtration. Filter extraction from below.
SMF9x: Filter module with ePM1 80% efficiency according to EN ISO 16890 (F9 according to EN 779) to be positioned at the unit's flow or intake in order to carry out a two-stage filtration. Filter extraction from below.
SM2Sx: Mixing chamber module complete with two galvanised steel calibration dampers to be positioned at the intake of the unit. The damper pins are equipped with an easily removable hand control.
SMLFx: Module consisting of state-of-the-art devices with UV germicidal lamp with photocatalytic effect for active disinfection. To be placed at the discharge of the unit. The complete elimination of germs, bacteria and viruses cannot be achieved by using SMLFx modules alone, but a reduction in microbial load means less exposure to infection.
FAIx: Filter holder flange to allow intake in a direction perpendicular to the air flow through the unit. The use of the flange does not allow the installation of other accessories or the ducting of the unit to the intake.
SERx: Galvanised steel damper to be installed on the intake or flow side of the unit. The damper pin is equipped with an easily removable hand control.
GRAx: Natural anodised aluminium intake grid with fixed louvers inclined at 45°. To be installed at the intake of the unit via the supplied flange.
GRMx: Natural anodised aluminium flow grille with two rows of adjustable louvers. To be installed on the unit's flow side via the flange supplied.
V2Vx for main and secondary coil: 2-way valve for main and secondary coil.
V3Vx for main and secondary heat exchanger: 3-way valve for main and secondary coil.
AV24F - 24V / ON-OFF actuator for main and secondary coil: 24V / ON-OFF actuator for main and secondary coil.
AV24FM - 24V / ON-OFF - 0-10V actuator for main and secondary coil: Actuator with 24V power supply for ON-OFF or modulating 0-10V control of 2-way and 3-way main and secondary coil valves.
AV24M - 24V / 0-10V actuator for main and secondary coil: Actuator with 24V power supply for modulating 0-10V control of 2-way and 3-way main and secondary coil valves.
GT2x - 2-way valve tube assembly for main coil: Hose assembly and hydraulic fittings for connecting the 2-way valve to the main coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).
GT2Px - 2-way valve hose assembly for secondary coil: Hose assembly and hydraulic fittings for connecting the 2-way valve to the secondary coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).
GT3x - 3-way valve hose assembly for main coil: Hose assembly and hydraulic fittings for connecting the 3-way valve to the main coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).
GT3Px - 3-way valve hose assembly for secondary coil: Hose assembly and hydraulic fittings for connecting the 3-way valve to the secondary coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).
PVV: Potentiometer for fan speed control. The +10V signal is available directly on the electrical connection box located outside the unit.
SMSSx - Silencer baffles module: Module consisting of rock wool silencing baffles covered with polyethylene film and protective mesh to prevent flaking. To be installed on the flow and/or intake side of the unit.
SPCx: Closed plenum to be positioned at the flow or intake of the unit. Depending on the opening of the flow/intake hole, the accessory allows flow/intake in both longitudinal and perpendicular directions to the air flow through the unit.
SPMx: Plenum with circular flows to be positioned at the flow and/or intake of the unit. The multi-diameter (200mm, 180mm, 150mm) circular plastic

couplings allow the connection of circular ducts. Flow/intake is allowed in the longitudinal direction of the air flow through the unit.



Key:

1	**TVS**	6	**SMSS**	12	**GRA**
2	**Valvola (V3V, AV24,GT3, GT3P)**	7	**SPC**	13	**SMF9**
3	**GRM**	8	**SPM**	14	**SMF7**
4	**SMLF**	9	**FAI**	15	**SM2S**
5	**SMBE**	10	**F7**		
		11	**F9**		

ACCESSORIES COMPATIBILITY

Control

Potentiometer for fan speed control

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
PVV	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Water valves

2 way valve kit

	TVS084	TVS154	TVS204	TVS274	TVS344	TVS404	TVS524
Main coil							
2 way valve	V2V2	V2V3	V2V4	V2V5	V2V5	V2V6	V2V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT21	GT21	GT22	GT23	GT23	GT24	GT24
Secondary coil							
2 way valve	V2V1	V2V1	V2V4	V2V4	V2V4	V2V5	V2V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT2P1	GT2P1	GT2P2	GT2P2	GT2P2	GT2P3	GT2P3

	TVS086	TVS156	TVS206	TVS276	TVS346	TVS406	TVS526
Main coil							
2 way valve	V2V2	V2V3	V2V4	V2V5	V2V5	V2V6	V2V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT21	GT21	GT22	GT23	GT23	GT24	GT24
Secondary coil							
2 way valve	V2V1	V2V1	V2V4	V2V4	V2V4	V2V5	V2V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT2P1	GT2P1	GT2P2	GT2P2	GT2P2	GT2P3	GT2P3

Table 3 way valve kit

	TVS084	TVS154	TVS204	TVS274	TVS344	TVS404	TVS524
Main coil							
Three-way valve	V3V2	V3V2	V3V4	V3V5	V3V5	V3V6	V3V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT31	GT31	GT32	GT33	GT33	GT34	GT34
Secondary coil							
Three-way valve	V3V1	V3V1	V3V4	V3V4	V3V4	V3V5	V3V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT3P1	GT3P1	GT3P2	GT3P2	GT3P2	GT3P3	GT3P3

	TVS086	TVS156	TVS206	TVS276	TVS346	TVS406	TVS526
Main coil							
Three-way valve	V3V2	V3V2	V3V4	V3V5	V3V5	V3V6	V3V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT31	GT31	GT32	GT33	GT33	GT34	GT34
Secondary coil							
Three-way valve	V3V1	V3V1	V3V4	V3V4	V3V4	V3V5	V3V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT3P1	GT3P1	GT3P2	GT3P2	GT3P2	GT3P3	GT3P3

Heating only additional coil

2 row water coil

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
BS21	•	•												
BS22			•	•										
BS23					•	•								
BS24							•	•	•	•				
BS25											•	•	•	•

Electric coil module

2-stage electric coil module

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
SMBE1 (1)	•	•												
SMBE2 (1)			•	•										
SMBE3 (1)					•	•								
SMBE4 (1)							•	•	•	•				
SMBE5 (1)											•	•	•	•

(1) Module not compatible for vertical installation.

Installation accessories

Filter module with ePM1 50% efficiency

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
SMF71	•	•												
SMF72			•	•										
SMF73					•	•								
SMF74							•	•	•	•				
SMF75											•	•	•	•

Filter module with ePM1 80% efficiency

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
SMF91	•	•												
SMF92			•	•										
SMF93					•	•								
SMF94							•	•	•	•				
SMF95											•	•	•	•

Silencer baffles module

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
SMSS1	•	•												
SMSS2			•	•										
SMSS3					•	•								
SMSS4							•	•	•	•				
SMSS5											•	•	•	•

Photocatalytic device module

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
SMLF1	•	•												
SMLF2			•	•										
SMLF3					•	•								
SMLF4							•	•	•	•				
SMLF5											•	•	•	•

Mixing chamber module complete with two calibration dampers

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
SM2S1	•	•												
SM2S2			•	•										
SM2S3					•	•								
SM2S4							•	•	•	•				
SM2S5											•	•	•	•

Closed plenum

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
SPC1	•	•												
SPC2			•	•										
SPC3					•	•								
SPC4							•	•	•	•				
SPC5											•	•	•	•

Plenum with circular deliveries

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
SPM1	•	•												
SPM2			•	•										
SPM3					•	•								
SPM4							•	•	•	•				
SPM5											•	•	•	•

Table Filter flange

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
FAI1	•	•												
FAI2			•	•										
FAI3					•	•								
FAI4							•	•	•	•				
FAI5											•	•	•	•

Galvanised steel dampers

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS524	TVS526
SER1	•	•										
SER2			•	•								
SER3					•	•						
SER4							•	•	•	•		
SER5											•	•

Alluminium Intake grids

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
GRA1	•	•												
GRA2			•	•										
GRA3					•	•								
GRA4							•	•	•	•				
GRA5											•	•	•	•

Alluminium delivery grille

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
GRM1	•	•												
GRM2			•	•										
GRM3					•	•								
GRM4							•	•	•	•				
GRM5											•	•	•	•

Filter with ePM1 50% efficiency

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
F71	•	•												
F72			•	•										
F73					•	•								
F74							•	•	•	•				
F75											•	•	•	•

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
F71	•	•												
F72			•	•										
F73					•	•								
F74							•	•	•	•				
F75											•	•	•	•

Filter with ePM1 80% efficiency

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
F91	•	•												
F92			•	•										
F93					•	•								
F94							•	•	•	•				
F95											•	•	•	•

4-ROW COIL UNIT PERFORMANCE DATA

Units designed to operate with all recirculating air or maximum 10% of external air.

		TVS084	TVS154	TVS204	TVS274	TVS344	TVS404	TVS524
Performance in heating mode 70 °C / 60 °C - Main coil 2-pipe system (1)								
Heating capacity	kW	10,50	18,80	25,10	31,90	41,40	54,20	66,40
Water flow rate	l/h	901	1615	2157	2738	3557	4659	5705
Pressure drop	kPa	26	25	37	23	41	38	55
Performance in heating mode 45 °C / 40 °C - Main coil for 2-pipe systems (2)								
Heating capacity	kW	5,20	9,30	12,40	15,80	20,50	26,80	32,70
Water flow rate	l/h	896	1600	2139	2718	3525	4610	5640
Pressure drop	kPa	28	27	40	24	44	40	58
Heating performance 65 °C /55 °C - Secondary coil 4-pipe system (3)								
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
Cooling performances 7 °C / 12 °C - Main coil 2 pipe system (4)								
Cooling capacity	kW	4,40	7,70	10,90	13,20	17,90	23,20	27,80
Sensible cooling capacity	kW	3,30	6,00	8,20	10,40	13,60	17,10	20,70
Water flow rate	l/h	753	1322	1870	2266	3078	3979	4766
Pressure drop	kPa	22	20	33	20	36	34	46
Fan								
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	no.	1	2	1	1	2	2	2
Nominal air flow rate	m^3/h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Maximum useful head (2-pipes) (5)	Pa	213	242	351	361	380	403	414
Maximum useful head (4-pipes) (5)	Pa	194	217	321	337	342	377	375
Input power (2-pipes) (6)	W	199	358	545	825	826	998	1494
Input power (4 pipes) (6)	W	207	377	574	859	896	1044	1608
Sound data (7)								
Sound power level (inlet + radiated)	dB(A)	66,0	68,0	77,0	77,0	78,0	80,0	80,0
Sound power level (outlet)	dB(A)	66,0	68,0	74,0	76,0	74,0	77,0	78,0
Diametre hydraulic fittings								
Main heat exchanger	Ø	3/4" F	3/4" F	1" F	1" F	1" F	1" F	1" F
Secondary heat exchanger	Ø	1/2" F	1/2" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F
Condensate discharge diameter	mm	1/2" M	1/2" M	1/2" M	1/2" M	1/2" M	1/2" M	1/2" M
Power supply								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
Air filter								
Type	type	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)
Electric coil								
Electric coil capacity	kW	1,5 + 1,5	2,5 + 2,5	4 + 4	6 + 6	6 + 6	7,5 + 7,5	7,5 + 7,5
Stages	no.	2	2	2	2	2	2	2
Power supply		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz

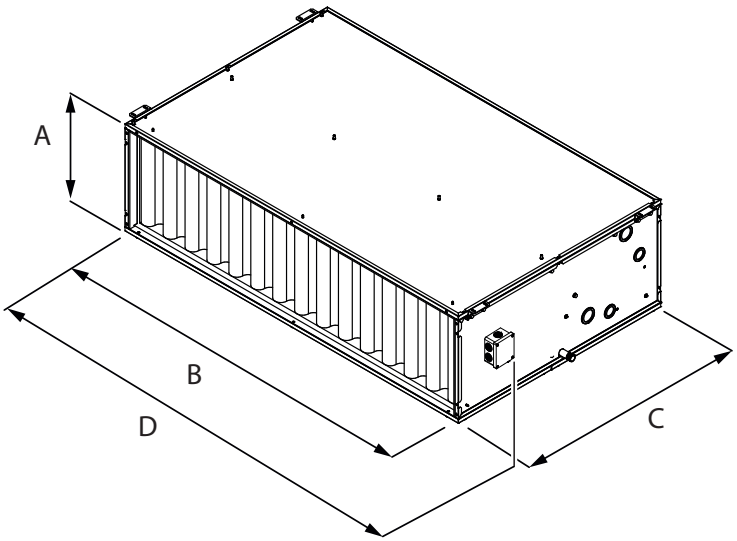
(1) Room air temperature 20°C d.b.; Water (in/out) 70 °C / 60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C / 40 °C
(3) Room air temperature 20 °C d.b.; Water (in/out) 65 °C / 55 °C
(4) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C
(5) Maximum high static pressure at nominal air flow rate, in heating mode
(6) Input power at nominal air flow rate, at nominal high static pressure, in heating mode
(7) Sound data in 2-pipe configuration, at nominal air flow rate, at nominal high static pressure, in heating mode

6-ROW COIL UNIT PERFORMANCE DATA

		TVS086	TVS156	TVS206	TVS276	TVS346	TVS406	TVS526
Performance in heating mode 70 °C / 60 °C - Main coil 2-pipe system (1)								
Heating capacity	kW	11,50	20,60	27,40	35,10	45,40	58,30	72,00
Water flow rate	l/h	986	1774	2359	3017	3900	5009	6189
Pressure drop	kPa	40	27	30	23	42	31	45
Performance in heating mode 45 °C / 40 °C - Main coil for 2-pipe systems (2)								
Heating capacity	kW	5,70	10,20	13,60	17,30	22,50	28,90	35,80
Water flow rate	l/h	978	1762	2342	2985	3876	4980	6166
Pressure drop	kPa	42	29	32	25	44	33	48
Heating performance 65 °C /55 °C - Secondary coil 4-pipe system (3)								
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
Cooling performances 7 °C / 12 °C - Main coil 2 pipe system (4)								
Cooling capacity	kW	5,30	9,00	12,30	15,40	20,70	25,90	31,60
Sensible cooling capacity	kW	3,80	6,70	9,00	11,60	15,00	18,70	22,90
Water flow rate	l/h	912	1538	2104	2649	3554	4443	5427
Pressure drop	kPa	39	24	28	23	41	30	42
Fan								
Type	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	no.	1	2	1	1	2	2	2
Nominal air flow rate	m^3/h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Maximum useful head (2-pipes) (5)	Pa	204	230	338	351	364	392	397
Maximum useful head (4-pipes) (5)	Pa	185	205	308	327	326	366	358
Input power (2-pipes) (6)	W	203	368	557	839	856	1016	1544
Input power (4 pipes) (6)	W	211	387	588	873	932	1064	1658
Sound data (7)								
Sound power level (inlet + radiated)	dB(A)	67,0	69,0	78,0	77,0	78,0	81,0	80,0
Sound power level (outlet)	dB(A)	67,0	69,0	74,0	77,0	74,0	78,0	79,0
Diametre hydraulic fittings								
Main heat exchanger	Ø	3/4" F	3/4" F	1" F	1" F	1" F	1" F	1" F
Secondary heat exchanger	Ø	1/2" F	1/2" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F
Condensate discharge diameter	mm	1/2" M	1/2" M	1/2" M	1/2" M	1/2" M	1/2" M	1/2" M
Power supply								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
Air filter								
Type	type	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)
Electric coil								
Electric coil capacity	kW	1,5 + 1,5	2,5 + 2,5	4 + 4	6 + 6	6 + 6	7,5 + 7,5	7,5 + 7,5
Stages	no.	2	2	2	2	2	2	2
Power supply		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz

(1) Room air temperature 20°C d.b.; Water (in/out) 70 °C / 60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C / 40 °C
(3) Room air temperature 20 °C d.b.; Water (in/out) 65 °C / 55 °C
(4) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C
(5) Maximum high static pressure at nominal air flow rate, in heating mode
(6) Input power at nominal air flow rate, at nominal high static pressure, in heating mode
(7) Sound data in 2-pipe configuration, at nominal air flow rate, at nominal high static pressure, in heating mode

DIMENSIONS



Unit for horizontal installation

		TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
Dimensions and weights															
A	mm	300	300	300	300	390	390	390	390	390	390	390	390	390	390
B	mm	700	700	1000	1000	1000	1000	1400	1400	1400	1400	2000	2000	2000	2000
C	mm	700	700	700	700	850	850	850	850	850	850	850	850	850	850
D	mm	770	770	1070	1070	1070	1070	1470	1470	1470	1470	2070	2070	2070	2070
Net weight	kg	27,0	28,0	42,0	44,0	56,0	59,0	79,0	83,0	89,0	94,0	119,0	125,0	120,0	126,0

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www.aermec.com

TVH

Air handling unit

- Plug fan with EC motor
- Horizontal installation only
- Available units with heat exchanger with 4-6 rows
- Large range of available static pressure
- Ductable unit
- 15 mm thick sandwich panelling

DESCRIPTION

TVH it is a thermoventilation unit designed to guarantee high heads in small to medium-sized rooms with nominal air flow rates from 800 to 5200 m^3/h. As standard, it is suitable for 2-pipe systems, however the availability (as an accessory) of the secondary water coil, which can be installed inside the unit downstream of the main coil, makes it also suitable for 4-pipe systems.
The unit is suitable for horizontal installation.

FEATURES

Structure

The load-bearing structure is made of sandwich-type panels made of galvanised steel sheet with 15 mm thick polyurethane insulation (density 45 kg/m^3).
The particular formulation of the polyurethane foam provides the sandwich panels with reaction to fire class M1 according to NFP standard 92-501. The polyurethane foam was developed with precise specifications to achieve the exceptional value of GWP = 0 (Global Warming Potential), not contributing to the greenhouse effect.
The presence of sandwich type panels enables to significantly reduce the noise outside the unit in typical horizontal suspended ceiling installations.
Specific brackets supplied with the unit make it easier to secure it to the wall.

Heat exchanger coil

Heat exchanger made with copper pipes and aluminium louvers blocked by the mechanical expansion of the pipes.
The main heat exchanger can be 4 or 6-row.
The secondary heat exchanger, available as an accessory, is 2-row.

Hydraulic connections

The hydraulic connections are on the right and are made with female threaded connections, however male-male threaded sleeves, with air release valves, are supplied to facilitate hydraulic connections.
The side of the hydraulic connections can be reversed on site by turning the coil.

The definition of "RH connections side" or "LH connections side" refers to the position of the coil connections in relation to the air flow direction (convection: air flow from behind a hypothetical operator inserted in the flow).

Condensate drip

The galvanised steel condensate drip tray is thermally insulated and has a double drain on the right and left. The unused condensate drain must be sealed.

Ventilation group

The ventilation unit consists of plug fans with reversed blades. The use of plug fans allows a reduction in input power compared to fans with forward-facing blades.
The electric motor, directly coupled to the impeller, is of the EC type.
The use of the EC motor allows significant energy savings when compared to traditional AC motors and a continuous control of the rotation speed, simplifying air flow rate calibration operations on site.

Air filtration

Air filtration is provided, as standard, by 48 mm thick corrugated synthetic filters with Coarse 55% efficiency according to EN ISO 16890 (G4 according to EN 779) positioned in the intake.
The filters are easily accessible for servicing and cleaning. Extraction is carried out by pulling them out from below by removing the respective panel.

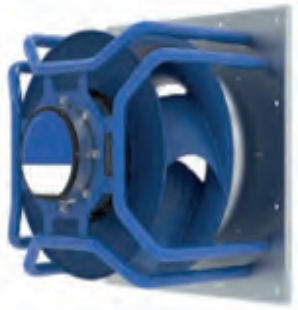
Electrical wiring

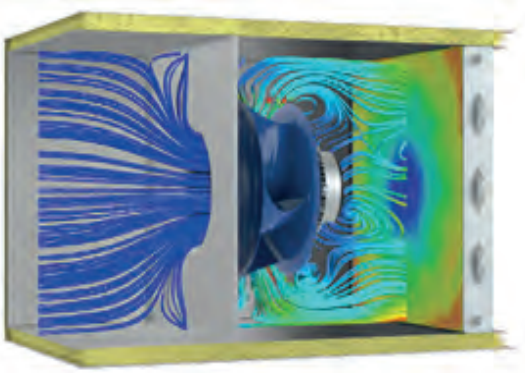
On the side of the hydraulic connections there is an electric box, with IP55 protection rating, for connecting power and the 0-10V control signal or a potentiometer of the ventilation unit.
In the case of reversing the side of the hydraulic connections, there is no need to reverse the position of the electrical connections.

VENTILATION EFFICIENCY

All fans in the range TVH use an EC motor, which, due to the special efficiency of the system, consumes less energy than conventional AC motors. This applies to all speeds, i.e. also to partial load operation.
In addition, continuous speed control via the 0-10V signal allows the air flow rate to be varied, and the static pressure can be adapted to the system's pressure drop, allowing a perfect machine - system match.

The innovative mixed-flow geometry of the composite impeller allows a particularly homogenous aeraulic distribution over the next component.
The positive effect of homogeneous aeraulic distribution is reflected in a decrease in pressure drops and an increase in the cooling efficiency of the heat exchange coil located downstream of the fan.
For the same processed air flow rate there is therefore less electric input power and a higher cooling efficiency.
In addition, by means of the pressure probe (relying on an external controller) or the flow rate/pressure regulator, which are supplied as accessories, it is possible to carry out ventilation control in constant flow rate or constant pressure on the flow channel.





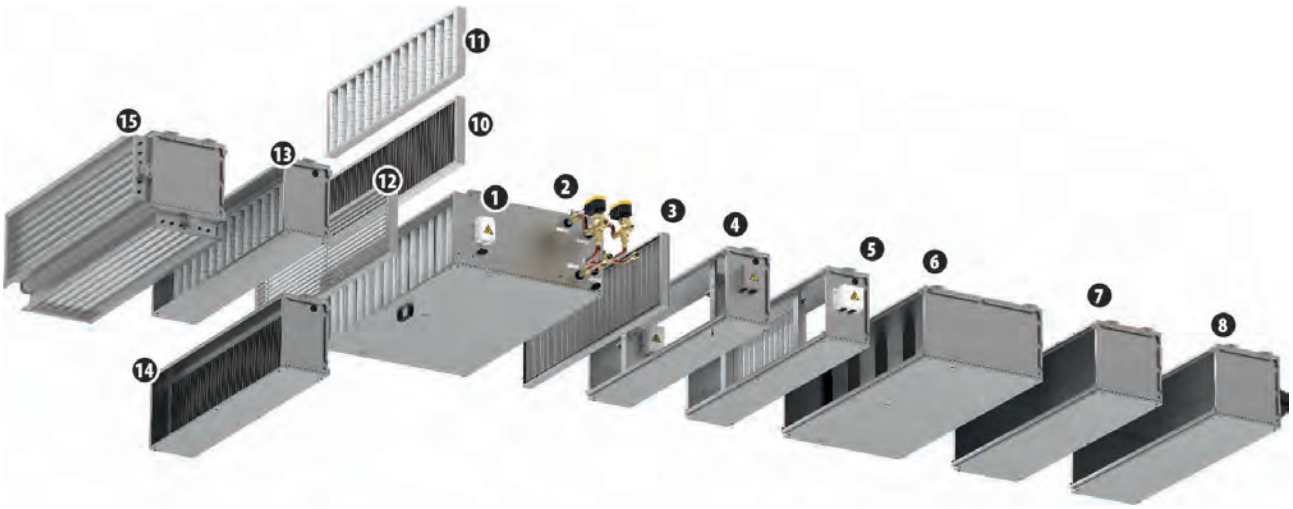
CONFIGURATOR

Field	Description
1,2,3	TVH
4,5	Size 08, 15, 20, 27, 34, 40, 52
6	Version
4	4-row finned pack main heat exchanger with right-hand connections
6	6-row finned pack main heat exchanger with right-hand connections

ACCESSORIES

BS2x: 2 row water coil: 2-row water coil for 4-pipe system, located internally, downstream of the main coil. The threaded sleeves for the hydraulic connections and the air vent valve are supplied.
F7x: filter with ePM1 50% efficiency: Filter with ePM1 50% efficiency according to EN ISO 16890 (F7 according to EN 779) to be placed inside the unit in place of the standard filter.
F7x: filter with ePM1 80% efficiency: Filter with ePM1 80% efficiency according to EN ISO 16890 (F9 according to EN 779) to be placed inside the unit in place of the standard filter.
SERx: Galvanised steel damper to be installed on the intake or flow side of the unit. The damper pin is equipped with an easily removable hand control.
GRAx: Natural anodised aluminium intake grid with fixed louvers inclined at 45°. To be installed at the intake of the unit via the supplied flange.
GRMx: Natural anodised aluminium flow grille with two rows of adjustable louvers. To be installed on the unit's flow side via the flange supplied.
V2Vx for main and secondary coil: 2-way valve for main and secondary coil.
V3Vx for main and secondary heat exchanger: 3-way valve for main and secondary coil.
AV24F - 24V / ON-OFF actuator for main and secondary coil: 24V / ON-OFF actuator for main and secondary coil.
AV24FM - 24V / ON-OFF - 0-10V actuator for main and secondary coil: Actuator with 24V power supply for ON-OFF or modulating 0-10V control of 2-way and 3-way main and secondary coil valves.
AV24M - 24V / 0-10V actuator for main and secondary coil: Actuator with 24V power supply for modulating 0-10V control of 2-way and 3-way main and secondary coil valves.
GT2x - 2-way valve tube assembly for main coil: Hose assembly and hydraulic fittings for connecting the 2-way valve to the main coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).
GT2Px - 2-way valve hose assembly for secondary coil: Hose assembly and hydraulic fittings for connecting the 2-way valve to the secondary coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).
GT3x - 3-way valve hose assembly for main coil: Hose assembly and hydraulic fittings for connecting the 3-way valve to the main coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).
GT3Px - 3-way valve hose assembly for secondary coil: Hose assembly and hydraulic fittings for connecting the 3-way valve to the secondary coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).
PVV: Potentiometer for fan speed control. The +10V signal is available directly on the electrical connection box located outside the unit.
HMBEx: Electric coil module with double safety thermostat (manual and automatic) to be installed on the unit's flow side.
HMF7x: Filter module with ePM1 50% efficiency according to EN ISO 16890 (F7 according to EN 779) to be positioned at the unit's flow or intake in order to carry out a two-stage filtration. Filter extraction from below.
HMF9x: Filter module with ePM1 80% efficiency according to EN ISO 16890 (F9 according to EN 779) to be positioned at the unit's flow or intake in order to carry out a two-stage filtration. Filter extraction from below.
HMLFx: Module consisting of state-of-the-art devices with UV germicidal lamp with photocatalytic effect for active disinfection. To be placed at the discharge of the unit. The complete elimination of germs, bacteria and viruses cannot be achieved by using SMLFx modules alone, but a reduction in microbial load means less exposure to infection.
HM2Sx: Mixing chamber module complete with two galvanised steel calibration dampers to be positioned at the intake of the unit. The damper pins are equipped with an easily removable hand control.
HMSSx - Silencer baffles module: Module consisting of rock wool silencing baffles covered with polyethylene film and protective mesh to prevent flaking. To be installed on the flow and/or intake side of the unit.
RPx: Regulator to control ventilation in constant flow rate or constant pressure on the flow duct. An external regulator must be provided for thermoregulation.
SPD: Pressure probe for constant flow rate or constant pressure control on the flow duct. In order to carry out the control, the pressure probe must be controlled by an external regulator.
SPF: Differential pressure switch to signal filter fouling status.
HPCx: Closed plenum to be positioned at the flow or intake of the unit. Depending on the opening of the flow/intake hole, the accessory allows

flow/intake in both longitudinal and perpendicular directions to the air flow through the unit.
HPMx: Plenum with circular flows to be positioned at the flow and/or intake of the unit. The multi-diameter (200mm, 180mm, 150mm) circular plastic couplings allow the connection of circular ducts. Flow/intake is allowed in the longitudinal direction of the air flow through the unit.
SCS: Servocontrol with 24V power supply for 0-10V modulating control of the SER damper or the HM2S mixing chamber dampers.



Key:

1	**TVH**	6	**HMSS**	12	**GRA**
2	**Valvola (V3V, AV24,GT3, GT3P)**	7	**HPC**	13	**HMF9**
3	**GRM**	8	**HPM**	14	**HMF7**
4	**HMLF**	9	**FAI**	15	**HM2S**
5	**HMBE**	10	**F7**		
		11	**F9**		

ACCESSORIES COMPATIBILITY

Control

Potentiometer for fan speed control

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
PVV	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Water valves

2 way valve kit

	TVH084	TVH154	TVH204	TVH274	TVH344	TVH404	TVH524
Main coil							
2 way valve	V2V2	V2V3	V2V4	V2V5	V2V5	V2V6	V2V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT21	GT21	GT22	GT23	GT23	GT24	GT24
Secondary coil							
2 way valve	V2V1	V2V1	V2V4	V2V4	V2V4	V2V5	V2V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT2P1	GT2P1	GT2P2	GT2P2	GT2P2	GT2P3	GT2P3

	TVH086	TVH156	TVH206	TVH276	TVH346	TVH406	TVH526
Main coil							
2 way valve	V2V2	V2V3	V2V4	V2V5	V2V5	V2V6	V2V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT21	GT21	GT22	GT23	GT23	GT24	GT24
Secondary coil							
2 way valve	V2V1	V2V1	V2V4	V2V4	V2V4	V2V5	V2V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT2P1	GT2P1	GT2P2	GT2P2	GT2P2	GT2P3	GT2P3

Table 3 way valve kit

	TVH084	TVH154	TVH204	TVH274	TVH344	TVH404	TVH524
Main coil							
Three-way valve	V3V2	V3V3	V3V4	V3V5	V3V5	V3V6	V3V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT31	GT31	GT32	GT33	GT33	GT34	GT34
Secondary coil							
Three-way valve	V3V1	V3V1	V3V4	V3V4	V3V4	V3V5	V3V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT3P1	GT3P1	GT3P2	GT3P2	GT3P2	GT3P3	GT3P3

	TVH086	TVH156	TVH206	TVH276	TVH346	TVH406	TVH526
Main coil							
Three-way valve	V3V2	V3V3	V3V4	V3V5	V3V5	V3V6	V3V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT31	GT31	GT32	GT33	GT33	GT34	GT34
Secondary coil							
Three-way valve	V3V1	V3V1	V3V4	V3V4	V3V4	V3V5	V3V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT3P1	GT3P1	GT3P2	GT3P2	GT3P2	GT3P3	GT3P3

Heating only additional coil

2 row water coil

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
BS21	•	•												
BS22			•	•										
BS23					•	•								
BS24							•	•	•	•				
BS25											•	•	•	•

Electric coil module

2-stage electric coil module

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HMBE1	•	•												
HMBE2			•	•										
HMBE3					•	•								
HMBE4							•	•	•	•				
HMBE5											•	•	•	•

Installation accessories

Filter module with ePM1 50% efficiency

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HMF71	•	•												
HMF72			•	•										
HMF73					•	•								
HMF74							•	•	•	•				
HMF75											•	•	•	•

Filter module with ePM1 80% efficiency

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HMF91	•	•												
HMF92			•	•										
HMF93					•	•								
HMF94							•	•	•	•				
HMF95											•	•	•	•

Silencer baffles module

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HMSS1	•	•												
HMSS2			•	•										
HMSS3					•	•								
HMSS4							•	•	•	•				
HMSS5											•	•	•	•

Photocatalytic device module

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH526
HMLF1	•	•											
HMLF2			•	•									
HMLF3					•	•							
HMLF4							•	•	•	•			
HMLF5											•	•	•

Mixing chamber module complete with two calibration dampers

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH526
HM2S1	•	•											
HM2S2			•	•									
HM2S3					•	•							
HM2S4							•	•	•	•			
HM2S5											•	•	•

Closed plenum

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HPC1	•	•												
HPC2			•	•										
HPC3					•	•								
HPC4							•	•	•	•				
HPC5											•	•	•	•

Plenum with circular deliveries

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HPM1	•	•												
HPM2			•	•										
HPM3					•	•								
HPM4							•	•	•	•				
HPM5											•	•	•	•

Galvanised steel dampers

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
SER1	•	•												
SER2			•	•										
SER3					•	•								
SER4							•	•	•	•				
SER5											•	•	•	•

Alluminium Intake grids

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
GRA1	•	•												
GRA2			•	•										
GRA3					•	•								
GRA4							•	•	•	•				
GRA5											•	•	•	•

Alluminium delivery grille

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
GRM1	•	•												
GRM2			•	•										
GRM3					•	•								
GRM4							•	•	•	•				
GRM5											•	•	•	•

Filter with ePM1 50% efficiency

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
F71	•	•												
F72			•	•										
F73					•	•								
F74							•	•	•	•				
F75											•	•	•	•

Filter with ePM1 80% efficiency

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
F91	•	•												
F92			•	•										
F93					•	•								
F94							•	•	•	•				
F95											•	•	•	•

Flow rate adjuster

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
RP1	•	•	•	•										
RP2					•	•	•	•	•	•	•	•	•	•

Differential pressure probe

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
SPD	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Filter fouling pressure switch

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
SPF	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Servocontrol

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
SCS	•	•	•	•	•	•	•	•	•	•	•	•	•	•

4-ROW COIL UNIT PERFORMANCE DATA

Units designed to operate with all recirculating air or maximum 10% of external air.

		TVH084	TVH154	TVH204	TVH274	TVH344	TVH404	TVH524
Performance in heating mode 70 °C / 60 °C - Main coil 2-pipe system (1)								
Heating capacity	kW	11,60	20,80	28,50	36,60	47,10	60,30	73,90
Water flow rate	l/h	994	1787	2454	3150	4054	5189	6353
Pressure drop	kPa	31	31	48	31	53	42	60
Performance in heating mode 45 °C / 40 °C - Main coil for 2-pipe systems (2)								
Heating capacity	kW	5,70	10,30	14,10	18,20	23,40	29,80	36,50
Water flow rate	l/h	985	1769	2431	3123	4017	5125	6270
Pressure drop	kPa	33	32	51	33	56	45	64
Heating performance 65 °C /55 °C - Secondary coil 4-pipe system (3)								
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
Cooling performances 7 °C / 12 °C - Main coil 2 pipe system (4)								
Cooling capacity	kW	4,70	8,30	11,90	14,30	19,30	24,90	29,30
Sensible cooling capacity	kW	3,50	6,20	8,50	10,80	14,10	17,60	21,40
Water flow rate	l/h	815	1422	2038	2447	3316	4267	5032
Pressure drop	kPa	27	25	41	23	44	38	51
Fan								
Type	type	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	no.	1	2	1	1	2	2	2
Nominal air flow rate	m^3/h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Maximum useful head (2-pipes) (5)	Pa	202	232	438	536	540	443	521
Maximum useful head (4-pipes) (5)	Pa	183	207	408	512	502	417	482
Input power (2-pipes) (6)	W	151	287	313	491	533	620	1006
Input power (4 pipes) (6)	W	159	305	335	511	581	656	1074
Sound data (7)								
Sound power level (inlet + radiated)	dB(A)	74,0	74,0	70,0	76,0	72,0	73,0	79,0
Sound power level (outlet)	dB(A)	72,0	75,0	72,0	78,0	73,0	75,0	81,0
Diametre hydraulic fittings								
Main heat exchanger	Ø	3/4" F	3/4" F	1" F	1" F	1" F	1" F	1" F
Secondary heat exchanger	Ø	1/2" F	1/2" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F
Condensate discharge diameter	mm	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M
Power supply								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
Air filter								
Type	type	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)
Electric coil								
Electric coil capacity	kW	1,5 + 1,5	2,5 + 2,5	4 + 4	6 + 6	6 + 6	7,5 + 7,5	7,5 + 7,5
Stages	no.	2	2	2	2	2	2	2
Power supply		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz

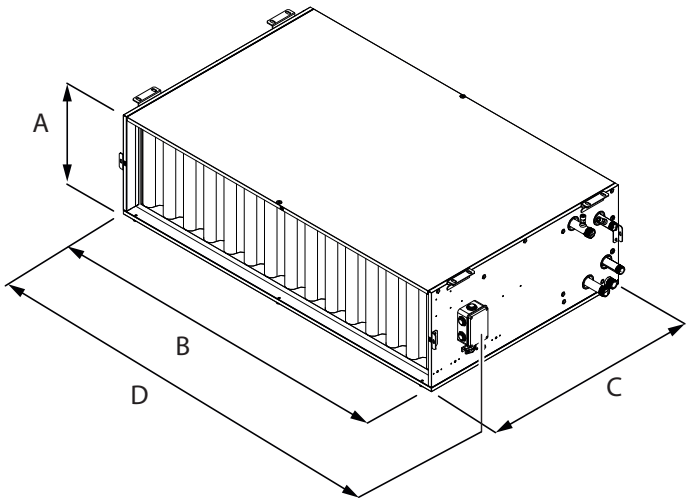
(1) Room air temperature 20°C d.b.; Water (in/out) 70 °C / 60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C / 40 °C
(3) Room air temperature 20 °C d.b.; Water (in/out) 65 °C / 55 °C
(4) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C
(5) Maximum high static pressure at nominal air flow rate, in heating mode
(6) Input power at nominal air flow rate, at nominal high static pressure, in heating mode
(7) Sound data in 2-pipe configuration, at nominal air flow rate, at nominal high static pressure, in heating mode

6-ROW COIL UNIT PERFORMANCE DATA

		TVH086	TVH156	TVH206	TVH276	TVH346	TVH406	TVH526
Performance in heating mode 70 °C / 60 °C - Main coil 2-pipe system (1)								
Heating capacity	kW	12,40	22,60	30,80	39,40	51,30	64,90	80,10
Water flow rate	l/h	1070	1941	2652	3391	4407	5578	6889
Pressure drop	kPa	54	32	37	31	53	34	50
Performance in heating mode 45 °C / 40 °C - Main coil for 2-pipe systems (2)								
Heating capacity	kW	6,20	11,20	15,30	19,60	25,50	32,20	39,90
Water flow rate	l/h	1063	1923	2630	3369	4377	5537	6855
Pressure drop	kPa	58	34	40	33	57	37	53
Heating performance 65 °C /55 °C - Secondary coil 4-pipe system (3)								
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
Cooling performances 7 °C / 12 °C - Main coil 2 pipe system (4)								
Cooling capacity	kW	5,60	9,70	13,60	16,70	22,30	28,10	33,70
Sensible cooling capacity	kW	4,00	6,90	9,50	12,10	15,80	19,60	24,00
Water flow rate	l/h	965	1666	2329	2862	3827	4819	5789
Pressure drop	kPa	46	30	36	26	49	34	47
Fan								
Type	type	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	no.	1	2	1	1	2	2	2
Nominal air flow rate	m^3/h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Maximum useful head (2-pipes) (5)	Pa	193	219	425	525	524	432	505
Maximum useful head (4-pipes) (5)	Pa	174	194	395	501	486	406	466
Input power (2-pipes) (6)	W	155	297	322	500	555	635	1036
Input power (4 pipes) (6)	W	163	315	344	520	601	671	1102
Sound data (7)								
Sound power level (inlet + radiated)	dB(A)	74,0	75,0	70,0	76,0	73,0	73,0	79,0
Sound power level (outlet)	dB(A)	73,0	75,0	72,0	78,0	73,0	75,0	82,0
Diametre hydraulic fittings								
Main heat exchanger	Ø	3/4" F	3/4" F	1" F	1" F	1" F	1" F	1" F
Secondary heat exchanger	Ø	1/2" F	1/2" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F
Condensate discharge diameter	mm	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M
Power supply								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
Air filter								
Type	type	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)
Electric coil								
Electric coil capacity	kW	1,5 + 1,5	2,5 + 2,5	4 + 4	6 + 6	6 + 6	7,5 + 7,5	7,5 + 7,5
Stages	no.	2	2	2	2	2	2	2
Power supply		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz

(1) Room air temperature 20°C d.b.; Water (in/out) 70 °C / 60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C / 40 °C
(3) Room air temperature 20 °C d.b.; Water (in/out) 65 °C / 55 °C
(4) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C
(5) Maximum high static pressure at nominal air flow rate, in heating mode
(6) Input power at nominal air flow rate, at nominal high static pressure, in heating mode
(7) Sound data in 2-pipe configuration, at nominal air flow rate, at nominal high static pressure, in heating mode

DIMENSIONS



Unit for horizontal installation

		TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
Dimensions and weights															
A	mm	300	300	300	300	390	390	390	390	390	390	390	390	390	390
B	mm	700	700	1000	1000	1000	1000	1400	1400	1400	1400	2000	2000	2000	2000
C	mm	700	700	700	700	850	850	850	850	850	850	850	850	850	850
D	mm	758	758	1058	1058	1058	1058	1458	1458	1458	1458	2058	2058	2058	2058
Net weight	kg	30,0	31,0	43,0	45,0	55,0	58,0	69,0	73,0	80,0	85,0	110,0	116,0	110,0	116,0

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www.aermec.com

TS

Air handling unit

- **Very quiet**
- **Available units with heat exchanger with 3-4-6 rows**
- **Ductable units**

DESCRIPTION

The air-conditioning units of the TS series are intended for civil, commercial and hotel systems in small to medium sized environments. They are distinguished by their compactness (a necessary requisite for false ceiling applications) and low noise. The wide range of accessories meets various system requirements.

STRUCTURE

Case

Structure made of Galvanized steel 10/10 sheet steel and internally covered with sheets of polyethylene and polyester to obtain improved thermal and acoustic insulation.

Ventilation group

Statically and dynamically balanced centrifugal fans:

— Three-speed electrical motor with running capacitor permanently activated and internal thermal protection
— Transmission system relay card for each speed (excluding the models TS13 and TS16)
— Useful static pressure available for any canalisation

Heat exchanger coil

3, 4 or 6 row coils, powered with hot or cold water and made of copper piping with aluminium louvered fins blocked by mechanical expansion of the pipes. The threaded sleeves for the hydraulic connections and the air bleeding valve are supplied. The coils can be rotated on site.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Condensate drip

Condensate drip tray in stainless steel AISI 304 with insulation.

ACCESSORIES

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
FMT10: Electronic thermostat for fan coil in to 2/4 pipe systems.
PXAE: Electronic thermostat with thermostated or continuous ventilation.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.
WMT16: Electronic thermostat with thermostated ventilation.
WMT16CV: Electronic thermostat with continuous ventilation.
TSBA: 2-row coil for post-heating, contained in a delivery installation plenum.
TSFA: Air filter class Coarse 50%
TSGA: Horizontal suction grille with fixed louvers to produce suction from below together with the TSPA accessory.
TSMX: Section that mixes the recirculating air and the external air. Calibration of the mix via the damper, motorisation is possible.
VCT: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.
VCT: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.
VCTK: The VCT series valves can be combined with the actuators On-Off 230V. The actuator must be selected according to the type of system/adjustment provided.
TSFM: Delivery flange with rectangular section.
VCTKM: The VCT series valves can be combined with the actuators 24V modulating. The actuator must be selected according to the type of system/adjustment provided.

ACCESSORIES COMPATIBILITY

Control panels

Model	13	16	23	34	36	43	46	53	56	63	74	76
AER503IR (1)	•	•	•	•	•	•	•	•	•	•	•	•
FMT10	•	•	•	•	•	•	•	•	•	•	•	•
PXAE	•	•	•	•	•	•	•	•	•	•	•	•
SA5 (2)	•	•	•	•	•	•	•	•	•	•	•	•
SW5 (2)	•	•	•	•	•	•	•	•	•	•	•	•
TX (3)	•	•	•	•	•	•	•	•	•	•	•	•
WMT10 (3)	•	•	•	•	•	•	•	•	•	•	•	•
WMT16 (3)	•	•	•	•	•	•	•	•	•	•	•	•
WMT16CV (3)	•	•	•	•	•	•	•	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

2-row coil for post-heating

13	16	23	34	36	43	46	53	56	63	74	76
TSBA10	TSBA10	TSBA20/30	TSBA20/30	TSBA20/30	TSBA40	TSBA40	TSBA50	TSBA50	TSBA60/70	TSBA60/70	TSBA60/70

Air filter

13	16	23	34	36	43	46	53	56	63	74	76
TSFA10	TSFA10	TSFA20/30	TSFA20/30	TSFA20/30	TSFA40	TSFA40	TSFA50	TSFA50	TSFA60/70	TSFA60/70	TSFA60/70

Intake grids

13	16	23	34	36	43	46	53	56	63	74	76
TSGA10	TSGA10	TSGA20/40	TSGA20/40	TSGA20/40	TSGA20/40	TSGA20/40	TSGA50/70	TSGA50/70	TSGA50/70	TSGA50/70	TSGA50/70

Section that mixes

13	16	23	34	36	43	46	53	56	63	74	76
TSMX10	TSMX10	TSMX20/30	TSMX20/30	TSMX20/30	TSMX40	TSMX40	TSMX50	TSMX50	TSMX60/70	TSMX60/70	TSMX60/70

Plenum with suction

13	16	23	34	36	43	46	53	56	63	74	76
TSPA10	TSPA10	TSPA20/30	TSPA20/30	TSPA20/30	TSPA40	TSPA40	TSPA50	TSPA50	TSPA60/70	TSPA60/70	TSPA60/70

Delivery plenum

13	16	23	34	36	43	46	53	56	63	74	76
TSPM10	TSPM10	TSPM20/30	TSPM20/30	TSPM20/30	TSPM40	TSPM40	TSPM50	TSPM50	TSPM60/70	TSPM60/70	TSPM60/70

Delivery flange

13	16	23	34	36	43	46	53	56	63	74	76
TSFM10	TSFM10	TSFM20/30	TSFM20/30	TSFM20/30	TSFM40	TSFM40	TSFM50	TSFM50	TSFM60/70	TSFM60/70	TSFM60/70

2 way valve kit

13	16	23	34	36	43	46	53	56	63	74	76
VCT102	VCT102	VCT102	VCT102	VCT102	VCT202	VCT202	VCT202	VCT402	VCT402	VCT402P	VCT402P

3 way valve kit

13	16	23	34	36	43	46	53	56	63	74	76
VCT103	VCT103	VCT103	VCT103	VCT103	VCT203	VCT203	VCT203	VCT403	VCT403	VCT403P	VCT403P

Actuator VCTK 230V

13	16	23	34	36	43	46	53	56	63	74	76
VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK

Actuator 24V

13	16	23	34	36	43	46	53	56	63	74	76
VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM

PERFORMANCE SPECIFICATIONS

2-pipe

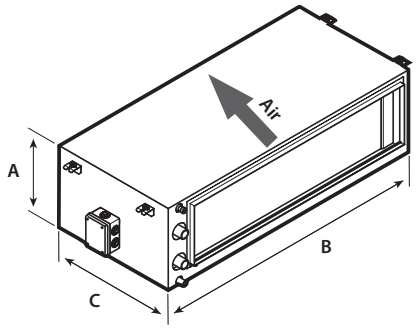
		TS13			TS16			TS23			TS34			TS36			TS43		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Cooling performance 7 °C / 12 °C (1)																			
Cooling capacity	kW	4,39	4,65	4,85	4,44	5,21	5,81	7,18	7,65	7,98	8,59	9,20	9,61	9,40	10,08	10,52	7,14	9,35	11,11
Sensible cooling capacity	kW	3,39	3,60	3,75	3,41	3,99	4,45	5,82	6,20	6,46	6,80	7,28	7,61	7,43	7,96	8,31	5,75	7,54	8,96
Water flow rate system side	l/h	754	800	835	764	896	999	1235	1315	1372	1478	1583	1653	1617	1733	1809	1227	1608	1912
Pressure drop system side	kPa	17	19	21	6	7	9	20	23	24	20	22	24	13	15	16	10	17	23
Heating performance 70 °C / 60 °C (2)																			
Heating capacity	kW	8,89	9,43	9,83	9,75	11,34	12,61	14,14	15,04	15,67	17,71	18,92	19,76	19,36	20,71	21,60	14,24	18,33	21,67
Water flow rate system side	l/h	780	827	862	856	995	1106	1240	1319	1375	1553	1660	1733	1698	1816	1894	1249	1068	1900
Pressure drop system side	kPa	10	12	13	5	7	8	10	12	12	17	19	21	11	13	14	8	13	18
Fan																			
Air flow rate	m^3/h	810	877	930	656	803	930	1316	1432	1518	1376	1507	1600	1376	1510	1601	1170	1631	2050
High static pressure	Pa	68	80	90	27	41	55	77	91	102	62	75	85	33	40	45	37	72	114
Input power	kW	0,1	0,1	0,2	0,1	0,1	0,2	0,2	0,3	0,3	0,2	0,3	0,3	0,2	0,3	0,3	0,3	0,3	0,4
Type	type	Centrifugal																	
Fan motor	type	On-Off																	
Number	no.	1			1			2			2			2			2		
Diametre hydraulic fittings																			
Type	type	Gas																	
Main heat exchanger	Ø	3/4"			1"			3/4"			3/4"			1"			3/4"		
Power supply																			
Power supply		230V~50Hz																	

		TS46			TS53			TS56			TS63			TS74			TS76		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Cooling performance 7 °C / 12 °C (1)																			
Cooling capacity	kW	8,57	11,27	13,44	8,05	11,06	13,86	9,50	13,13	16,47	8,11	12,84	16,62	17,47	20,65	21,92	19,79	23,38	24,93
Sensible cooling capacity	kW	6,90	9,06	10,81	5,68	7,80	9,77	6,73	9,31	11,68	6,40	10,12	13,11	14,20	16,78	17,82	16,04	18,95	20,21
Water flow rate system side	l/h	1474	1938	2311	1385	1902	2384	1633	2260	2833	1395	2208	2858	3006	3551	3771	3405	4022	4289
Pressure drop system side	kPa	8	13	17	12	21	32	10	18	27	7	16	26	19	25	28	17	23	26
Heating performance 70 °C / 60 °C (2)																			
Heating capacity	kW	18,17	23,45	27,83	15,55	20,82	25,89	19,63	26,43	32,90	18,32	27,78	35,61	37,33	43,80	46,45	42,00	49,25	52,44
Water flow rate system side	l/h	1593	2056	2440	1364	1826	2270	1722	2321	2886	1607	2436	3123	3274	3841	4073	3683	4319	4599
Pressure drop system side	kPa	6	10	14	9	15	22	9	15	22	6	13	21	16	22	24	15	20	22
Fan																			
Air flow rate	m^3/h	1173	1642	2076	1211	1775	2387	1202	1777	2391	1493	2570	3599	3117	3869	4200	3119	3869	4225
High static pressure	Pa	24	48	76	26	57	104	18	38	69	20	61	120	63	97	115	41	63	75
Input power	kW	0,3	0,3	0,4	0,3	0,4	0,5	0,3	0,4	0,5	0,3	0,4	0,6	0,7	0,8	0,8	0,7	0,8	0,8
Type	type	Centrifugal																	
Fan motor	type	On-Off																	
Number	no.	2			2			2			2			2			2		
Diametre hydraulic fittings																			
Type	type	Gas																	
Main heat exchanger	Ø	1"			3/4"			1"			1"			1"			1"1/4		
Power supply																			
Power supply		230V~50Hz																	

(1) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C;
(2) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C;

Unit designed to operate with all recirculating air or maximum 10% of external air.

DIMENSIONS



Size		13	16	23	34	36	43	46	53	56	63	74	76
Dimensions and weights													
A	mm	295	295	295	295	295	325	325	325	325	375	375	375
B	mm	645	645	1000	1000	1000	1100	1100	1345	1345	1345	1345	1345
C	mm	520	520	520	520	520	600	600	600	600	600	600	600
Empty weight	kg	25	27	35	38	42	42	46	48	52	56	61	67

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TA

Air handling unit

- **Horizontal or vertical, configurations**
- **Available units with heat exchanger with 4-6 rows**
- **Version with 4 row expansion coil using R410A**
- **Version with extractor**

DESCRIPTION

The air-conditioning units of the TA series are intended for civil, commercial and hotel systems in small to medium sized environments. They are distinguished by their compactness (a necessary requisite for false ceiling applications) and low noise. The wide range of accessories meets various system requirements.

FEATURES

Structure

Made of galvanised steel sandwich panels with polyurethane insulation (density 45 kg/m^3), 15 mm thick. The intake and delivery panels are fitted with flanges for the connection to any possible air channels or accessories.
The unit is supplied with specific brackets for attaching it to the wall.

Air filtration

Filtration of the air entrusted to class G4 filters in compliance with EN779 (thickness 50mm) as per standard positioned at intake.

Ventilation group

Fans double intake centrifugal with forward blades and directly coupled motor. The 230V-50Hz single-phase motor has many speeds, of which three can be selected via the control panel.

Heat exchanger coil

4 or 6 row coils, powered with hot or cold water and made of copper piping with aluminium louvered fins blocked by mechanical expansion of the pipes. The threaded sleeves for the hydraulic connections and the air bleeding valve are supplied. The coils can be rotated on site.
The possibility to rotate the coils on site is envisioned.

■ *Also available are coils with 4 rows with direct expansion operating with R410A fluid and post-heating coils with 2 rows realised in copper piping with aluminium louvers blocked via mechanical expansion of the pipes.*

Condensate drip

Condensate drip tray interior isolated in aluminium alloy.

ACCESSORIES

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.
WMT16: Electronic thermostat with thermostated ventilation.
WMT16CV: Electronic thermostat with continuous ventilation.
VCT: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.
VCT: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.
VCTK: The VCT series valves can be combined with the actuators On-Off 230V. The actuator must be selected according to the type of system/adjustment provided.
VCTKM: The VCT series valves can be combined with the actuators 24V modulating. The actuator must be selected according to the type of system/adjustment provided.
M2S: Galvanised steel mixing chamber with two dampers for air calibration. Louver pitch 50 mm, the galvanised steel adjustment knob (diameter 8 mm) can be motorised.

M3S: Galvanised steel mixing chamber with three air calibration dampers and galvanised steel plates. Must necessarily be paired with the VRF accessory.
FTF: Soft bag filters. Section in galvanised steel sheet metal with F6 soft bag filters. Must necessarily be paired in the powered units.
B2R: Hot water coil with 2 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil.
PBE: Section with post heating coil composed of armoured heaters equipped with a double safety thermostat.
SSL: Module with seven galvanised steel sheet metal silencers and seven stone wool silencers covered by polyethylene film to prevent chipping.
S2Z: Galvanised steel opposed louvers dampers for mixing outside air with recirculating air.
VRF: Recovery fan unit equipped with electronic variable speed control. The unit is contained in a galvanised steel sheet metal section equipped with flat filters, efficiency level G4 (EN779).
SAS: Air calibration damper with galvanised sheet metal louvers to be positioned for intake. Louver pitch 50 mm; the galvanised steel adjustment knob can be motorised.
GMD: Air delivery grill with louvers that can be positioned for the delivery of air in the room to be treated. May be installed directly on the device by removing the flanges or installed on the wall.
GAP: Intake grille with louvers at a fixed 45° angle. May be installed directly on the device by removing the flanges or installed on the wall.
FPI: ISO COARSE 50% filter flange for intake at base.
PMM: Plenum with circular multiple delivery, thickness 1.5 mm. The plenum is equipped with multi-diameter circular connections (200 mm, 180 mm, 150 mm) made of plastic to permit the connection of circular conduits.
PMC: Closed delivery plenum in 1.5 mm thick hot-dip galvanised sheet metal. The plenum allows for flow to be rotated by 90°. Opening the delivery outlet is the installer's responsibility.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	09	11	15	19	24	33	40	50
AER503IR (1)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•
SA5 (2)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•
SIT3 (3)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•
SW5 (2)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•
WMT10 (4)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•
WMT16 (4)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•
WMT16CV (4)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
(4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

2 way valve kit

Ver	09	11	15	19	24	33	40	50
H4, H6, V4, V6	VCT102	VCT102	VCT202	VCT202	VCT202	VCT402	VCT402P	VCT402P

3 way valve kit

Ver	09	11	15	19	24	33	40	50
H4, H6, V4, V6	VCT103	VCT103	VCT203	VCT403, VCT403P	VCT403, VCT403P	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Actuator VCTK 230V

Ver	09	11	15	19	24	33	40	50
H4, H6, V4, V6	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK

Actuator 24V

Ver	09	11	15	19	24	33	40	50
H4, H6, V4, V6	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM

2-damper mixing chamber

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	M2S1	M2S1	M2S2	M2S3	M2S4	M2S4	M2S5	M2S5

3-damper mixing chamber

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	M3S1 (1)	M3S1 (1)	M3S2 (1)	M3S3 (1)	M3S4 (1)	M3S4 (1)	M3S5 (1)	M3S5 (1)

(1) It must necessarily be combined with the VRF accessory.

Closed delivery plenum

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	PMC1	PMC1	PMC2	PMC3	PMC4	PMC4	PMC5	PMC5

Soft bag filter section

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	FTF1 (1)	FTF1 (1)	FTF2 (1)	FTF3 (1)	FTF4 (1)	FTF4 (1)	FTF5 (1)	FTF5 (1)

(1) It must necessarily be combined in the enhanced units.

2-row coil

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	B2R1	B2R1	B2R2	B2R3	B2R4	B2R4	B2R5	B2R5

PMM

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	PMM1	PMM1	PMM2	PMM3	PMM4	PMM4	PMM5	PMM5

ISO COARSE 50% filter flange for intake at base.

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	FPI1	FPI1	FPI2	FPI3	FPI4	FPI4	FPI5	FPI5

Section with post-heating coil

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	PBE1	PBE2	PBE3	PBE4	PBE5	PBE6	PBE7	PBE8

Silencer baffles module

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	SSL1	SSL1	SSL2	SSL3	SSL4	SSL4	SSL5	SSL5

2 zone damper

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	S2Z1	S2Z1	S2Z2	S2Z3	S2Z4	S2Z4	S2Z5	S2Z5

Return ventilating section with a G4 filter

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	VRF1	VRF2	VRF3	VRF4	VRF5	VRF6	VRF7	VRF8

Suction damper

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	SAS1	SAS1	SAS2	SAS3	SAS3	SAS3	SAS5	SAS5

Outlet grille with adjustable louvers

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	GMD1	GMD1	GMD2	GMD3	GMD4	GMD4	GMD5	GMD5

Intake grids

Ver	09	11	15	19	24	33	40	50
H4, H6, HE, V4, V6, X	GAP1	GAP1	GAP2	GAP3	GAP4	GAP4	GAP5	GAP5

4-ROW COIL UNIT PERFORMANCE DATA

Units designed to operate with all recirculating air or maximum 10% of external air.

Versions H/V

		TA09H4	TA09V4	TA11H4	TA11V4	TA15H4	TA15V4	TA19H4	TA19V4	TA24H4	TA24V4	TA33H4	TA33V4	TA40H4	TA40V4	TA50H4	TA50V4
Cooling performances 7 °C / 12 °C - 2 pipe system (1)																	
Cooling capacity	kW	4,20	4,20	5,70	5,70	8,70	8,70	12,40	12,40	17,30	17,30	21,70	21,70	27,20	27,20	33,50	33,50
Sensible cooling capacity	kW	3,50	3,50	4,20	4,20	6,20	6,20	8,30	8,30	11,20	11,20	14,30	14,30	18,00	18,00	20,90	20,90
Water flow rate	l/h	722	722	980	980	1496	1496	2132	2132	2975	2975	3732	3732	4678	4678	5761	5761
Pressure drop	kPa	6	6	6	6	7	7	12	12	16	16	23	23	11	11	31	31
Heating performance 70 °C / 60 °C - 2 pipe system																	
Heating capacity	kW	10,40	10,40	13,30	13,30	19,10	19,10	24,70	24,70	34,10	34,10	41,90	41,90	52,80	52,80	58,30	58,30
Water flow rate	l/h	894	894	1139	1139	1642	1642	2124	2124	2932	2932	3603	3603	4538	4538	5013	5013
Pressure drop	kPa	5	5	8	8	7	7	10	10	13	13	19	19	10	10	22	22
2-rows-heating coil with hot water - (accessory) (2)																	
Heating capacity	kW	3,90	3,90	8,50	8,50	12,70	12,70	16,00	16,00	21,70	21,70	26,70	26,70	34,80	34,80	40,00	40,00
Water flow rate	l/h	333	333	731	731	1092	1092	1371	1371	1866	1866	2291	2291	2988	2988	3439	3439
Pressure drop	kPa	8	8	11	11	13	13	14	14	18	18	26	26	18	18	23	23
Electric heating coil - (accessory)																	
Heating capacity	kW	4,00	4,00	6,00	6,00	8,00	8,00	10,00	10,00	12,00	12,00	16,00	16,00	20,00	20,00	24,00	24,00
Stages	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Power supply		400V~3 50Hz															
Fan																	
Type	type	Centrifugal															
Number	no.	1	1	2	2	2	2	1	1	1	1	2	2	2	2	2	2
Air flow rate	m^3/h	800	800	1100	1100	1500	1500	1900	1900	2400	2400	3300	3300	4000	4000	5000	5000
High static pressure	Pa	145	145	290	290	176	176	240	240	211	211	245	245	248	248	153	153
Input power	kW	0.25		0.31		0.38		0.61		0.83		0.81		0.98		1.28	
Air filter																	
Type	type	G4 / F6															
Sound data																	
Sound power level	dB(A)	62,0	62,0	66,0	66,0	67,0	67,0	72,0	72,0	74,0	74,0	75,0	75,0	76,0	76,0	79,0	79,0
Power supply																	
Power supply		230V~50Hz															

(1) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C
(2) Water temperature (in/out) 70°C / 60°C.

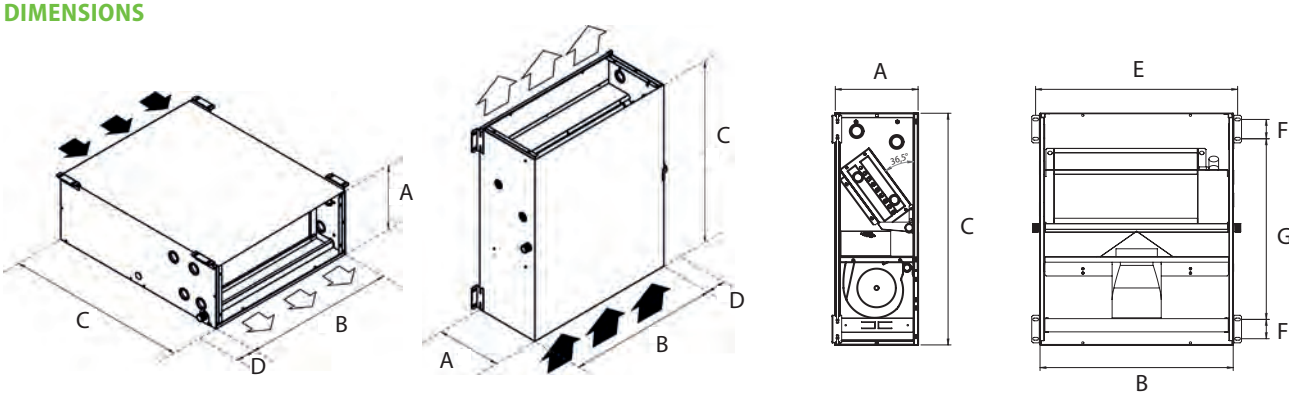
6-ROW COIL UNIT PERFORMANCE DATA

Versions H/V

		TA09H6	TA09V6	TA11H6	TA11V6	TA15H6	TA15V6	TA19H6	TA19V6	TA24H6	TA24V6	TA33H6	TA33V6	TA40H6	TA40V6	TA50H6	TA50V6
Cooling performances 7 °C / 12 °C - 2 pipe system (1)																	
Cooling capacity	kW	5,10	5,10	6,70	6,70	11,70	11,70	15,50	15,50	20,60	20,60	26,30	26,30	33,50	33,50	39,60	39,60
Sensible cooling capacity	kW	3,40	3,40	4,70	4,70	7,50	7,50	9,80	9,80	12,80	12,80	16,60	16,60	20,90	20,90	25,00	25,00
Water flow rate	l/h	868	868	1152	1152	2012	2012	2666	2666	3543	3543	4523	4523	5761	5761	6810	6810
Pressure drop	kPa	4	4	6	6	15	15	29	29	27	27	41	41	31	31	42	42
Heating performance 70 °C / 60 °C - 2 pipe system																	
Heating capacity	kW	11,40	11,40	14,80	14,80	21,40	21,40	27,40	27,40	35,60	35,60	46,60	46,60	58,30	58,30	72,80	72,80
Water flow rate	l/h	976	976	1273	1273	1838	1838	2356	2356	3058	3058	4005	4005	5013	5013	6260	6260
Pressure drop	kPa	4	4	7	7	16	16	23	23	21	21	34	34	22	22	30	30
2-rows-heating coil with hot water - (accessory) (2)																	
Heating capacity	kW	3,90	3,90	8,50	8,50	12,70	12,70	16,00	16,00	21,70	21,70	26,70	26,70	34,80	34,80	40,00	40,00
Water flow rate	l/h	333	333	731	731	1092	1092	1371	1371	1866	1866	2291	2291	2988	2988	3439	3439
Pressure drop	kPa	8	8	11	11	13	13	14	14	18	18	26	26	18	18	23	23
Electric heating coil - (accessory)																	
Heating capacity	kW	4,00	4,00	6,00	6,00	8,00	8,00	10,00	10,00	12,00	12,00	16,00	16,00	20,00	20,00	24,00	24,00
Stages	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Power supply		400V~3 50Hz															
Fan																	
Type	type	Centrifugal															
Number	no.	1	1	2	2	2	2	1	1	1	1	2	2	2	2	2	2
Air flow rate	m^3/h	800	800	1100	1100	1500	1500	1900	1900	2400	2400	3300	3300	4000	4000	5000	5000
High static pressure	Pa	131	131	265	265	158	158	224	224	199	199	224	224	234	234	131	131
Input power	kW	0.25		0.31		0.38		0.61		0.83		0.81		0.98		1.28	
Air filter																	
Type	type	G4 / F6															
Sound data																	
Sound power level	dB(A)	62,0	62,0	66,0	66,0	67,0	67,0	72,0	72,0	74,0	74,0	75,0	75,0	76,0	76,0	79,0	79,0
Power supply																	
Power supply		230V~50Hz															

(1) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C
(2) Water temperature (in/out) 70°C / 60°C.

DIMENSIONS



Unit for horizontal installation

Unit H

		TA09H4	TA09H6	TA11H4	TA11H6	TA15H4	TA15H6	TA19H4	TA19H6	TA24H4	TA24H6	TA33H4	TA33H6	TA40H4	TA40H6	TA50H4	TA50H6
Dimensions and weights																	
A	mm	300	300	300	300	300	300	390	390	390	390	390	390	390	390	390	390
B	mm	700	700	700	700	1050	1050	1050	1050	1475	1475	1475	1475	2100	2100	2100	2100
C	mm	700	700	700	700	700	700	850	850	850	850	850	850	1000	1000	1000	1000
D	mm	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
E	mm	732	732	732	732	732	732	1082	1082	1507	1507	1507	1507	2131	2131	2131	2131
F	mm	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
G	mm	655	655	655	655	655	655	905	905	905	905	905	905	905	905	905	905
Weights																	
With 4-row water coil	kg	28	28	33	33	45	45	60	60	78	78	86	86	135	135	140	140
With 6-row water coil	kg	30	30	35	35	47	47	62	62	81	81	89	89	139	139	144	144

Unit for vertical installation

Unit V

		TA09V4	TA09V6	TA11V4	TA11V6	TA11VE	TA15V4	TA15V6	TA19V4	TA19V6	TA24V4	TA24V6	TA33V4	TA33V6	TA40V4	TA40V6	TA50V4	TA50V6
Dimensions and weights																		
A	mm	300	300	300	300	300	300	300	390	390	390	390	390	390	390	390	390	390
B	mm	700	700	700	700	700	1050	1050	1050	1050	1475	1475	1475	1475	2100	2100	2100	2100
C	mm	700	700	700	700	700	700	700	850	850	850	850	850	850	1000	1000	1000	1000
D	mm	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
E	mm	732	732	732	732	732	732	732	1082	1082	1507	1507	1507	1507	2131	2131	2131	2131
F	mm	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
G	mm	655	655	655	655	655	655	655	905	905	905	905	905	905	905	905	905	905
Weights																		
With 4-row water coil	kg	28	28	33	33	33	45	45	60	60	78	78	86	86	135	135	140	140
With 6-row water coil	kg	30	30	35	35	35	47	47	62	62	81	81	89	89	139	139	144	144

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TN

Air handling unit

- **Maximum installation flexibility**
- **EC fan Plug-fan**
- **Wide choice of accessories.**
- **Large range of capacities and static pressures.**
- **Versions available with water coil or with direct expansion.**

DESCRIPTION

The TN range offers an alternative to the air treatment unit for flow rates from 2300 to 23000m^3/h when the only treatment required is filtering, cooling and/or heating. Designed for domestic, commercial, industrial or hotel systems in small or medium sized contexts.
The units can be installed horizontally or vertically for greater flexibility of use.
All the units are always supplied and shipped in the vertical configuration. The customer is responsible for any possible modification from vertical to horizontal.
TN series are characterised by their compact size, low noise levels, and the wide choice of accessories.
The units are available with a plug fan unit with EC motor, or with a transmission centrifugal fan unit with AC motor (the latter comes in both the standard version and the boosted high head version).

FEATURES

Structure

The structure is made of aluminium profiles with sandwich cover paneling made of galvanised steel on the inside and pre-coated RAL 9003 galvanised steel on the outside with polyurethane insulation (density 40 kg/m^3) with 25 mm thickness.
Both the panels of the base unit as well as the panels of the plenum have pre-shearing that render them compatible with the insertion of the accessories.
The fixing of the paneling using a panel block profile ensures a perfect seal between the panel and the frame and makes it extremely easy to mount and remove the panels. The 3-way corner joint is made of glass-fibre reinforced nylon.
The condensate drip tray, in galvanised steel, has a threaded drain connection on both sides and can be used whether the unit is installed horizontally or vertically.

Water heat exchanger coils

With copper pipes. Aluminium fins blocked via the mechanical expansion of the pipes. With 4 or 6 rows for the main one (heating or cooling) and 2,3 or 4 rows for the secondary one (heating only).

Evaporative heat exchanger coils

An alternative to the main water coil.
Suitable for R410A refrigerant. With copper pipes. Aluminium fins blocked via the mechanical expansion of the pipes. With 4 or 6 rows and both RH and LH versions.

Electric heating coil

Electric heating coil with finned, armoured elements. With twin safety thermostat (automatic and manual reset). Includes the implementation contactors (commanded with 24Volt AC voltage).
Can be used both for summer post-heating and winter heating. The coil has two asymmetric levels (1/3, 2/3 of the total power) so it can be commanded at up to 3 levels.

Air filter

The air is filtered through synthetic 50mm filters with an efficiency level of Coarse 55% (as per the ISO 16890 standard) on the intake points.
The filters are housed on guides in the main coil section, and can be easily removed for cleaning and maintenance; just remove the panel on the side of the water connections and then take out the filters.
With the FT7MxT accessory, filtering takes place via compact filters with an EPM1 55% efficiency level (as per the ISO 16890 standard).

VENTILATION GROUP

The configurator allows you to choose between two different types of fan unit, to meet every possible system request.

Ventilation group with inverter EC fan plug fun

Fan
The fans are of the plug-fan type with reversed blades for excellent performance with single intake.
Motor
The electric motors with extremely high efficiency, directly coupled to the fans, have an external EC rotor with integrated electronic control.They can be controlled continuously by a 0-10V signal. IP55 Protection rating. The motors can be powered with 380-480V / 3ph / 50-60Hz (the range is however reduced to the power supply required by the ByyExT or ByyExTZ electric battery accessory, if required immediately or if installed at a later date).
A standard control option via the ModBus protocol.

Fan unit with transmission

Fan

The fans are of the double suction centrifugal variety with high performance forward blades.

Motor

The single-speed (4-pole) electric motors are of the three-phase asynchronous type, with a closed construction and external ventilation, caged rotor and B3 configuration with horizontal shaft, complying with the IEC, CEI and UNEL standards. IP55 protection rating. They are powered at 400V-3ph-50Hz (standard) or 460V-3ph-60Hz (units with "Z" power supply).

Transmission

The pulleys (supplied with a Taperlock-type conical shrink disk) are statically and dynamically balanced, with a variable diameter for improved fan calibration. The transmission belts may be of the SPA or SPB type.

ACCESSORIES

PLxT: Plenum composed of pre-sheared panels that can be opened on 3 sides, it can be mounted as an inlet or as an outlet; it is compatible with the accessories GAxT, GMxT, SAxT and TPPLxT. It includes mounting brackets and feet (for horizontal and vertical configurations).

FT7MxT: Compact filters with filtering degree ePM1 55% (according to ISO 16890), composed of a plenum that can be opened on two sides, which can be positioned on the outlet of the machine; it is compatible with the accessories GMxT, SAxT and TPPxT. It includes fixing plates and feet (for horizontal and vertical configurations).

B2RxT: Hot water coil with 2 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil, and made of copper piping and aluminium finning blocked by the mechanical expansion of the pipes.

B3RxT: Hot water coil with 3 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil, and made of copper piping and aluminium finning blocked by the mechanical expansion of the pipes.

BR4xT: Hot water coil with 4 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil, and made of copper piping and aluminium finning blocked by the mechanical expansion of the pipes.

SAxT: Air calibration damper with galvanised steel louvers. Louvers pitch 50mm; galvanised steel adjusting pin : can be installed on the equipment base or the plenum.

GMxT: Outlet grille with double row of louvers that can be adjusted when emitting air into the room. Can be installed on the plenum.

GAxT: Suction grille with louvers fixed at an angle of 45°; Can be installed directly on the equipment base or on the plenum accessories.

TPVSxT: Protective roof for Vertical installation with top outlet. Composed of a pre-coated metal sheet, fastened to the side of the unit. To be installled on the unit base. The accessory is not compatible with units equipped with EC plug fans.

TPVFxT: Protective roof for Vertical installation with front delivery. Composed of pre-coated diamond sheet, fastened to the side of the unit. To be installed on: PLxT, FT7MxT and vertical unit base with front outlet.

TPLxT: Protective roof for horizontal installation with Front outlet. Composed of pre-coated diamond sheet, fastened to the side of the unit. To be installed on unit base.

TPPLxT: Protective roof for the plenum, for horizontal installation with front delivery. Made of pre-painted diamond sheet metal fixed to the sides of the unit (to be installed on PLxT and FT7MxT, from size 3 to size 8).

TPFTLxT: Protective roof for the bag filters, for line installation with front delivery. Made of pre-painted diamond sheet metal fixed to the sides of the unit (to be installed on FT7MxT, on sizes 1 and 2).

P50MBT: Corner support feet for both the horizontal and vertical version. Made of galvanised sheet: they can be fixed directly to the unit with the screws supplied. The accessory has 4 corner feet and 2 side feet.

P50ACT: Lateral support feet for the horizontal version. Made of galvanised sheet: they come with the accessories unit together with the bolts and screws.

ByyExT: Electric coil 400V/3ph/50Hz. Can be positioned inside the standard device, downstream from the main coil. Consists of a sheet metal frame, heating elements (armoured and finned), command contactors (24V AC) and two thermostats (one with automatic reset and the other manual). The electrical heating power (yy in kW) is divided over two sets of heaters 1/3+2/3 that can be controlled up to max. 3 levels. WARNING: To avoid the risk of overheating, make sure the fan is working at the correct flow rate when the coil is activated, and that there is a minimum post-ventilation time when the coil is deactivated.

BYYExTZ: Electric coil 460V/3ph/60Hz. Can be positioned inside the standard device, downstream from the main coil. Consists of a sheet metal frame, heating elements (armoured and finned), command contactors (24V AC) and two thermostats (one with automatic reset and the other manual). The electrical heating power (yy in kW) is divided over two sets of heaters 1/3+2/3 that can be controlled up to max. 3 levels. WARNING: To avoid the risk of overheating, make sure the fan is working at the correct flow rate when the coil is activated, and that there is a minimum post-ventilation time when the coil is deactivated.

CPxT: Adjustment module with sensor for volumetric flow rate (accessory for TNxxE version only).

CPxTP: Adjustment module with sensor for differential pressure (accessory for TNxxE version only).

CPxTV: Speed regulatory (accessory only for TNxxE versions).

ACCESSORIES COMPATIBILITY

Plenum

1	2	3	4	5	6	7	8
PL1T (1)	PL2T (1)	PL3T (1)	PL4T (1)	PL5T (1)	PL6T (1)	PL7T (1)	PL8T (1)

(1) For horizontal and vertical configurations.

Compact ePM1 55% filters on the fan delivery

1	2	3	4	5	6	7	8
FT7M1T (1)	FT7M2T (1)	FT7M3T (1)	FT7M4T (1)	FT7M5T (1)	FT7M6T (1)	FT7M7T (1)	FT7M8T (1)

(1) For horizontal and vertical configurations.

Hot water coil with 2 rows for lines with 4 pipes

1	2	3	4	5	6	7	8
B2R1T	B2R2T	B2R3T	B2R4T	B2R5T	B2R6T	B2R7T	B2R8T

Hot water coil with 3 rows for lines with 4 pipes

1	2	3	4	5	6	7	8
B3R1T	B3R2T	B3R3T	B3R4T	B3R5T	B3R6T	B3R7T	B3R8T

Hot water coil with 4 rows for lines with 4 pipes

1	2	3	4	5	6	7	8
B4R1T	B4R2T	B4R3T	B4R4T	B4R5T	B4R6T	B4R7T	B4R8T

Suction damper

1	2	3	4	5	6	7	8
SA1T	SA2T	SA3T	SA4T	SA5T	SA6T	SA7T	SA8T

Outlet grille with adjustable louvers

1	2	3	4	5	6	7	8
GM1T	GM2T	GM3T	GM4T	GM5T	GM6T	GM7T	GM8T

Intake grids

1	2	3	4	5	6	7	8
GA1T	GA2T	GA3T	GA4T	GA5T	GA6T	GA7T	GA8T

Protective roof for Vertical installation with top outlet

1	2	3	4	5	6	7	8
TPVS1T (1)	TPVS2T (1)	TPVS3T (1)	TPVS4T (1)	TPVS5T (1)	TPVS6T (1)	TPVS7T (1)	TPVS8T (1)

(1) The accessory is not compatible with units equipped with EC plug fans.

Protective roof for Vertical installation with front outlet

1	2	3	4	5	6	7	8
TPVF1T	TPVF2T	TPVF3T	TPVF4T	TPVF5T	TPVF6T	TPVF7T	TPVF8T

Protective roof for horizontal installation with front outlet

1	2	3	4	5	6	7	8
TPL1T	TPL2T	TPL3T	TPL4T	TPL5T	TPL6T	TPL7T	TPL8T

Protective roof for horizontal installation with Front outlet

1	2	3	4	5	6	7	8
TPPL1T (1)	TPPL2T (1)	TPPL3T (1)	TPPL4T (1)	TPPL5T (1)	TPPL6T (1)	TPPL7T (1)	TPPL8T (1)

(1) To be installed on PLxT and FT7MxT from size 3 to size 8.

Roof for protecting pocket filters for installation on Line with Front outlet

1	2	3	4	5	6	7	8
TPFTL1T (1)	TPFTL2T (1)	-	-	-	-	-	-

(1) To be installed on FT7MxT on sizes 1 and 2.
The accessory cannot be fitted on the configurations indicated with -

Corner support feet

1	2	3	4	5	6	7	8
P50MBT	P50MBT	P50MBT	P50MBT	P50MBT	P50MBT	P50MBT	P50MBT

Lateral support feet

1	2	3	4	5	6	7	8
P50ACT	P50ACT	P50ACT	P50ACT	P50ACT	P50ACT	P50ACT	P50ACT

Electric coil 400V~3 50Hz

1	2	3	4	5	6	7	8
B07E1T	B10E2T	B14E3T	B18E4T	B25E5T	B30E6T	B40E7T	B50E8T

Electric coil 460V~3 60Hz

1	2	3	4	5	6	7	8
B07E1TZ	B10E2TZ	B14E3TZ	B18E4TZ	B25E5TZ	B30E6TZ	B40E7TZ	B50E8TZ

Adjustment module with sensor for volumetric flow rate

1	2	3	4	5	6	7	8
CP1T (1)	CP1T (1)	CP2T (1)	CP2T (1)	CP2T (1)	CP2T (1)	CP2T (1)	CP2T (1)

(1) Accessory only available for TNxxE versions.

Adjustment module with sensor for differential pressure

1	2	3	4	5	6	7	8
CP1TP (1)	CP1TP (1)	CP1TP (1)	CP1TP (1)	CP1TP (1)	CP1TP (1)	CP1TP (1)	CP1TP (1)

(1) Accessory only available for TNxxE versions.

Speed regulatory

1	2	3	4	5	6	7	8
CP1TV (1)	CP1TV (1)	CP1TV (1)	CP1TV (1)	CP1TV (1)	CP1TV (1)	CP1TV (1)	CP1TV (1)

(1) Accessory only available for TNxxE versions.

CONFIGURATOR

Field		Description
1,2		**TN**
3		**Size** 1, 2, 3, 4, 5, 6, 7, 8
4		**Version**
	4	Water coil, 4 rows (LH side for connections - the connections side can be altered on site)
	6	Water coil, 6 rows (LH side for connections - the connections side can be altered on site)
	A	R410A direct expansion coil, 4 rows (RH side for connections - the connections side cannot be altered on site) (1)
	B	R410A direct expansion coil, 4 rows (LH side for connections - the connections side cannot be altered on site) (2)
	C	R410A direct expansion coil, 6 rows (RH side for connections - the connections side cannot be altered on site) (1)
	D	R410A direct expansion coil, 6 rows (LH side for connections - the connections side cannot be altered on site) (2)
5		**Fans (3)**
	B	Centrifugal with AC motor (low head)
	E	Plug fans with EC motor
	P	Centrifugal with AC motor (high head)
6		**Power supply (4)**
	Z	460V ~ 3 60Hz
	°	400V ~ 3 50Hz

(1) With vertical configuration, the coil connections are on the opposite side to motor inspection. When transformed to horizontal configuration, the coil connections may be on the same side as motor inspection or on the opposite side, depending on the type of conversion.
(2) With vertical configuration, the coil connections and motor inspection are on the same side. When transformed to horizontal configuration, the coil connections may be on the same side as motor inspection or on the opposite side, depending on the type of conversion.
(3) The unit is always supplied with fan delivery directed upwards. The delivery flow direction can be altered on site.
(4) Field to be specified only in the case of a "B" or "P" fan unit. In the case of an "E" fan unit, the permitted power supply range is 380-480V ~ 3 50-60 Hz.

* VERSION: the definition of "RH connections side" or "LH connections side" refers to the position of the coil connections in relation to the air flow direction (convection: air flow from behind a hypothetical operator inserted in the flow).

** All the units are always supplied and shipped in the vertical configuration. The customer is responsible for any possible modification from vertical to horizontal.

PERFORMANCE SPECIFICATIONS

TN 1-8 with 4-row water coil

Size		1	2	3	4	5	6	7	8
Cooling performance 7 °C / 12 °C (1)									
Cooling capacity	kW	15,6	21,3	29,1	38,1	44,8	56,7	74,7	96,4
Sensible cooling capacity	kW	10,7	14,7	20,1	26,2	33,3	41,7	55,1	70,9
Heating performance 70 °C / 60 °C (2)									
Heating capacity	kW	40,0	54,5	74,9	97,6	131,1	162,9	216,1	277,3
Performance in heating mode with additional coil for 4-pipe systems									
Heating capacity with 2 row water coil	kW	25,2	34,0	46,8	61,5	84,4	103,8	138,0	178,5
Heating capacity with 3 row water coil	kW	33,5	45,6	62,7	82,0	110,8	137,3	182,5	234,4
Heating capacity with 4 row water coil	kW	40,0	54,5	74,9	97,6	131,1	162,9	216,1	277,3
Heating performance 45 °C / 40 °C (3)									
Heating capacity	kW	23,4	31,9	43,7	57,0	76,3	94,8	125,8	161,4
Performance in heating mode with additional coil for 4-pipe systems									
Heating capacity with 2 row water coil	kW	14,7	19,8	27,3	36,0	49,0	60,3	80,1	103,8
Heating capacity with 3 row water coil	kW	19,6	26,6	36,6	47,9	64,4	79,8	106,1	136,3
Heating capacity with 4 row water coil	kW	23,4	31,9	43,7	57,0	76,3	94,8	125,8	161,4

(1) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C;
(2) Room air temperature 10 °C d.b.; Water (in/out) 70 °C/60 °C
(3) Room air temperature 10°C d.b.; Water (in/out) 45 °C/40 °C;

TN 1-8 with 4-row direct expansion coil

Size		1	2	3	4	5	6	7	8
Performance in cooling mode with incoming air at 27°C / 50% R.H. (1)									
Cooling capacity	kW	12,6	17,1	23,5	30,2	38,5	47,7	63,7	81,5
Sensible cooling capacity	kW	9,9	13,5	18,5	24,1	30,4	38,0	50,7	65,2

(1) Temperatura dell'aria in entrata 27°C b.s. 50% U.R .; Refrigerante R410A, t.at. EVAP. 10°C, fino a 8 K, trasformazione inferiore a 0 K, vapore-vapore liquido da 0 a 1; consultare il software di selezione.

TN 1-8 with 6-row water coil

Size		1	2	3	4	5	6	7	8
Cooling performance 7 °C / 12 °C (1)									
Cooling capacity	kW	20,0	27,4	37,7	49,2	58,3	74,5	98,9	127,8
Sensible cooling capacity	kW	13,4	18,3	25,2	32,8	41,1	51,8	68,8	88,5
Heating performance 70 °C / 60 °C (2)									
Heating capacity	kW	48,7	66,6	91,5	119,2	157,5	196,8	260,4	334,1
Performance in heating mode with additional coil for 4-pipe systems									
Heating capacity with 2 row water coil	kW	25,2	34,0	46,8	61,5	84,4	103,8	138,0	178,5
Heating capacity with 3 row water coil	kW	33,5	45,6	62,7	82,0	110,8	137,3	182,5	234,4
Heating capacity with 4 row water coil	kW	40,0	54,5	74,9	97,6	131,1	162,9	216,1	277,3
Heating performance 45 °C / 40 °C (3)									
Heating capacity	kW	28,5	38,9	53,5	69,6	91,7	114,3	151,7	194,6
Performance in heating mode with additional coil for 4-pipe systems									
Heating capacity with 2 row water coil	kW	14,7	19,8	27,3	36,0	49,0	60,3	80,1	103,8
Heating capacity with 3 row water coil	kW	19,6	26,6	36,6	47,9	64,4	79,8	106,1	136,3
Heating capacity with 4 row water coil	kW	23,4	31,9	43,7	57,0	76,3	94,8	125,8	161,4

(1) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C;
(2) Room air temperature 10 °C d.b.; Water (in/out) 70 °C/60 °C
(3) Room air temperature 10°C d.b.; Water (in/out) 45 °C/40 °C;

GENERAL TECHNICAL DATA

Fans

Size			1	2	3	4	5	6	7	8
Fans: B										
Fan										
Number	4,6,A,B,C,D	no.	1	1	1	1	1	1	1	1
Nr. poles	4,6,A,B,C,D	no.	4	4	4	4	4	4	4	4
Maximum air flow rate with cooling coil	4,6,A,B,C,D	m^3/h	3000	4100	5650	7350	9400	11700	15500	20000
Maximum air flow rate with heating coil	4,6,A,B,C,D	m^3/h	3500	4700	6400	8000	9750	13400	17800	20000
High static pressure - maximum	4,6,A,B,C,D	Pa	425	455	452	440	383	425	436	400
Total fan input power	4,6,A,B,C,D	kW	0,8	1,1	1,5	2,2	2,2	4,0	4,0	5,5
Version without resistance										
Rated current input	4,6,A,B,C,D	A	1,8	2,4	3,2	4,7	4,7	8,2	8,2	11,1
Peak current	4,6,A,B,C,D	A	5,3	6,2	6,8	6,4	6,4	7,0	7,0	5,9
Version with electric heater										
Rated current input	4,6,A,B,C,D	A	11,9	16,9	15,0	23,4	30,7	40,8	51,6	83,4
Peak current	4,6,A,B,C,D	A	11,9	16,9	23,4	30,7	40,8	51,6	66,0	83,4
Fan										
Power supply	4,6,A,B,C,D		400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz

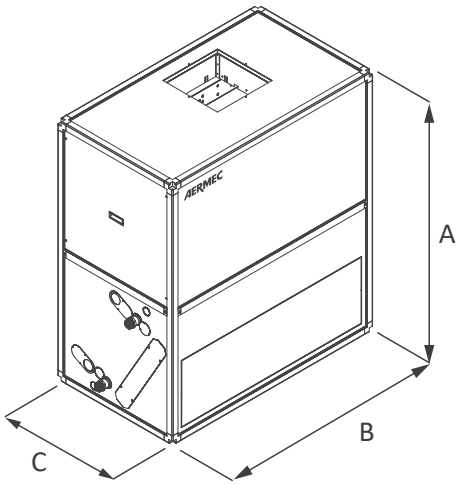
Size			1	2	3	4	5	6	7	8
Fans: E										
Fan										
Number	4,6,A,B,C,D	no.	1	1	1	1	1	1	2	2
Nr. poles	4,6,A,B,C,D	no.	-	-	-	-	-	-	-	-
Maximum air flow rate with cooling coil	4,6,A,B,C,D	m^3/h	3000	4100	5650	7350	9400	11700	15500	20000
Maximum air flow rate with heating coil	4,6,A,B,C,D	m^3/h	3500	4700	6400	8400	10500	13400	17800	23000
High static pressure - maximum	4,6,A,B,C,D	Pa	700	660	700	700	660	640	700	580
Total fan input power	4,6,A,B,C,D	kW	1,5	1,5	2,5	3,4	3,4	3,4	3,4	3,4
Version without resistance										
Rated current input	4,6,A,B,C,D	A	2,4	2,4	4,0	5,4	5,4	5,4	2x5,4	2x5,4
Peak current	4,6,A,B,C,D	A	-	-	-	-	-	-	-	-
Version with electric heater										
Rated current input	4,6,A,B,C,D	A	12,5	16,9	24,2	31,4	41,5	48,8	68,6	83,1
Peak current	4,6,A,B,C,D	A	-	-	-	-	-	-	-	-
Fan										
Power supply	4,6,A,B,C,D		400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz

Size			1	2	3	4	5	6	7	8
Fans: P										
Fan										
Number	4,6,A,B,C,D	no.	1	1	1	1	1	1	1	1
Nr. poles	4,6,A,B,C,D	no.	4	4	4	4	4	4	4	4
Maximum air flow rate with cooling coil	4,6,A,B,C,D	m^3/h	3000	4100	5650	7350	9400	11700	15500	20000
Maximum air flow rate with heating coil	4,6,A,B,C,D	m^3/h	3500	4700	6400	8400	10500	13400	17800	23000
High static pressure - maximum	4,6,A,B,C,D	Pa	600	627	674	672	567	670	625	610
Total fan input power	4,6,A,B,C,D	kW	1,1	1,5	2,2	3,0	3,0	5,5	5,5	7,5
Version without resistance										
Rated current input	4,6,A,B,C,D	A	2,4	3,2	4,7	6,3	6,3	11,1	11,1	14,9
Peak current	4,6,A,B,C,D	A	6,2	6,8	6,4	7,7	7,7	5,9	5,9	5,6
Version with electric heater										
Rated current input	4,6,A,B,C,D	A	12,5	17,7	24,9	32,3	42,4	54,5	68,9	87,2
Peak current	4,6,A,B,C,D	A	12,5	17,7	24,9	32,3	42,4	54,5	68,9	87,2
Fan										
Power supply	4,6,A,B,C,D		400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz

It is the maximum static pressure that can be supplied by the fan; it is equal to the internal pressure drops + the useful static pressure.

Size			1	2	3	4	5	6	7	8
Finned pack heat exchanger										
H		mm	475	475	550	550	720	720	960	960

DIMENSIONS



Size			1	2	3	4	5	6	7	8
Dimensions and weights										
A	4,6,A,B,C,D	mm	1334	1334	1497	1497	1822	1822	2309	2309
B	4,6,A,B,C,D	mm	928	1172	1334	1659	1659	1984	1984	2472
C	4,6,A,B,C,D	mm	684	684	765	765	928	928	1172	1172

Size			1	2	3	4	5	6	7	8
Fans: B										
Dimensions and weights										
Empty weight	4	kg	187	216	270	314	408	466	619	793
	6	kg	190	220	275	320	415	475	630	807
	A,B	kg	191	220	274	318	412	470	623	797
	C,D	kg	195	225	280	325	420	480	635	812

Size			1	2	3	4	5	6	7	8
Fans: E										
Dimensions and weights										
Empty weight	4	kg	175	199	249	304	388	466	611	769
	6	kg	178	203	254	310	395	475	622	783
	A,B	kg	179	203	253	308	392	470	615	773
	C,D	kg	183	208	259	315	400	480	627	788

Size			1	2	3	4	5	6	7	8
Fans: P										
Dimensions and weights										
Empty weight	4	kg	197	219	279	316	410	493	646	799
	6	kg	200	223	283	321	417	502	657	813
	A,B	kg	201	223	283	320	414	497	650	803
	C,D	kg	205	228	289	327	422	507	662	818

Add 50mm to the height of the unit (A), to allow for the feet.
The vertical configuration (B/D), the connections and motor inspection are on the same side.

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- **Maximum installation flexibility**
- **EC fan Plug-fan**
- **Large range of capacities.**

FEATURES

— Central air handling units with double panelling with panel thickness of 50 mm;
— Support structure realised in aluminium alloy sections and a large choice of panels;
— Wide range of sections and components to satisfy all plant engineering requirements
— Double intake centrifugal fans with forward or reverse blades.
— PLUG FAN type fan with Inverter regulation, able to adapt to the most varied system requirements.

Structure

— In aluminium sections;
— Gaskets, able to guarantee reduced seepage in compliance with the EN1886 Standard;
— Reduction of noise emission thanks to the use of material with high sound-absorption power;
— Small dimensions and contained height.

Internal components

— New high-efficiency heat exchangers with small pressure drops
— 3-damper mixing chamber.

Mixing chamber with three dampers. The configurations for the mixing chambers with three dampers are the following:

— two upper dampers and an internal one for recirculation;
— two front dampers and a horizontal one for recirculation (for overlapping control units);
— two lateral internal dampers and an internal for recirculation (configuration for expulsion and non-ducted fresh air intake).

Large availability of filters

— Filters with large surfaces to reduce the pressure drops and increase the duration;
— Cell pre-filters;
— Roll filters;
— Bag filters;
— Absolute filters;
— Activated carbon filters;
— Germicidal lamp;
— New efficient drop eliminator in PVC;
— New heat recoverers with high heat exchange.

Electric components

— Electronic regulation available able to optimise the performance and simplify installation of the control unit itself;
— New high performance selection software.

ACCESSORIES

Technical rooms;

Accessories for air intake/exhaust sections:

— Flange;
— Blank panel (to be perforated with care by the customer);
— Anti-vibration sheet on the intake/flow vents (with or without damper) with earth cable;
— Aluminium grille (for internal dampers only);
— Manual command on the dampers;
— Proportional servo-control;
— Proportional servo-control with spring return;
— Pedestrian grill on the floor dampers.

Accessories for the fan-motor sections:

— Damper on the flow vent;
— Damper on the flow vent;
— Micro switch on the inspection hatch.

Accessories common to several sections:

— Spot light with window with 24V bulb (the installer must envision the 24V power supply);
— Manometer with dial;
— Pressure switche;
— Instruments-probes holder GJ 1/4" double sleeve;
— Floor reinforced with non-slip sheet steel.

PERFORMANCE SPECIFICATIONS

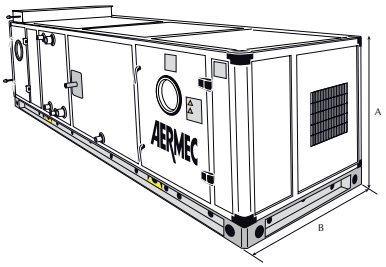
	Air flow rate m^3/h	Section heating coil m^2
NCD 1	1134	0,13
NCD 2	1958	0,22
NCD 3	2390	0,27
NCD 4	3132	0,35
NCD 5	3823	0,42
NCD 6	4307	0,48
NCD 7	5257	0,58
NCD 8	6207	0,69
NCD 9	8019	0,89
NCD 10	9477	1,05
NCD 11	11548	1,28
NCD 12	14213	1,58
NCD 13	16978	1,89
NCD 14	19742	2,19
NCD 15	25761	2,86
NCD 16	30772	3,42
NCD 17	37139	4,13
NCD 18	47187	4,80
NCD 19	49235	5,47
NCD 20	55283	6,14
NCD 21	61331	6,81
NCD 22	67379	7,49
NCD 23	73427	8,16
NCD 24	79475	8,83

The performance refers to an air speed through the coils equal to 2.5 m/s.

	EXT		734	894	1054	1214	1374	1534	1694	1854	2014
Height with base		**INT**	**620**	**780**	**940**	**1100**	**1260**	**1420**	**1580**	**1740**	**1900**
			NCD1	**NCD1A**	**NCD2**	**NCD2**	**NCD3C**	**NCD4B**	**NCD5B**	**NCD6B**	**NCD6D**
645	**524**	**410**	1370-1640 m^3/h	1880-2260 m^3/h	2350-2820 m^3/h	2350-2820 m^3/h	3390-4070 m^3/h	3890-4670 m^3/h	4380-5250 m^3/h	4860-5840 m^3/h	5330-6400 m^3/h
			NCD1B	**NCD3A**	**NCD4**	**NCD5**	**NCD6A**	**NCD7A**	**NCD8A**	**NCD8C**	**NCD8F**
805	**684**	**570**	1970-2360 m^3/h	2720-3260 m^3/h	3400-4080 m^3/h	4150-4980 m^3/h	4900-5870 m^3/h	5620-6740 m^3/h	6320-7590 m^3/h	7020-8430 m^3/h	7700-9240 m^3/h
			NCD2A	**NCD4A**	**NCD6**	**NCD7**	**NCD8**	**NCD8D**	**NCD9**	**NCD9C**	**NCD9F**
965	**844**	**730**	2580-3090 m^3/h	3550-4260 m^3/h	4440-5330 m^3/h	5420-6500 m^3/h	6400-7680 m^3/h	7350-8820 m^3/h	8270-9920 m^3/h	9180-11020 m^3/h	10070-12090 m^3/h
			NCD3B	**NCD5A**	**NCD6E**	**NCD8B**	**NCD8H**	**NCD9A**	**NCD10**	**NCD10C**	**NCD11**
1125	**1004**	**890**	3180-3820 m^3/h	4390-5270 m^3/h	5490-6580 m^3/h	6700-8030 m^3/h	7910-9490 m^3/h	9080-10890 m^3/h	10210-12250 m^3/h	11340-13610 m^3/h	12440-14930 m^3/h
				NCD6C	**NCD7B**	**NCD8G**	**NCD9E**	**NCD10A**	**NCD10F**	**NCD11A**	**NCD12**
1285	**1164**	**1050**		5220-6270 m^3/h	6530-7830 m^3/h	7970-9560 m^3/h	9410-11290 m^3/h	10800-12960 m^3/h	12150-14580 m^3/h	13500-16200 m^3/h	14810-17770 m^3/h
					NCD8E	**NCD9B**	**NCD10B**	**NCD10G**	**NCD11D**	**NCD12A**	**NCD12C**
1445	**1324**	**1210**			7570-9090 m^3/h	9240-11090 m^3/h	10910-13100 m^3/h	12530-15040 m^3/h	14100-16920 m^3/h	15660-18800 m^3/h	17180-20610 m^3/h
						NCD10D	**NCD11B**	**NCD12B**	**NCD13A**	**NCD13D**	**NCD14B**
1765	**1644**	**1530**				11790-14150 m^3/h	13920-16710 m^3/h	15990-19190 m^3/h	17990-21580 m^3/h	19980-23980 m^3/h	21920-26300 m^3/h
								NCD13B	**NCD14A**	**NCD14E**	**NCD15**
2085	**1964**	**1850**						19440-23330 m^3/h	21870-26250 m^3/h	24300-29160 m^3/h	26650-31980 m^3/h
										NCD15D	**NCD15G**
2405	**2284**	**2170**								28620-34350 m^3/h	31390-37670 m^3/h
											NCD16B
2565	**2444**	**2330**									33760-40510 m^3/h

	EXT		2334	2654	2974	3294	3614	3934	4254	4574
Height with base		INT	2220	2540	2860	3180	3500	3820	4140	4460
645	524	410								
805	684	570	NCD9D 9200-11040 m³/h							
965	844	730	NCD10E 12030-14440 m³/h	NCD11C 13990-16790 m³/h						
1125	1004	890	NCD11E 14860-17830 m³/h	NCD12D 17280-20730 m³/h	NCD13C 19700-23640 m³/h					
1285	1164	1050	NCD13 17690-21230 m³/h	NCD14 20570-24680 m³/h	NCD14C 23450-28140 m³/h	NCD15B 26330-31590 m³/h				
1445	1324	1210	NCD13E 20520-24620 m³/h	NCD14D 23860-28630 m³/h	NCD15C 27200-32640 m³/h	NCD15E 30540-36650 m³/h	NCD16A 33880-40660 m³/h			
1765	1644	1530	NCD15A 26180-31410 m³/h	NCD15F 30440-36530 m³/h	NCD16C 34700-41640 m³/h	NCD17A 38970-46760 m³/h	NCD17D 43230-51870 m³/h	NCD18B 47490-56990 m³/h		
2085	1964	1850	NCD16 31840-38200 m³/h	NCD16D 37020-44430 m³/h	NCD17C 42210-50650 m³/h	NCD18C 47390-56870 m³/h	NCD19A 52570-63090 m³/h	NCD20A 57760-69310 m³/h	NCD21A 62940-75530 m³/h	NCD21C 68130-81750 m³/h
2405	2284	2170	NCD17 37500-45000 m³/h	NCD18 43600-52320 m³/h	NCD19 49710-59650 m³/h	NCD20 55810-66980 m³/h	NCD21 61920-74300 m³/h	NCD22 68030-81630 m³/h	NCD23 74130-88960 m³/h	NCD24 80240-96280 m³/h
2565	2444	2330	NCD17B 40330-48390 m³/h	NCD18A 46890-56270 m³/h	NCD19B 53460-64150 m³/h	NCD20B 60030-72030 m³/h	NCD21B 66590-79910 m³/h	NCD22A 73160-87790 m³/h	NCD23A 79730-95670 m³/h	NCD24A 86290-103550 m³/h

DIMENSIONS



	Section A (mm)	Section B (mm)
NCD1	645	735
NCD2	645	1055
NCD3	645	1215
NCD4	805	1055
NCD5	805	1215
NCD6	965	1055
NCD7	965	1215
NCD8	965	1375
NCD9	965	1695
NCD10	1130	1695
NCD11	1130	2015
NCD12	1285	2015
NCD13	1285	2335
NCD14	1285	2655
NCD15	2085	2015
NCD16	2085	2335
NCD17	2405	2335
NCD18	2405	2655
NCD19	2405	2975
NCD20	2405	3295
NCD21	2405	3615
NCD22	2405	3935
NCD23	2405	4255
NCD24	2405	4575

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SPL 025-130

Swimming Pool Lines air handling unit for health centres

Air flow rate 4000 ÷ 13000 m³/h

- **Maximum installation flexibility**
- **EC fan Plug-fan**
- **Large range of capacities.**

DESCRIPTION

The units from the SPL series represent the ideal solution to guarantee the comfort conditions in small-medium spaces such as health centres, spa areas, fitness centres, small swimming pools, sports facilities, etc.
The unit contains a refrigerant circuit and a system for the recovery of sensible and latent heat coming from the humid air extracted from the space, thereby being optimised for the reduction of energy consumption.
The main function of the unit, which is a "plug and play" machine ready for use, is that of dehumidifying and at the same time ensuring control of the temperature and humidity conditions of the area served.

The unit is fitted with an efficient heat recovery system on the water side, to be used to partially heat the swimming pool water at no cost. The structure and all the internal components are built to ensure the maximum resistance to corrosion

FEATURES

Fitted as standard with panel filters in extract (G4 efficiency class according to EN779) and panel + bag filters (G4 + F9 efficiency class according to EN779) meet the requirements for the applicable standards for indoor air quality. Dirty filter differential pressure switches are provided as standard.

Structure

Anodised aluminium profile with reinforced nylon corner pieces.
Casing made from sandwich type panels (50mm thickness), with internal surface pre-painted galvanised steel, external in pre-painted galvanised steel and insulating material hot injected polyurethane with a density of 42 kg/m³, fixed without screws but with panel locking profiles, doors with keyless handles.
This fixing method allows a uniform pressure on the casing, ensuring an excellent resistance to the leakage of air and water.
The support structures and the seals around components are completely painted to ensure the maximum corrosion resistance. The bottom surfaces of the unit are fitted with drain panels in pre-painted galvanised steel with a central drain point piped sideways.

Thermal recovery section

High efficiency static cross flow in pre-painted aluminium. Including dampers: recirculating damper used for the quick start up of the space, recirculating damper for the "primary" cycle, dampers on the air inlet and extract.
All dampers are manufactured in anodised aluminium and are individually controlled by an external actuator for precise air flow control.

Refrigerant circuit

Fitted with scroll compressor supplied with rubber anti-vibration feet, refrigerant gas/air heat exchanger coil with copper tubes and pre-painted aluminium fins and painted frame, filter, electronic expansion valve, liquid receiver, filter drier, controls (pressure transducers and visual indicators) and safeties (high and low pressure pressostats), brazed copper connections, refrigerant charge of environmentally friendly R410A.
The refrigerant circuit is installed in a compartment isolated from the air flow to facilitate checks and maintenance.
The units on request can also be realized without the refrigerant circuit. The size of the machine remains unchanged.

Fan section

Treated with epoxy paint resistant to corrosion, fitted with "plug fans" with backward curved impeller of high output. Electrical motor directly coupled to the impeller suitable for inverter control (standard).

Filtration systems

Hot water heating coil

With copper tubes and pre-painted aluminium fins to heat the supply air after dehumidification, controlled by a modulating 3 way valve (standard); this allows the accurate control of the supply air temperature. The frame of the coil is in painted galvanised steel to ensure the maximum resistance to corrosion.

Electric power board

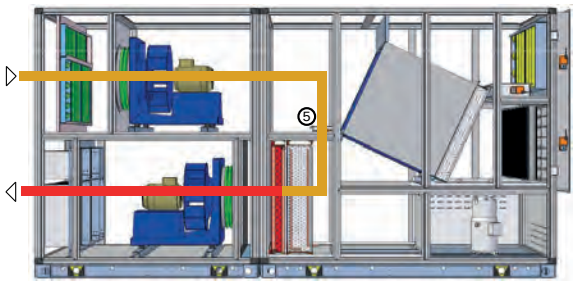
Power and controls panel unit mounted. Electrical installation for the connection of power and controls, set in tubes or conduits with glands and grommets, IP55 protective rating. Remote panel supplied as standard for the control of all the main functions and display of alarms.

OPERATING SCHEMATICS

The principal operation modes of the unit are shown in the example schematics below.

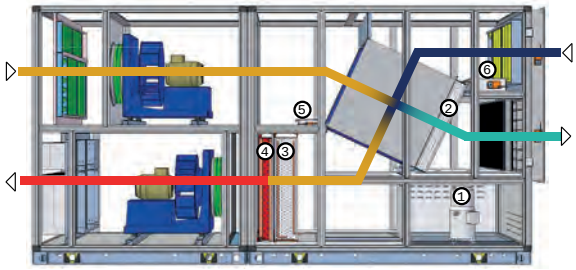
In all the following schematics the hot water coil is always operating because the external air temperature is below 10°C with a required supply air temperature to compensate for the heat losses from the building.

"START UP" CYCLE



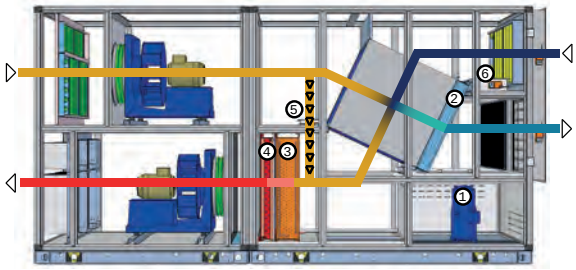
The operating mode is with no external air flow. The whole air flow is recirculated through damper 5 and returned to the pool area.
The hot water coil is operational.
The "start up cycle" is activated for the time necessary to heat up the area.

"DEHUMIDIFICATION" CYCLE



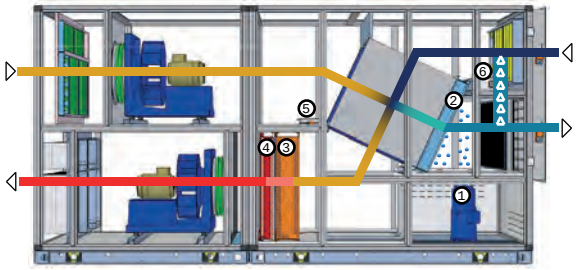
In night time mode the unit modifies the operating settings to adapt to the changes of evaporation from the pool and reduce consumption to the minimum.

Dehumidification with external air



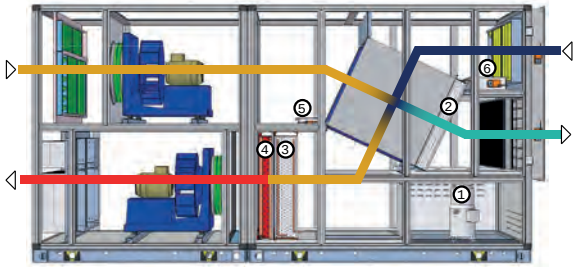
The operating mode is with external air dehumidifying the space, compensating for evaporation from the pool. The refrigerant circuit (consisting of the compressor 1 and the coils 2 and 3) allows the sensible and latent heat recovery of the extracted air to be transferred to the supply air or the water, through the thermal heat exchange consisting of the double heat exchanger on the water side.
The hot water coil 4 supplements, if necessary, the heating capacity provided by the refrigerant circuit, placed downstream of the entering air flow (condensing coil 3).

ehumidification with external air and primary cycle



When required the compressor also assists in the dehumidification of the pool area.
The supply air flow is modulated by the fan inverter to reach the required hygrometric conditions.
As a function of the external ambient temperature the unit modifies the operating mode to achieve the best efficiency possible.

Dehumidification with external air (night cycle)



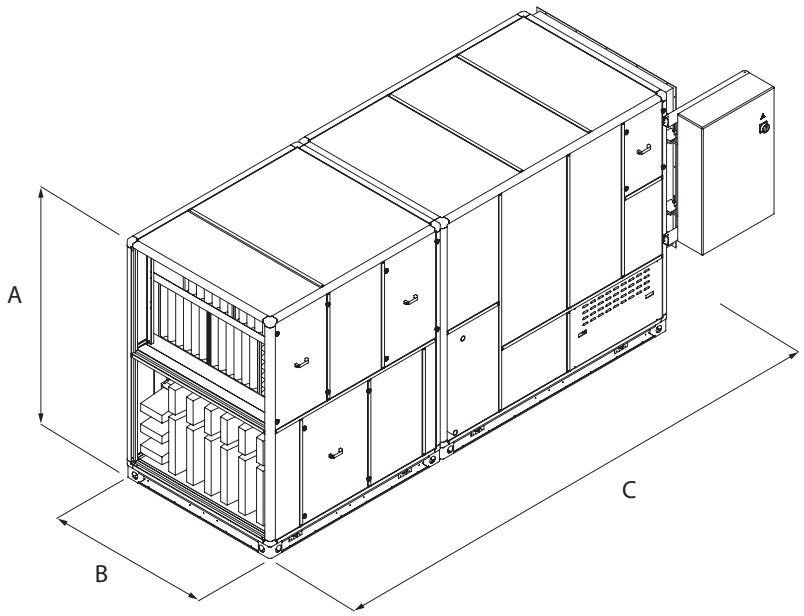
In night time mode the unit modifies the operating settings to adapt to the changes of evaporation from the pool and reduce consumption to the minimum.

PERFORMANCE SPECIFICATIONS

			025	040	060	100	130
Nominal airflow (supply/extract)		M^3/h	2500	4000	6300	10000	13000
Available pressure (supply/ extract)		Pa	400	400	400	400	400
Heat recovery capacity recovered	(1)	KW	7,90	12,60	20,40	32,00	41,50
Max heat recovery efficiency	(1)	%	80,80	79,30	80,10	79,50	79,40
Refrigerant circuit recovered capacity	(1)	KW	7,50	10,50	21,30	31,70	45,70
Total recovered capacity	(1)	KW	15,40	23,10	41,60	63,70	87,30
Compressor absorbed power	(1)	KW	1,30	1,60	3,70	6,00	8,40
COP	(1)	-	11,80	14,40	11,20	10,60	10,40
COP	(2)	-	3,90	4,00	4,10	4,00	4,10
Total dehumidification capacity	(1)	Kg/h	15,50	25,20	40,10	63,70	82,70
Supply fan power input		KW	1,60	2,60	3,70	5,90	7,60
Extract fan power input		KW	1,20	1,90	2,70	4,50	5,70
Type / number of compressors		No.			Scroll / 1		
Hot water heating coil (standard)							
Capacity (without recovery active)	(1)	KW	26,10	35,40	61,60	95,30	124,50
Water flow rate	(3)	L/h	2250	3050	5300	8200	10700
Water pressure drop	(3)	KPa	23,50	43,70	33,10	48,80	46,30
Plate heat exchanger R410A/non aggressive water (standard)							
Nominal water flow rate	(4)	L/h	950	1120	2500	3600	5400
Pressure drops	(4)	KPa	19,00	19,00	31,00	32,00	33,00
Plate heat exchanger accessible non aggressive water/pool water (standard)							
Water flow rate nominal pool	(5)	L/h	1200	1400	3100	4500	6800
Pressure drop pool side	(5)	KPa	32,40	34,00	31,40	33,00	34,50
Pressure drop intermediate circuit side	(5)	KPa	21,20	22,30	20,60	21,60	22,50
Electric data							
Unit power supply					400 V-3- 50 Hz		
Maximum total current input supply fan		A	3,50	6,20	11,00	14,60	15,00
Maximum total current input extract fan		A	2,60	4,90	6,40	11,30	11,30
Unit maximum current input		A	11,60	17,10	32,40	49,30	61,30
Unit starting current		A	32,10	46,10	91,40	181,90	184,30

1. External air 0°C,80% RH; internal air 29°C,60% RH.
2. Values as per conditions of D.M. 7 april 2008 for heating only operation
3. Water temperature inlet/outlet 70/60°C; water pressure drop including 3 way valve
4. Water temperature inlet/outlet non aggressive 27/37°C
5. Water temperature inlet/outlet intermediate circuit 37/27°C; water temperature inlet/outlet pool 25/35°C

DIMENSIONS



		025	040	060	100	130
A	mm	1765	1765	2245	2405	2405
B	mm	895	895	1055	1375	1695
C	mm	3230	3390	4190	4190	4670
Weight	Kg	900	1000	1350	2060	2600

Aermec S.p.A.
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Tel. 0442633111 - Telefax 044293577
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SPL 160-250

Swimming Pool Lines air handling unit for health centres

Air flow rate 16000 ÷ 25000 m3/h

- **Maximum installation flexibility**
- **EC fan Plug-fan**
- **Large range of capacities.**

DESCRIPTION

The units from the SPL series represent the ideal solution to guarantee the comfort conditions in small-medium spaces such as health centres, spa areas, fitness centres, small swimming pools, sports facilities, etc.
The unit contains a refrigerant circuit and a system for the recovery of sensible and latent heat coming from the humid air extracted from the space, thereby being optimised for the reduction of energy consumption.
The main function of the unit, which is a "plug and play" machine ready for use, is that of dehumidifying and at the same time ensuring control of the temperature and humidity conditions of the area served.

The unit is fitted with an efficient heat recovery system on the water side, to be used to partially heat the swimming pool water at no cost. The structure and all the internal components are built to ensure the maximum resistance to corrosion

FEATURES

Sizes

Indoor unit available in 3 sizes.

Structure

Anodised aluminium profile with reinforced nylon corner pieces.
Casing made from sandwich type panels (50mm thickness), with internal surface pre-painted galvanised steel, external in pre-painted galvanised steel and insulating material hot injected polyurethane with a density of 42 kg/m^3, fixed without screws but with panel locking profiles, doors with keyless handles.
This fixing method allows a uniform pressure on the casing, ensuring an excellent resistance to the leakage of air and water.
The support structures and the seals around components are completely painted to ensure the maximum corrosion resistance. The bottom surfaces of the unit are fitted with drain panels in pre-painted galvanised steel with a central drain point piped sideways.

Thermal recovery section

High efficiency static cross flow in pre-painted aluminium. Including dampers: recirculating damper used for the quick start up of the space, recirculating damper for the "primary" cycle, dampers on the air inlet and extract.
All dampers are manufactured in anodised aluminium and are individually controlled by an external actuator for precise air flow control.

Refrigerant circuit

Fitted with scroll compressor supplied with rubber anti-vibration feet, refrigerant gas/air heat exchanger coil with copper tubes and pre-painted aluminium fins and painted frame, filter, electronic expansion valve, liquid receiver, filter drier, controls (pressure transducers and visual indicators) and safeties (high and low pressure pressostats), brazed copper connections, refrigerant charge of environmentally friendly R410A.
The refrigerant circuit is installed in a compartment isolated from the air flow to facilitate checks and maintenance.
The units on request can also be realized without the refrigerant circuit. The size of the machine remains unchanged.

Fan section

Treated with epoxy paint resistant to corrosion, fitted with "plug fans" with backward curved impeller of high output. Electrical motor directly coupled to the impeller suitable for inverter control (standard).

Filtration systems

Fitted as standard with panel filters in extract (G4 efficiency class according to EN779) and panel + bag filters (G4 + F9 efficiency class according to EN779) meet the requirements for the applicable standards for indoor air quality. Dirty filter differential pressure switches are provided as standard.

Hot water heating coil

With copper tubes and pre-painted aluminium fins to heat the supply air after dehumidification, controlled by a modulating 3 way valve (standard); this allows the accurate control of the supply air temperature. The frame of the coil is in painted galvanised steel to ensure the maximum resistance to corrosion.

Electric power board

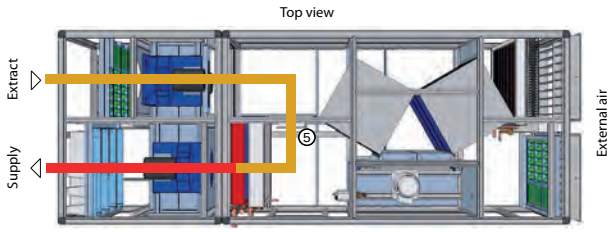
Power and controls panel unit mounted. Electrical installation for the connection of power and controls, set in tubes or conduits with glands and grommets, IP55 protective rating. Remote panel supplied as standard for the control of all the main functions and display of alarms.

OPERATING SCHEMATICS

The principal operation modes of the unit are shown in the example schematics below.

In all the following schematics the hot water coil is always operating because the external air temperature is below 10°C with a required supply air temperature to compensate for the heat losses from the building.

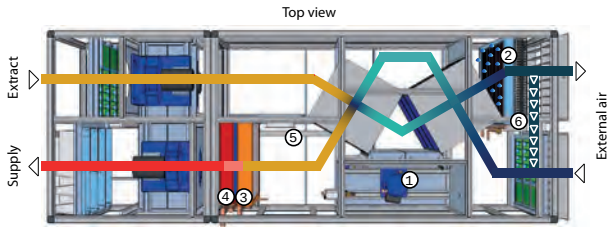
"START UP" CYCLE



The operating mode is with no external air flow. The whole air flow is recirculated through damper 5 and returned to the pool area.
The hot water coil is operational.
The "start up cycle" is activated for the time necessary to heat up the area.

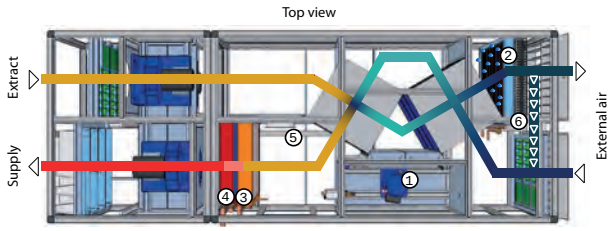
"DEHUMIDIFICATION" CYCLE

Dehumidification with external air



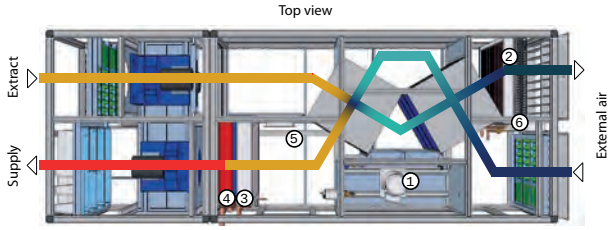
The operating mode is with external air dehumidifying the space, compensating for evaporation from the pool. The refrigerant circuit (consisting of the compressor 1 and the coils 2 and 3) allows the sensible and latent heat recovery of the extracted air to be transferred to the supply air or the water, through the thermal heat exchange consisting of the double heat exchanger on the water side.
The hot water coil 4 supplements, if necessary, the heating capacity provided by the refrigerant circuit, placed downstream of the entering air flow (condensing coil 3).

ehumidification with external air and primary cycle



When required the compressor also assists in the dehumidification of the pool area.
The supply air flow is modulated by the fan inverter to reach the required hygrometric conditions.
As a function of the external ambient temperature the unit modifies the operating mode to achieve the best efficiency possible.

Dehumidification with external air (night cycle)



In night time mode the unit modifies the operating settings to adapt to the changes of evaporation from the pool and reduce consumption to the minimum.

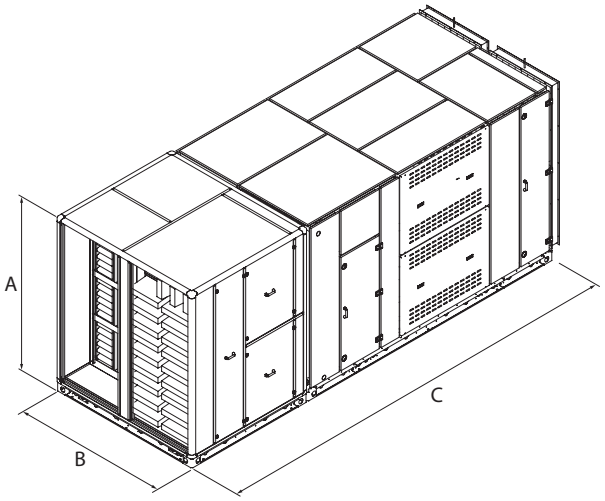
PERFORMANCE SPECIFICATIONS

SPL			160	200	250
Nominal air flow rate (supply / recovery)		m^3/h	16000	20000	25000
Available pressure (supply/recovery)		Pa	400	400	400
Heat recovery capacity recovered	(1)	kW	59,6	68,6	89,2
Max heat recovery efficiency	(1)	%	93	86	89
Refrigerant circuit recovered capacity	(1)	kW	46,3	53,6	69,4
Total recovered capacity	(1)	kW	105,9	122,2	158,6
Compressor absorbed power	(1)	kW	8,5	9,2	12,8
COP	(1)	-	12,5	13,3	12,4
COP	(2)	-	4,0	3,9	3,9
Total dehumidification capacity	(1)	kg/h	102,2	127,6	159,5
Supply fan power input		kW	10,9	13,7	17,7
Extract fan power input		kW	8,3	9,8	12,4
Type / number of compressors		no.		Scroll / 1	
Hot water heating coil (standard)					
Capacity (without recovery active)	(1)	kW	131,9	182,7	205,9
Water flow rate	(3)	l/h	11300	15700	17700
Water pressure drop	(3)	kPa	43,7	37,9	42,2
Plate heat exchanger R410A/non aggressive water (standard)					
Nominal water flow rate	(4)	l/h	5760	6450	8260
Pressure drops	(4)	kPa	33	33	33
Plate heat exchanger accessible non aggressive water/pool water (standard)					
Water flow rate nominal pool	(5)	l/h	7200	8100	10400
Pressure drop pool side	(5)	kPa	34,2	34,7	34,2
Pressure drop intermediate circuit side	(5)	kPa	22,3	22,7	22,2
Electric data					
Unit power supply				400 V - 3 ph - 50 Hz	
Maximum total current input supply fan		A	29,2	41,0	42,0
Maximum total current input extract fan		A	22,0	22,6	30,0
Unit maximum current input		A	86,2	99,6	123,0
Unit starting current		A	209,0	223,0	287,0

1. External air 0°C,80% RH; internal air 29°C,60% RH.
2. Values as per conditions of D.M. 7 april 2008 for heating only operation
3. Water temperature inlet/outlet 70/60°C; water pressure drop including 3 way valve.
4. Water temperature inlet/outlet non aggressive 27/37°C.
5. Water temperature inlet/outlet intermediate circuit 37/27°C; water temperature inlet/outlet pool 25/35°C

Preliminary technical data, subject to modification.

DIMENSIONS



SPL			160	200	250
A (including base H=120mm)	*	mm	2085	2405	2405
B	*	mm	2015	2175	2335
C	*	mm	5790	5790	6430
Weight		kg	2780	3250	3580

* The dimensions remain unchanged even if the unit, on request, is supplied without a refrigerant circuit.

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RTG 060X-125X

Roof-Top for applications in medium crowed

Cooling capacity 57,7 ÷ 128,1 kW
Heating capacity 58,1 ÷ 124,6 kW

- For medium crowding applications
- R32 refrigerant gas
- High efficiency also at partial loads
- High power modulation capacity
- Compressors and fans with Inverter
- Upgraded thermodynamic heat recovery

DESCRIPTION

Independent Roof -top type air cooled air conditioner, for treatment, filtration and renewal of the air , based on the chosen configuration.
These are outdoor units using environmentally friendly R32 gas.
Being fitted to function with 50% external air (MB2, MB4, MBT and MBF versions), the units are designed for medium density applications like shopping malls, shops, offices and production areas. RTG 060X-125X
Based on the version and accessories selected, the units allow you to manage free-cooling mode and, in the MB4 and MBT versions, there is thermodynamic recovery (enhanced in the MBT configuration) of the energy contained in the expelled air, allowing for higher performance and efficiency.

VERSIONS

H Heat pump

FEATURES

Refrigerant HFC R32

Thanks to the R32 refrigerant (A2L slightly flammable), the environmental impact of the units is significantly reduced.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

Inverter compressor

All models use inverter-driven scroll compressors, which allow them to perfectly comply with the energy levels required by European regulations.
Inverter technology enables high seasonal energy efficiencies, reduced noise level at partial loads and high environmental comfort

Inverter fans

The air treatment cross-section ventilation, which represents the highest expense in terms of machine operating costs, is entrusted to the plug fans with EC brushless motors, efficiency class IE5, which enable high performance, easy flow rate adjustment, compactness, low noise, versatility and easy maintenance.
Two types of flow fans are available: the standard one and the enhanced one for a higher useful static pressure.

Axial fans

The axial fans on the source side are helical, electrically and mechanically protected by grilles, and are equipped with **brushless EC motors, efficiency class IE5.**
Electronic control of summer condensation temperature and winter evaporation temperature is standard.

Air filtration

A Coarse 55% corrugated filter according to ISO 16890 (G4 according to EN 779), with synthetic fibre filter media protected by wire mesh on both sides and a galvanised sheet steel frame is included as per standard.
The filters are placed on guides and are easily removable from the side.
Downstream it is possible to insert an additional filtration stage with ePM1 50% efficiency according to ISO 16890 (F7 according to EN 779) or ePM1 80% efficiency according to ISO 16890 (F9 according to EN 779).
As an alternative to mechanical filters, electrostatic filters can be fitted for even higher filtration efficiency and lower maintenance costs.
Air quality control systems are also available (VOC and CO2 probe).

Exchangers

The internal and external heat exchangers are made of copper pipes and aluminium louvers blocked by mechanical expansion of the pipes.
They are the high efficiency type with internally striped pipe and corrugated louvers.
To protect the louvers from corrosion, pre-painted aluminium louvers are available as an alternative.

Thermoregulation

Electronic controller able to manage the different functioning modes, ensuring maximum energy savings in all conditions of use by means of special software. Interfaces to connect to remote supervision and control systems available as options. The electrical panel complete with all devices is easily accessible.
The free-cooling/heating and defrosting logics are particularly sophisticated. As soon as the external conditions allow it, the unit is able to automatically activate the free-cooling or free-heating mode, which cools or heats the served room, while keeping the compressors off and introducing suitably treated external air. This mode significantly reduces both energy consumption and wear of the compressors. These functions are also used when the external air energy content is not enough to cool or heat the room.

Air flow management

There are different types of supply and exhaust (if present) air flow rate control.
With constant flow rate control, air flows are kept constant at the set value regardless of the heat load and varying pressure drops of the machine/plant system.
With variable flow rate control, the air flows vary depending on the heat load between the set nominal value and the minimum value of the unit.
With variable flow rate, in addition to the benefits in terms of environmental comfort, there are also economic benefits as the modulation of the air flow rate leads to a considerable reduction in the electricity consumption of the unit compared to a unit operating with a fixed flow rate.
A function can also be enabled that in Economy mode, when the temperature set-point is reached, allows ventilation to be switched off, with considerable economic advantages.

CONFIGURATIONS

MB1: Single ventilating cross-section for recovery air.
Recovery air only configuration where no fresh air is required.
The useful flow and recovery static pressure is provided by the flow ventilating cross-section.

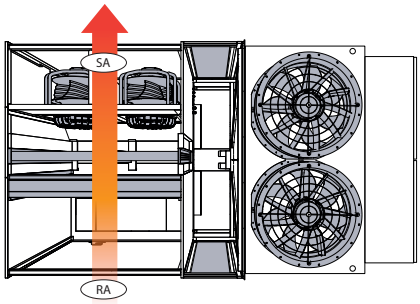
MB2: Single ventilating cross-section for recovery and external air.
Recovery and external air configuration. The useful flow and recovery static pressure is provided by the flow ventilating cross-section.
If there are no extraction systems, the room will be in overpressure.
Possibility of performing freecooling/freeheating.

MB4: double ventilating cross-section (flow and expulsion) for recovery air, external air and exhaust air, thermodynamic recovery.
Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure. The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.
Thermodynamic recovery is performed by conveying expelled air on the external heat exchangers.
Possibility of performing freecooling/freeheating.

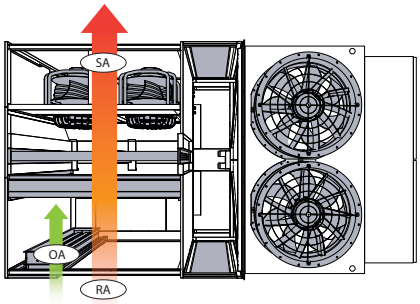
MBT: double ventilating cross-section (flow and expulsion) for recovery air, external air and exhaust air, upgraded thermodynamic recovery.
Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure.
The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.
Possibility of performing freecooling/freeheating.
The MBT configuration allows for the upgraded thermodynamic recovery on the exhaust air by fully exploiting the energy content still present in it.
The exhaust flow rate, controlled by the dedicated exhaust fan, is conveyed to the innovative finned pack recovery coil, integrated in the cooling circuit of the unit.
The coil, perfectly hit by the air flow, recovers the energy still present in the exhaust flow and transfer it to the cooling circuit, increasing the treatment coil performance without increasing the input power of the compressors.
In summer functioning, the coil makes it possible to increase the liquid subcooling, while in winter functioning, the coil takes on part of the evaporation by operating the cooling circuit at more advantageous temperatures.

MBF: single fan section for return air, outside air and exhaust air
Recovery, external and exhaust air configuration.
The flow ventilating cross-section provides the flow and recovery useful static pressure.
The flow rate of fresh and exhaust air is achieved through the use of two modulating dampers (fresh and exhaust air) and one gravimetric damper (exhaust air).
The presence of the recirculation damper allows for total free-cooling (100% external air).
This configuration makes it possible to exploit the overpressure in the room to expel stale air (maximum 50 Pa leakage in the duct) without having to use a dedicated fan.

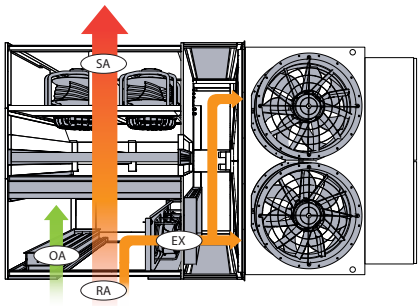
MB1



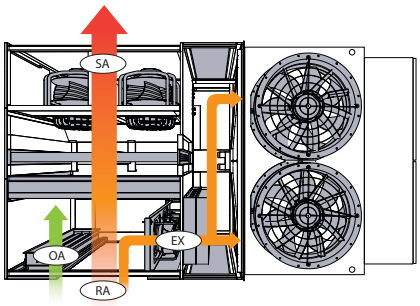
MB2



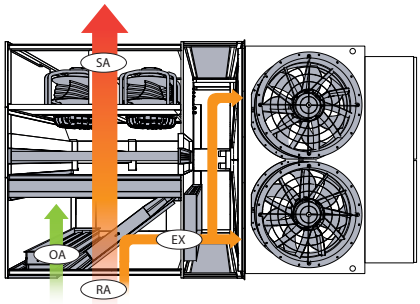
MB4



MBT



MBF



SA: Flow air
RA: Return air
OA: External air
EX: Air expelled

ACCESSORIES

Refer to the selection software for compatibility of accessories.

MB1: Single fan section - Recirculation
MB2: Single fan section - Recirculation + Renewal
MB4: Double fan section - Recirculation Renewal + Exhaust - Thermodynamic recovery
MBT: Double fan section - Recirculation + Renewal + Exhaust - Enhanced thermodynamic recovery
MBF: Single fan section - Recirculation + Renewal + Exhaust
MO: Horizontal air flow
MI: Lower air flow
MS: Upper air flow
RO: Horizontal air recovery
RI1: Lower air recovery for MB1 configuration
RI2: Lower air recovery for MB2 configuration
RI4: Lower air recovery for MB4/MBT configuration
RS1: Upper air recovery for MB1 configuration
RS2: Upper air recovery for MB2 configuration
RS4: Upper air recovery for MB4/MBT configuration
VSTD: Fans with standard static pressure
VPWR: Fans with increased static pressure
IAL: Internal coil with aluminium louvers
IPV: Internal coil with pre-painted aluminium louvers
EAL: External coil with aluminium louvers
EPV: External coil with pre-painted aluminium louvers
IALT: MBT internal coil with aluminium louvers
IPVT: MBT internal coil with pre-painted aluminium louvers
EALT: MBT external coil with aluminium louvers
EPVT: MBT external coil with pre-painted aluminium louvers
FCT: Thermal free-cooling
FCH: Enthalpy free-cooling
CMAN: Manual external damper control
SCM: Modulating external damper servocontrol
SCM-F: MBF modulating damper servocontrols
PCOST: Constant air flow rate
PVAR: Variable air flow rate
DML: Demand limit
PFS: Filter fouling control differential pressure switch
DEU: Summer dehumidification
DEUP: Summer dehumidification with post-heating
CUR: Provision for humidification control (digital contact and analogue output)
BPGC: Hot gas after-heating coil with aluminium louvers
BPGCPV: Hot gas after-heating coil with pre-painted aluminium louvers
BW2: Heating/Integration water coil with aluminium louvers

BW2PV: Heating/Integration water coil with pre-painted aluminium louvers
BW3: Water coil for recovery from refrigerated display cabinets with aluminium louvers
BW3PV: Water coil for recovery from refrigerated display cabinets with pre-painted aluminium louvers
V2V: Modulating 2-way valve + connecting pipes
V3V: Modulating 3-way valve + connecting pipes
BE: 2-stage electric heating coil (3 steps)
F7: F7 filters (ISO 16890 ePM1 55%)
F9: F9 filters (ISO 16890 ePM1 80%)
FE1: Electrostatic filters for MB1/MB2 configuration
FE4: Electrostatic filters for MB4/MBT/MBF configuration
SCO2: CO2 duct probe
SVOC: VOC duct probe
SCO2+SVOC: CO2 + VOC duct probe
ASCO2: Room CO2 probe
ASVOC: Room VOC probe
ASCO2+SAVOC: Room CO2 + VOC probe
STR: Recovery temperature probe
STA: Room temperature probe
STR+SUR: Recovery temperature and humidity probe
STA+SUA: Room temperature and humidity probe
PRT1: Remote panel up to 50m
PRT2: Remote panel up to 200m
AVG: Anti-vibration supports
MIP: Modbus TCP/IP communication protocol (standard)
MRTU: Modbus RTU communication module
BIP: Bacnet IP communication module
BMSTP: Bacnet MS/TP communication module
KON: KONNEX communication module
CAP: Hoods function
CFF: Fire/smoke contact

PERFORMANCE SPECIFICATIONS

Unit input power: at nominal air flow rate, nominal high static pressure and standard fans

MB1

Size			060	085	125
Configuration: MB1					
Cooling performances					
Cooling capacity	H	kW	57,70	77,70	121,30
Sensible cooling capacity	H	kW	46,30	64,70	88,10
Compressors absorbed power	H	kW	15,80	20,70	38,00
EER compressors	H		3,65	3,75	3,19
Unit input power	H	kW	20,1	26,9	45,5
Heating performances					
Heating capacity	H	kW	58,10	78,30	119,30
Compressors absorbed power	H	kW	12,80	17,30	30,00
Compressor COP	H		4,53	4,53	3,98
Unit input power	H	kW	16,5	22,0	37,4

Cooling performances: Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.
Heating performances: Ambient air 20°C d.b./15°C w.b.; External air 7°C/6°C w.b.

MB2

Size			060	085	125
Configuration: MB2					
Cooling performances					
Cooling capacity	H	kW	60,40	81,40	127,00
Sensible cooling capacity	H	kW	49,00	68,70	92,10
Compressors absorbed power	H	kW	15,90	20,80	38,40
EER compressors	H		3,79	3,91	3,30
Unit input power	H	kW	20,2	27,0	46,0
Heating performances					
Heating capacity	H	kW	58,50	78,80	119,70
Compressors absorbed power	H	kW	11,70	15,90	27,60
Compressor COP	H		5,02	4,96	4,33
Unit input power	H	kW	15,3	20,6	35,1

Cooling performances: Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external air.
Heating performances: Ambient air 20°C d.b./15°C w.b.; External air 7°C/6°C w.b.; Functioning with 30% of external air.

MB4

Size			060	085	125
Configuration: MB4					
Cooling performances					
Cooling capacity	H	kW	60,90	81,90	128,10
Sensible cooling capacity	H	kW	49,10	68,80	92,40
Compressors absorbed power	H	kW	15,50	20,40	37,40
EER compressors	H		3,92	4,02	3,42
Unit input power	H	kW	20,5	27,6	46,5
Heating performances					
Heating capacity	H	kW	61,20	82,10	124,60
Compressors absorbed power	H	kW	12,00	16,00	28,00
Compressor COP	H		5,12	5,12	4,45
Unit input power	H	kW	16,4	21,8	37,2

Cooling performances: Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
Heating performances: Ambient air 20°C d.b./15°C w.b.; External air 7°C/6°C w.b.; Functioning with 30% of external and expelled air.

MBF

Size			060	085	125
Configuration: MBF					
Cooling performances					
Cooling capacity	H	kW	60,40	81,40	127,00
Sensible cooling capacity	H	kW	49,00	68,70	92,10
Compressors absorbed power	H	kW	15,90	20,80	38,40
EER compressors	H		3,79	3,91	3,30
Unit input power	H	kW	20,2	27,0	46,0
Heating performances					
Heating capacity	H	kW	58,50	78,80	119,70
Compressors absorbed power	H	kW	11,70	15,90	27,60
Compressor COP	H		5,02	4,96	4,33
Unit input power	H	kW	15,3	20,6	35,1

Cooling performances: Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external air.
Heating performances: Ambient air 20°C d.b./15°C w.b.; External air 7°C/6°C w.b.; Functioning with 30% of external air.

MBT

Size			060	085	125
Configuration: MBT					
Cooling performances					
Cooling capacity	H	kW	66,00	88,80	139,10
Sensible cooling capacity	H	kW	51,50	72,20	97,00
Compressors absorbed power	H	kW	15,50	20,50	37,50
EER compressors	H		4,25	4,34	3,71
Unit input power	H	kW	20,5	27,7	46,6
Heating performances					
Heating capacity	H	kW	65,90	88,50	134,40
Compressors absorbed power	H	kW	12,50	16,60	29,10
Compressor COP	H		5,29	5,32	4,62
Unit input power	H	kW	16,9	22,4	38,3

Cooling performances: Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
Heating performances: Ambient air 20°C d.b./15°C w.b.; External air 7°C/6°C w.b.; Functioning with 30% of external and expelled air.

ENERGY INDEX

Size			060	085	125
Energy index					
SEER	H	W/W	5,94	6,41	5,81
ηsc	H	%	234,60	253,50	229,20
SCOP	H	W/W	3,74	3,83	3,59
ηsh	H	%	146,70	150,30	140,70

■ *In MB1 configuration according to EN 14825:2022*

INDICES FOR ACCESS TO INCENTIVES

Size			060	085	125
Configuration: MB1					
Indices for access to incentives					
Cooling capacity	H	kW	58,60	79,00	-
EER	H	W/W	3,10	3,14	-
Heating capacity	H	kW	56,90	76,70	-
COP	H	W/W	3,71	3,73	-

■ *In MB1 configuration according to EN 14511-3:2022*

GENERAL TECHNICAL DATA

Size			060	085	125
Power supply					
Power supply	H		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz
Compressor					
Type	H	type	Scroll	Scroll	Scroll
Number	H	no.	2	2	2
Circuits	H	no.	2	2	2
Refrigerant	H	type	R32	R32	R32
Compressor regulation	H	Type	Inverter	Inverter	Inverter
Sound data					
Sound power level	H	dB(A)	84,0	85,0	89,0

■ *Sound power in MB1 configuration at nominal operating conditions calculated on the basis of measurements in accordance with UNI EN ISO 9614-1/2*

FANS

External fans

Size			060	085	125
Configuration: MB1, MB2, MB4, MBF, MBT					
External fans					
Type	H	type	Assiali EC	Assiali EC	Assiali EC
Number	H	no.	2	2	2

Internal flow fans

Size			060	085	125
Configuration: MB1, MB2, MB4, MBF, MBT					
Delivery					
Type	H	type		Plug fan EC	
Number	H	no.	1	2	2
Nominal air flow rate	H	m^3/h	12700	17500	23000
Minimum air flow rate	H	m^3/h	9500	13000	17000
Maximum air flow rate	H	m^3/h	14000	20500	25500
Nominal high static pressure (EN14511)	H	Pa	200	200	250

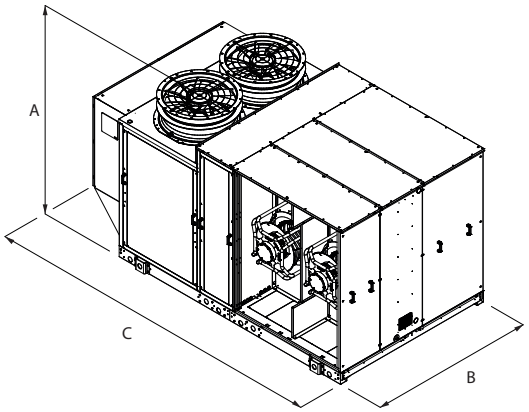
Expulsion fan MB4

Size			060	085	125
Configuration: MB4					
Exhaust					
Type	H	type		Plug fan EC	
Number	H	no.	1	2	3
Nominal useful head	H	Pa	100	100	125

Expulsion fan MBT

Size			060	085	125
Configuration: MBT					
Exhaust					
Type	H	type		Plug fan EC	
Number	H	no.	1	2	3
Nominal useful head	H	Pa	100	100	125

DIMENSIONS



Size			060	085	125
Dimensions and weights					
A	H	mm	1570	1900	2165
B	H	mm	2200	2200	2200
C	H	mm	3305	3905	3905
Empty weight	H	kg	1193	1518	1597

■ *Empty weight: in MB1 configuration without accessories*

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RTX-N1-N8

Roof-Top for applications in medium crowed

Cooling capacity 12,70 ÷ 49,95 kW
Heating capacity 13,50 ÷ 50,79 kW

- For medium crowding applications
- Upgraded thermodynamic heat recovery
- Handling section with plug fan coupled with BRUSHLESS EC motors
- Free-cooling / enthalpic free-cooling / photocatalytic system option

DESCRIPTION

Independent Roof-Top air-cooled air conditioner to treat, filter and renew air based on the selected configuration. Being fitted to function with 30% external and expelled air (MB4 versions), RTX units are designed for medium density applications like shopping malls, shops, offices and production areas.
Based on the version and accessories selected, the units allow you to manage free-cooling mode and, in the MB4 versions, there is thermodynamic recovery of the energy contained in the expelled air, allowing for higher performance and efficiency.

CONFIGURATIONS

MB1: Single ventilating cross-section for recovery air.
Recovery air only configuration where no fresh air is required.
The useful flow and recovery static pressure is provided by the flow ventilating cross-section.

MB2: Single ventilating cross-section for recovery and external air.
Recovery and external air configuration. The useful flow and recovery static pressure is provided by the flow ventilating cross-section.
The presence of the recirculation damper (optional) allows for total free-cooling (100% external air).
If there are no extraction systems, the room will be in overpressure.

MB4: double ventilating cross-section (flow and expulsion) for recovery air, external air and exhaust air, thermodynamic recovery.
Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure. The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.
The double flow and exhaust ventilating cross-section allows for partial free-cooling and has the thermodynamic recovery function.
Advantages of thermodynamic recovery (MB4):
— Energy recovery from the exhaust air flow that would otherwise be lost
— No further components are introduced and, therefore, there are no additional pressure drops
— Cooling circuit functioning with heat sources at more advantageous temperatures
— Reduction of defrosting cycles
— Increase in thermal and cooling efficiency
— Efficiency increase (EER/COP)

FEATURES

— 2 cooling circuits with electronic thermostatic expansion valve;
— High efficiency scroll compressors with low power consumption;
— Finned pack direct expansion internal and external exchangers;
— Plug fan type (EC) flow and exhaust fans (if any). The impellers are facing so as to ensure that the air flows through all the internal components with minimum noise;
— Axial fan unit for extremely silent functioning positioned on the condensing section.
— Filter with 55% COARSE efficiency (according to EN ISO 16890) on the fresh air flow; Also available: compact filter with ePM1 50% efficiency (according to EN ISO 16890). Positioning upstream of the components to be protected to ensure low pressure drops, having a large surface. Air quality control systems are also available (VOC and $CO_{2\ probe}$);
— The structure consists of a galvanised sheet metal base, frame in galvanised sheet metal shaped profiles powder coated in RAL9003 (self-bearing structure), pre-painted sheet metal panels (external) insulated with 28kg/mc dense adhesive insulation and sandwich type panels insulated with 25 mm thick 45kg/mc polyurethane, eco-friendly "GWP 0" (Global Warming Potential);
— The casing, designed to allow the internal components to be accessed for routine and extraordinary maintenance.

CONTROL

Microprocessor control able to manage the different functioning modes, ensuring maximum energy savings in any conditions of use. Interfaces to connect to remote supervision and control systems available as options.

FUNCTIONALITY AND TECHNOLOGICAL ADVANTAGES

RTX units are designed with the aim of reducing the energy consumption that subsequently dictated the technological choices made on the unit we will now introduce in brief.

Very high ventilation efficiency

As ventilation is one of the major power consumption factors, we dedicated particular attention to designing and constructing the ventilation system.

State-of-the-art plug fans with EC brushless motors have been used both in flow and in recovery (if any), which enable high performance and reduced consumption. Furthermore, compared to conventional centrifugal fans, they have no belts or pulleys, thus facilitating flow rate adjustment and resulting in compactness, versatility and easy maintenance.
Special adaptive logic allows you to adjust the air flow rate to actual system demand with further resulting advantages in terms of consumption reduction.
Axial fans for the external section of the unit are helical. Electronic condensation control is available as an accessory, which regulates fan speed based on the load required, allowing for noise reduction. As an option, the motors can have electronic control (EC) to reduce consumption even in the condensing part.

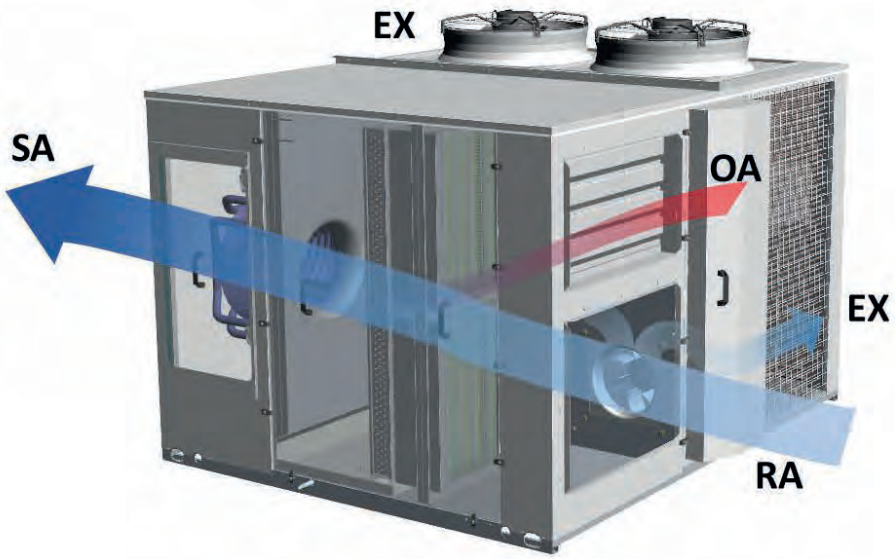
Room air quality

Special attention was paid to the quality of the room air, entrusted to the standard 55% COARSE efficiency filters. F7 filters are also available as optional.

Active thermodynamic recovery

In the MB4 configurations, the units have a thermodynamic recovery function to recover the energy contained in the exhaust air, causing the expelled air flow to hit the external finned pack exchanger, allowing for higher performance and efficiency.
All of these technological advantages are controlled by a thermoregulation that is able to manage the different functioning modes, ensuring maximum energy savings in all conditions of use via dedicated software.

MB4 CONFIGURATION WITH DOUBLE VENTILATING SECTION FOR RETURN AIR, EXTERNAL AIR AND EXPELLED AIR. STANDARD FREE-COOLING AND THERMODYNAMIC HEAT RECOVERY FUNCTION



SA Supply air
EX Exhaust air
OA Fresh air
RA Return air

ACCESSORIES

AXEC: Axial fans with EC motors with speed control function according to the pressure of condensation and evaporation.
AXECP: EC axial fans with available useful static pressure.
BAC: Interface card BACnet MS/TP pCOnet.
BE: Electric heating coil 2 stages.
BIP: Interface card Ethernet-pCOweb (BACNET IP)
BPGC: After heating coil with hot gas.
BW: 2-rows-heating coil with hot water.
BWV2V: 2 -rows -heating coil with hot water, with 2-way modulating valve.
BWV3V: 2-rows heating coil with hot water, with 3-way modulating valve.
CA: Waterproof covers on external air intake.
DP: Dehumidification control (humidity probe in recovery) and of after-heating (if present).
FCT: Partial Temperature Free-Cooling for MB2, MB4 versions.
FT7: F7 efficiency pocket filters positioned on the supply air flow.
GP: External coil protection grid.
LW: Interface card LonWorks.
PRT1: Wall/recessed (up to 50 m) remote control panel.
PRT2: Wall/recessed (up to 200 m) remote control panel.
PSF4: Differential pressure switch signalling dirty recovery and renewal filters (if any).
PSTEP: Adjusting constant flow, step flow in function of the modulation of the cooling circuit.
RFC: Smoke detector and damper management.
RS: Serial card BMS RS485.
SCM: Modulating servo-controls (standard on MB3 model or if temperature or enthalpic free-cooling is present).
SCMRM: Modulating Servo-control with spring return.
SCO2: Probe CO2 (not available on MB1 fittings).
STA: Room temperature probe
SUA: Room humidity probe.
SVOC: Probe VOC (not available on MB1 fittings).
VT: Antivibration mounts.

PERFORMANCE SPECIFICATIONS

Size		N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1									
Cooling performances (1)									
Cooling capacity	kW	12,70	15,50	19,10	22,20	28,60	33,00	43,00	47,00
Sensible cooling capacity	kW	8,60	10,40	12,80	14,80	19,00	22,40	28,80	32,10
Compressors absorbed power	kW	3,30	4,20	5,00	6,00	7,20	8,70	11,40	12,50
EER compressors		3,87	3,71	3,82	3,69	3,98	3,79	3,75	3,75
Heating performances (2)									
Heating capacity	kW	13,50	16,10	19,90	23,00	29,60	34,00	44,70	48,50
Compressors absorbed power	kW	3,07	3,65	4,28	5,15	6,23	6,86	9,43	10,02
Compressor COP		4,40	4,41	4,64	4,47	4,75	4,96	4,74	4,84

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Size		N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB2									
Cooling performances (1)									
Cooling capacity	kW	13,42	16,34	20,16	23,35	30,21	34,79	45,26	49,44
Sensible cooling capacity	kW	8,92	10,86	13,40	15,40	19,70	23,40	30,00	33,50
Compressors absorbed power	kW	3,33	4,22	5,04	6,07	7,29	8,85	11,65	12,74
EER compressors		4,03	3,87	4,00	3,85	4,14	3,93	3,88	3,88
Heating performances (2)									
Heating capacity	kW	13,65	16,24	20,02	23,18	29,87	34,22	45,17	48,94
Compressors absorbed power	kW	2,77	3,31	3,86	4,65	5,62	6,15	8,58	9,22
Compressor COP		4,92	4,91	5,18	4,99	5,32	5,57	5,26	5,31

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Size		N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB4									
Cooling performances (1)									
Cooling capacity	kW	13,49	16,49	20,33	23,58	30,45	35,16	45,65	49,95
Sensible cooling capacity	kW	8,93	10,91	13,40	15,50	19,80	23,50	30,20	33,60
Compressors absorbed power	kW	3,27	4,12	4,92	5,90	7,13	8,59	11,39	12,43
EER compressors		4,13	4,00	4,13	4,00	4,27	4,10	4,01	4,02
Heating performances (2)									
Heating capacity	kW	14,00	16,81	20,69	24,05	30,77	35,50	46,63	50,79
Compressors absorbed power	kW	2,81	3,36	3,92	4,73	5,71	6,27	8,74	9,38
Compressor COP		4,98	5,00	5,28	5,08	5,39	5,67	5,33	5,41

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

ENERGY INDEX

Size			N1	N2	N3	N4	N5	N6	N7	N8
Energy index										
SEER	H	W/W	3,73	3,60	3,76	3,70	3,86	3,86	3,80	3,77
ηsc	H	%	146.1%	141.2%	147.5%	144.8%	151.5%	151.5%	148.8%	147.8%
Pdesignh	H	kW	7	9	11	13	16	19	25	26
SCOP	H	W/W	3,47	3,34	3,46	3,36	3,29	3,50	3,47	3,44
ηsh	H	%	135.6%	130.5%	135.4%	131.2%	128.7%	137.1%	135.7%	134.4%

GENERAL TECHNICAL DATA

Size		N1	N2	N3	N4	N5	N6	N7	N8
Power supply									
Power supply		400V~3N 50Hz	400V~3N 50Hz	400V~3N 50Hz	400V~3N 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz
Compressor									
Type	type	Scroll							
Number	no.	2	2	2	2	2	2	2	2
Circuits	no.	2	2	2	2	2	2	2	2
Refrigerant	type	R410A							
Sound data									
Sound power level	dB(A)	73,3	73,7	76,4	76,3	81,2	79,7	82,8	82,9
Sound pressure level (1)	dB(A)	65,3	65,8	68,5	68,3	73,2	71,7	74,8	74,9

(1) MB1 configuration sound pressure measured in free field (Q=2), 1m away from the outer surface of the ducted unit, high static pressure 50 Pa (EN ISO 9614-2).. 3 dB(A) tolerance on sound power level (Eurovent 8/1).

FANS

Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1, MB2, MB4										
External fans										
Type	H	type	axials	axials	axials	axials	axials	axials	axials	axials
Number	H	no.	2	2	2	2	2	2	2	2

Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1, MB2, MB4										
Internal fans										
Nominal air flow rate	H	m^3/h	2000	2800	3500	4000	5000	6500	8000	9500
Minimum air flow rate	H	m^3/h	1800	1800	2700	2700	4000	4000	6500	6500
Maximum air flow rate	H	m^3/h	2900	2900	4100	4100	6900	6900	10100	10100

Size			09	10	11	12	13	14	15	16
Configuration: MBT										
Exhaust										
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	1	1	1	2	2	2	2	2

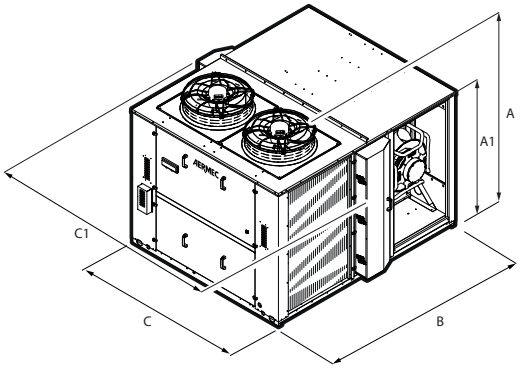
Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1, MB2										
Delivery										
Type	H	type	Brushless EC	Brushless EC	Brushless EC	Brushless EC	Brushless EC	Brushless EC	Brushless EC	Brushless EC
Number	H	no.	1	1	1	1	1	1	1	1
Maximum useful head (1)	H	Pa	755	575	460	555	435	460	575	765
High static pressure (EN14511) (1)	H	Pa	100	100	124	124	124	150	150	200

(1) At the nominal/maximum flow rate with a new, clean air filter.

Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB4										
Delivery										
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	1	1	1	1	1	1	1	1
Maximum useful head (1)	H	Pa	755	575	460	555	435	460	575	765
High static pressure (EN14511) (1)	H	Pa	100	100	124	124	124	150	150	200

(1) At the nominal/maximum flow rate with a new, clean air filter.

DIMENSIONS



Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1										
Dimensions and weights										
A	H	mm	1170	1170	1470	1470	1610	1610	1710	1710
A1	H	mm	910	910	1210	1210	1410	1410	1510	1510
B	H	mm	1460	1460	1460	1460	1860	1860	2310	2310
C	H	mm	1560	1560	1560	1560	1910	1910	1910	1910
C1	H	mm	-	-	-	-	-	-	-	-
Empty weight	H	kg	335	335	405	405	594	594	745	745

Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB2										
Dimensions and weights										
A	H	mm	1170	1170	1470	1470	1610	1610	1710	1710
A1	H	mm	910	910	1210	1210	1410	1410	1510	1510
B	H	mm	1460	1460	1460	1460	1860	1860	2310	2310
C	H	mm	1560	1560	1560	1560	1910	1910	1910	1910
C1	H	mm	-	-	-	-	-	-	-	-
Empty weight	H	kg	335	335	405	405	594	594	745	745

Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB4										
Dimensions and weights										
A	H	mm	1170	1170	1470	1470	1610	1610	1710	1710
A1	H	mm	910	910	1210	1210	1410	1410	1510	1510
B	H	mm	1460	1460	1460	1460	1860	1860	2310	2310
C	H	mm	-	-	-	-	-	-	-	-
C1	H	mm	1850	1850	1850	1850	2200	2200	2200	2200
Empty weight	H	kg	345	345	429	429	619	619	775	775

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RTX 09-16

Roof-Top for applications in medium crowed

Cooling capacity 50 ÷ 135 kW
Heating capacity 49 ÷ 141 kW

- **For medium crowding applications**
- **Upgraded thermodynamic heat recovery**
- **Handling section with plug fan coupled with BRUSHLESS EC motors**
- **Free-cooling / enthalpic free-cooling / photocatalytic system option**

DESCRIPTION

Independent Roof -top type air cooled air conditioner, for treatment, filtration and renewal of the air , based on the chosen configuration.
RTX 09-16units are designed fot medium crowding applications, like shopping malls, shops, offices , production areas being designed for operation with 30% external and expelled air (version MB3). The unit based on the version and selected accessories allows the management of the free-cooling operation, and can be equipped with a recuperator to recover the energy contained in the exaust air allowing higher perfomances and efficiencies.

VERSIONS

F Cooling only
H Heat pump.

FEATURES

Refrigerant circuit

functioning with R410A refrigerant, consisting of scroll compressors in "uneven" tandem configuration (except for sizes 09, 10 and 14) to ensure maximum energy savings at partial loads and better adaptability to system demands, providing only the energy actually needed. The compressors are equipped with electric resistances on the guards and thermal protection on the exhaust. The compressor compartment is isolated from the air flow.

Ventilation

The air treatment cross-section ventilation, which represents the highest expense in terms of machine operating costs, is entrusted to the plug fans with EC brushless motors which enable high performance, easy flow rate adjustment, compactness, low noise, versatility and easy maintenance. Furthermore, a special adaptive logic allows you to adjust the air flow rate to actual system demand with further advantages in terms of consumption reduction.

Axial fans

The axial fans, located in the condensing section of the unit, are the helical type, statically and dynamically balanced, protected electrically and mechanically by grids. Electronic condensation control is optional in F versions and condensation and evaporation during winter functioning in H versions.
The fans are also available with electronically controlled (EC) permanent magnet synchronous motor.

Exchangers

The internal and external heat exchangers are finned pack direct expansion, made with copper pipes arranged in staggered rows and mechanically expanded to better adhere to the collar of the louvers. The louvers are made of aluminium with a special corrugated surfaces, suitably spaced to ensure maximum heat exchange yield.

Air filtration

Entrusted to a filter with 55% Coarse efficiency (according to EN ISO 16890) on the fresh air flow.
Also available: compact filter with ePM1 50% efficiency or ePM1 80% efficiency (according to EN ISO 16890) and electronic filter on fresh air flow. Positioning upstream of the components to be protected to ensure low pressure drops, having a large surface. Air quality control systems are also available (VOC and CO2 probe).

Cleaning system with photocatalytic lamp

The Photocatalytic Oxidation technology generates natural oxidising ions capable of attracting and destroying the pollutants present in the air and on surfaces, by means of the combined action of UV rays with a catalyst structure composed of a four-metal alloy, mainly consisting of TiO_2 (titanium dioxide).

Thermoregulation

Electronic controller able to manage the different functioning modes, ensuring maximum energy savings in all conditions of use by means of special software. Interfaces to connect to remote supervision and control systems available as options. The electrical panel complete with all devices is easily accessible.
The free-cooling/heating and defrosting logics are particularly sophisticated. As soon as the external conditions allow it, the unit is able to automatically activate the free-cooling or free-heating mode, which cools or heats the served room, while keeping the compressors off and introducing suitably treated external air. This mode significantly reduces both energy consumption and wear of the compressors. These functions are also used when the external air energy content is not enough to cool or heat the room. In this case, the thermal cooling capacity is integrated by the compressors.

CONFIGURATIONS

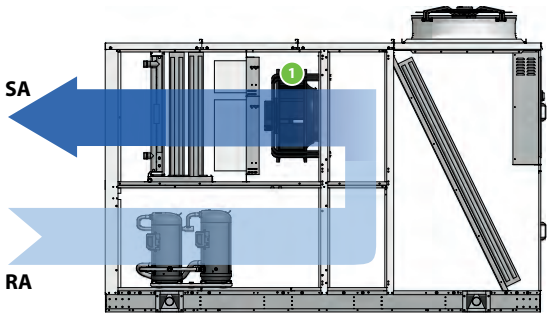
MB1: Single ventilating cross-section for recovery air.
Recovery air only configuration where no fresh air is required.
The useful flow and recovery static pressure is provided by the flow ventilating cross-section.

MB2: Single ventilating cross-section for recovery and external air.
Recovery and external air configuration. The useful flow and recovery static pressure is provided by the flow ventilating cross-section.
The presence of the recirculation damper (optional) allows for total free-cooling (100% external air).
If there are no extraction systems, the room will be in overpressure.

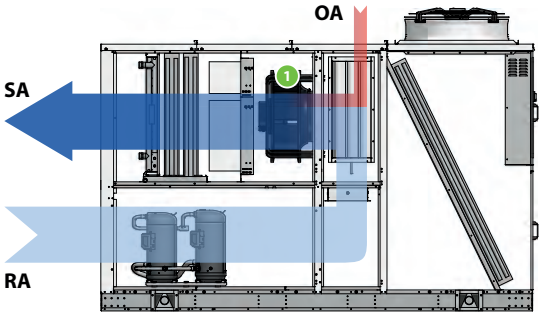
MB3: double ventilating cross-section (flow and return) for recovery air, external air and exhaust air, thermodynamic recovery.
Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the useful flow static pressure while the recovery ventilating cross-section provides the useful recovery static pressure.
The double flow and recovery ventilating cross-section allows for total free-cooling (100% external air) without the need for a dedicated extraction system. The room overpressure or depression can be obtained by unbalancing the flow rates.
Thermodynamic recovery is performed by conveying expelled air on the external heat exchanger.

MB4: double ventilating cross-section (flow and expulsion) for recovery air, external air and exhaust air, thermodynamic recovery.
Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure. The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.
The double flow and exhaust ventilating cross-section allows for partial free-cooling.
As for the MB3 version, it has the thermodynamic recovery function.
Advantages of thermodynamic recovery (MB3 - MB4 version):
- Energy recovery from the exhaust air flow that would otherwise be lost
- No further components are introduced and, therefore, there are no additional pressure drops
- Cooling circuit functioning with heat sources at more advantageous temperatures
- Reduction of defrosting cycles
- Increase in thermal and cooling efficiency
- Efficiency increase (EER/COP)

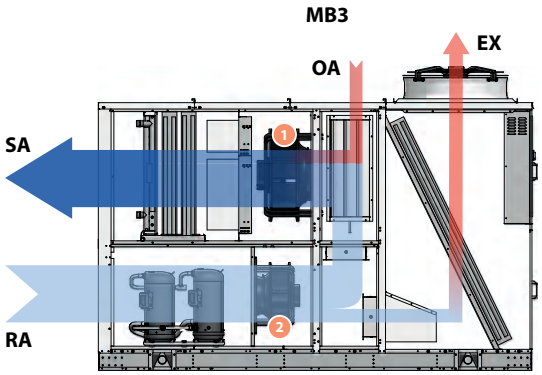
MB1



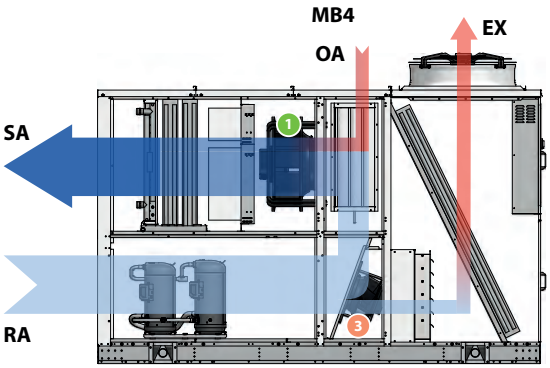
MB2



MB3



MB4



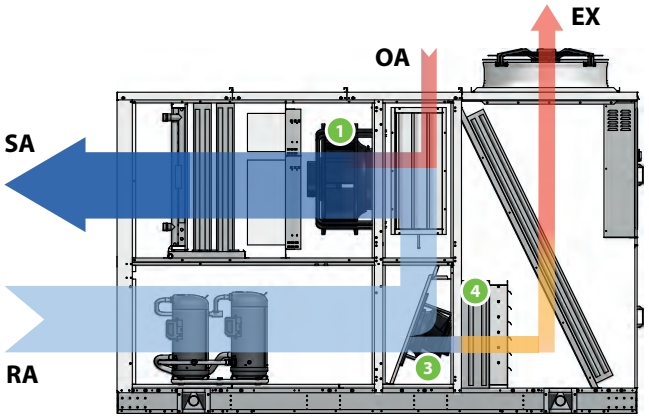
SA supply air
RA fresh air
OA fresh air
EX Exhaust air

1 Delivery fan
2 Return fan
3 Expulsion fan

MBT: DOUBLE VENTILATING CROSS-SECTION (FLOW AND EXPULSION) FOR RECOVERY AIR, EXTERNAL AIR AND EXHAUST AIR, UPGRADED THERMODYNAMIC RECOVERY.

Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure.
The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.
The double flow and exhaust ventilating cross-section allows for partial free-cooling.
The MBT configuration allows for the upgraded thermodynamic recovery on the exhaust air by fully exploiting the energy content still present in it. The exhaust flow rate, controlled by the dedicated exhaust fan, is conveyed to the innovative finned pack recovery coil, integrated in the cooling circuit of the unit.
The coil, perfectly hit by the air flow, recovers the energy still present in the exhaust flow and transfer it to the cooling circuit, increasing the treatment coil performance without increasing the input power of the compressors.
In summer functioning, the coil makes it possible to increase the liquid subcooling, while in winter functioning, the coil takes on part of the evaporation by operating the cooling circuit at more advantageous temperatures.
Advantages of upgraded thermodynamic recovery (MBT version):
- High heat exchange efficiency thanks to the dedicated recovery coil
- Further increase in unit cooling and heating capacity
- Further increase in unit efficiency (EER/COP)
- Reduced additional air side pressure drops (expelled air side only)

— The unit remains compact
— In heating functioning, the defrost cycles are further reduced due to the increase in evaporation temperature. The result is an increase in efficiency and greater room comfort.
— Compared to traditional passive recuperators, in heating functioning it allows for exhaust air recovery even with low temperature difference between external and indoor air (mild winters)
— Compared to traditional passive recuperators, in cooling functioning it allows for exhaust air recovery even with low temperature difference between external and indoor air (continental and temperate climate)
— The presence of the dedicated coil determines the recovery efficiency that can be used in the energy certification calculations.



SA supply air
RA fresh air
OA fresh air
EX Exhaust air

1 Delivery fan
2 Return fan
3 Expulsion fan
4 Dedicated thermodynamic recovery coil

ACCESSORIES

AXEC: Axial fans with EC motors with speed control function according to the pressure of condensation and evaporation.
AXECP: EC axial fans with available useful static pressure.
BAC: Interface card BACnet MS/TP pCOnet.
BE: Electric heating coil 2 stages.
BEM: Modulating electric heating coil.
BIP: Interface card Ethernet-pCOweb (BACNET IP)
BPGC: After heating coil with hot gas.
BW: 2-rows-heating coil with hot water.
BWV2V: 2 -rows -heating coil with hot water, with 2-way modulating valve.
BWV3V: 2-rows heating coil with hot water, with 3-way modulating valve.
CA: Waterproof covers on external air intake.
CF: Flue, only on unit with gas burner module.
CUR: Humidification control (humidity probe in recovery, limit humidity probe in supply , contact ON/OFF and modulating analog output).
DCPR: AC fans with pressure switch device of speed control function of the pressure of condensation and evaporation.
DP: Dehumidification control (humidity probe in recovery) and of after-heating (if present).
FCT: Partial Temperature Free-Cooling for MB2, MB4 versions.
FT7: F7 efficiency pocket filters positioned on the supply air flow.
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FTE: Electronic filters placed on the flow of supply air.
FTH: Enthalpy free-cooling.
GP: External coil protection grid.
Gx: Heating module with gas burner.
LFX: Device with photocatalytic effect.
LW: Interface card LonWorks.
MAN: High and low pressure gauges.
MSSM: Flow silencer module, only for rear flow.
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PRT1: Wall/recessed (up to 50 m) remote control panel.
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PSTEP: Adjusting constant flow, step flow in function of the modulation of the cooling circuit.
RF: Smoke detector.
RFC: Smoke detector and damper management.
RS: Serial card BMS RS485.
SCM: Modulating servo-controls (standard on MB3 model or if temperature or enthalpic free-cooling is present).
SCMRM: Modulating Servo-control with spring return.
SCO2: Probe CO2 (not available on MB1 fittings).
STA: Room temperature probe
SUA: Room humidity probe.
SVOC: Probe VOC (not available on MB1 fittings).
UP: Manufacturer of immersed electrodes supplied and steam ramp installed.
VT: Antivibration mounts.

PERFORMANCE SPECIFICATIONS

MB1

Size		09	10	11	12	13	14	15	16
Configuration: MB1									
Cooling performances (1)									
Cooling capacity	kW	50,00	60,10	68,60	81,00	93,40	103,50	114,00	125,30
Sensible cooling capacity	kW	40,10	46,10	52,70	63,20	70,90	81,80	89,30	97,10
Compressors absorbed power	kW	11,90	14,40	18,80	17,90	23,10	25,60	30,50	35,50
EER compressors		4,20	4,17	3,65	4,53	4,04	4,04	3,74	3,53
Heating performances (2)									
Heating capacity	kW	49,40	61,10	69,30	80,60	93,70	102,20	113,70	126,60
Compressors absorbed power	kW	9,80	12,20	15,50	15,70	20,60	21,00	24,40	28,40
Compressor COP		5,04	5,01	4,47	5,13	4,55	4,87	4,66	4,46

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

MB2

Size		09	10	11	12	13	14	15	16
Configuration: MB2									
Cooling performances (1)									
Cooling capacity	kW	52,90	63,30	72,30	85,30	98,40	108,80	120,10	131,60
Sensible cooling capacity	kW	42,70	48,80	55,90	67,10	75,00	86,70	94,80	102,80
Compressors absorbed power	kW	12,10	14,60	19,00	18,10	23,30	25,90	30,90	35,90
EER compressors		4,37	4,34	3,81	4,71	4,22	4,20	3,89	3,67
Heating performances (2)									
Heating capacity	kW	50,50	61,90	70,60	82,20	94,90	103,60	115,30	128,10
Compressors absorbed power	kW	9,00	11,20	14,10	14,30	18,90	19,20	22,50	26,00
Compressor COP		5,61	5,53	5,01	5,75	5,02	5,40	5,12	4,93

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

MB3

Size		09	10	11	12	13	14	15	16
Configuration: MB3									
Cooling performances (1)									
Cooling capacity	kW	53,40	63,70	73,10	86,10	99,30	110,00	121,30	133,30
Sensible cooling capacity	kW	43,00	48,90	56,20	67,40	75,30	87,00	95,10	103,20
Compressors absorbed power	kW	11,80	14,20	18,50	17,70	22,80	25,10	30,10	34,80
EER compressors		4,53	4,49	3,95	4,86	4,36	4,38	4,03	3,83
Heating performances (2)									
Heating capacity	kW	52,10	64,10	74,10	85,00	98,60	107,80	120,60	134,30
Compressors absorbed power	kW	9,20	11,40	14,40	14,60	19,10	19,40	22,90	26,70
Compressor COP		5,66	5,62	5,15	5,82	5,16	5,56	5,27	5,03

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

MB4

Size		09	10	11	12	13	14	15	16
Configuration: MB4									
Cooling performances (1)									
Cooling capacity	kW	53,40	63,70	73,10	86,10	99,30	110,00	121,30	133,30
Sensible cooling capacity	kW	43,00	48,90	56,20	67,40	75,30	87,00	95,10	103,20
Compressors absorbed power	kW	11,80	14,20	18,50	17,70	22,80	25,10	30,10	34,80
EER compressors		4,53	4,49	3,95	4,86	4,36	4,38	4,03	3,83
Heating performances (2)									
Heating capacity	kW	52,10	64,10	74,10	85,00	98,60	107,80	120,60	134,30
Compressors absorbed power	kW	9,20	11,40	14,40	14,60	19,10	19,40	22,90	26,70
Compressor COP		5,66	5,62	5,15	5,82	5,16	5,56	5,27	5,03

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

MBT

Size			09	10	11	12	13	14	15	16
Configuration: MBT										
Cooling performances (1)										
Cooling capacity		kW	57,10	67,80	78,00	90,50	103,70	116,90	128,80	140,60
Sensible cooling capacity		kW	46,60	53,00	61,20	71,90	79,70	94,00	102,60	110,60
Compressors absorbed power		kW	11,80	14,20	18,50	17,70	22,80	25,10	30,10	34,80
EER compressors			4,84	4,77	4,22	5,11	4,55	4,66	4,28	4,04
Heating performances (2)										
Heating capacity		kW	55,40	68,00	78,30	90,10	103,60	114,40	127,50	141,40
Compressors absorbed power		kW	9,20	11,40	14,40	14,60	19,10	19,40	22,90	26,70
Compressor COP			6,02	5,96	5,44	6,17	5,42	5,90	5,57	5,30
Recovery efficiency		%	84%	92%	87%	90%	85%	85%	82%	78%

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

ENERGY INDEX

Size			09	10	11	12	13	14	15	16
Energy index										
SEER	H	W/W	4,24	3,94	3,76	3,92	3,89	4,22	4,10	4,05
ηsc	H	%	166.6%	154.5%	147.2%	153.9%	152.7%	165.7%	161.1%	159.1%
Pdesignh	H	kW	29	34	38	46	52	57	62	71
SCOP	H	W/W	3,59	3,50	3,30	3,27	3,22	3,47	3,41	3,38
ηsh	H	%	140.5%	137.0%	128.8%	127.7%	126.0%	135.9%	133.5%	132.3%

GENERAL TECHNICAL DATA

Size			09	10	11	12	13	14	15	16
Power supply										
Power supply	H		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz
Compressor										
Type	H	type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Number	H	no.	2	2	2	2	2	2	2	2
Circuits	H	no.	1	1	1	1	1	1	1	1
Refrigerant	H	type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Partialisation step	H	no.	2	2	3	3	3	2	3	3

FANS

External fans

Size			09	10	11	12	13	14	15	16
Configuration: MB1, MB2, MB3, MB4, MBT										
External fans										
Type	H	type	Assiali AC	Assiali AC	Assiali AC	Assiali AC	Assiali AC	Assiali AC	Assiali AC	Assiali AC
Number	H	no.	2	2	2	2	2	2	2	2

Internal fans MB1-MB2-MB3-MB4-MBT

Size			09	10	11	12	13	14	15	16
Configuration: MB1, MB2, MB3, MB4, MBT										
Internal fans										
Nominal air flow rate	H	m^3/h	9500	11000	13000	15000	17000	20000	22000	24000
Minimum air flow rate	H	m^3/h	6650	7700	9100	10850	12600	14000	15400	16800
Maximum air flow rate	H	m^3/h	9500	11000	13000	15500	18000	20000	22000	24000

Internal recovery fans

Size			09	10	11	12	13	14	15	16
Configuration: MB3										
Recovery										
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	1	1	1	2	2	2	2	2

Expulsion fan MB4-MBT

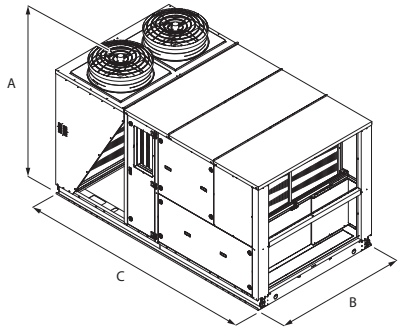
Size			09	10	11	12	13	14	15	16
Configuration: MBT										
Exhaust										
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	1	1	1	2	2	2	2	2

Internal flow fans

Size			09	10	11	12	13	14	15	16
Configuration: MB1, MB2, MB3, MB4, MBT										
Delivery										
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	1	1	1	2	2	2	2	2
Maximum useful head (1)	H	Pa	770	510	445	555	740	640	525	675
High static pressure (EN14511) (1)	H	Pa	200	200	200	200	250	250	250	300

(1) At the nominal/maximum flow rate with a new, clean air filter.

DIMENSIONS



Size			09	10	11	12	13	14	15	16
Dimensions and weights										
A	H	mm	2061	2061	2061	2373	2373	2440	2440	2440
B	H	mm	1900	1900	1900	2100	2100	2200	2200	2200
C	H	mm	3400	3400	3400	3400	3400	4000	4000	4000

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Tel. 0442633111 - Telefax 044293577
www.aermec.com

RTX-17-23

Roof-Top for applications in medium crowed

Cooling capacity 151 ÷ 307 kW
Heating capacity 152 ÷ 310 kW

- For medium crowding applications
- Thermodynamic heat recovery
- Handling section with plug fan coupled with BRUSHLESS EC motors
- Free cooling / Enthalpy free cooling

DESCRIPTION

Independent Roof -top type air cooled air conditioner, for treatment, filtration and renewal of the air , based on the chosen configuration.
The RTX 09-16 units are designed for installation in places with an average degree of crowding such as shopping centres, shops, offices and production sites, as operation uses 30% outside expelled air (versions MB3 and MB4). Depending on the version and the accessories chosen, the unit can manage free cooling mode. Versions MB3 and MB4 feature the thermodynamic recovery of the energy contained in the exhaust air, leading to higher performance and efficiency levels.

VERSIONS

F Cooling only
H Heat pump.

CONFIGURATIONS

MB1: Single ventilating cross-section for recovery air.
Recovery air only configuration where no fresh air is required.
The useful flow and recovery static pressure is provided by the flow ventilating cross-section.

MB2: Single ventilating cross-section for recovery and external air.
Recovery and external air configuration. The useful flow and recovery static pressure is provided by the flow ventilating cross-section.
The presence of the recirculation damper (optional) allows for total free-cooling (100% external air).
If there are no extraction systems, the room will be in overpressure.

MB3: double ventilating cross-section (flow and return) for recovery air, external air and exhaust air, thermodynamic recovery.
Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the useful flow static pressure while the recovery ventilating cross-section provides the useful recovery static pressure.
The double flow and recovery ventilating cross-section allows for total free-cooling (100% external air) without the need for a dedicated extraction system. The room overpressure or depression can be obtained by unbalancing the flow rates.
Thermodynamic recovery is performed by conveying expelled air on the external heat exchanger.

MB4: double ventilating cross-section (flow and expulsion) for recovery air, external air and exhaust air, thermodynamic recovery.
Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure. The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.
The double flow and exhaust ventilating cross-section allows for partial free-cooling.
As for the MB3 version, it has the thermodynamic recovery function.
Advantages of thermodynamic recovery (MB3 - MB4 version):
— Energy recovery from the exhaust air flow that would otherwise be lost
— No further components are introduced and, therefore, there are no additional pressure drops
— Cooling circuit functioning with heat sources at more advantageous temperatures
— Reduction of defrosting cycles
— Increase in thermal and cooling efficiency
— Efficiency increase (EER/COP)

FEATURES

— 2 cooling circuits with electronic thermostatic expansion valve;
— Scroll compressors (UNEVEN tandem) with high capacity and low electrical power consumption;
— Finned pack direct expansion internal and external exchangers;
— Plug fan type (EC) flow and exhaust fans (if any). The impellers are facing so as to ensure that the air flows through all the internal components with minimum noise;
— Axial fan unit for extremely silent functioning positioned on the condensing section.
— Filter with 55% COARSE efficiency (according to EN ISO 16890) on the fresh air flow; Also available: compact filter with ePM1 50% efficiency (according to EN ISO 16890). Positioning upstream of the components to be protected to ensure low pressure drops, having a large surface. Air quality control systems are also available (VOC and $CO_{2\ probe}$);
— The structure consists of a galvanised sheet metal base, frame in galvanised sheet metal shaped profiles powder coated in RAL9003

(self-bearing structure), pre-painted sheet metal panels (external) insulated with 28kg/mc dense adhesive insulation and sandwich type panels insulated with 25 mm thick 45kg/mc polyurethane, eco-friendly "GWP 0" (Global Warming Potential);
— The casing, designed to allow the internal components to be accessed for routine and extraordinary maintenance.

CONTROL

Microprocessor control able to manage the different functioning modes, ensuring maximum energy savings in any conditions of use. Interfaces to connect to remote supervision and control systems available as options.

FUNCTIONALITY AND TECHNOLOGICAL ADVANTAGES

RTX units are designed with the aim of reducing the energy consumption that subsequently dictated the technological choices made on the unit we will now introduce in brief.

Very high ventilation efficiency

As ventilation is one of the major power consumption factors, we dedicated particular attention to designing and constructing the ventilation system.
State-of-the-art plug fans with EC brushless motors have been used both in flow and in recovery (if any), which enable high performance and reduced consumption. Furthermore, compared to conventional centrifugal fans, they have no belts or pulleys, thus facilitating flow rate adjustment and resulting in compactness, versatility and easy maintenance.
Special adaptive logic allows you to adjust the air flow rate to actual system demand with further resulting advantages in terms of consumption reduction.

Axial fans for the external section of the unit are helical. Electronic condensation control is available as an accessory, which regulates fan speed based on the load required, allowing for noise reduction. As an option, the motors can have electronic control (EC) to reduce consumption even in the condensing part.

Maximum seasonal efficiency

To improve the efficiency of the cooling circuit, tandem scroll compressors of different power levels are used (UNEVEN compressors on all sizes). This distinctive trait, combined with the use of next generation fans, means reduced consumption and enhanced adaptability to system requests (particularly in partial load operation), guaranteeing boosted seasonal efficiency levels.

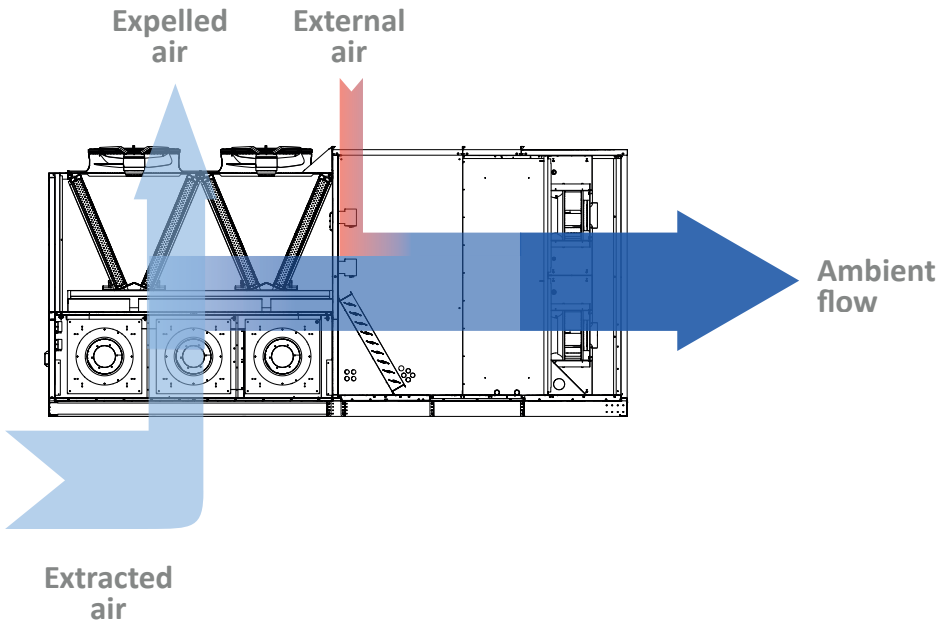
Room air quality

Special attention has been paid to the quality of the air in the room, entrusted to filters that ensure 55% COARSE efficiency as standard. There is also the option of F7, F9 or electronic filters on the fresh air flow.

Active thermodynamic recovery

In the MB3-MB4 configuration, the unit with thermodynamic recovery function also takes advantage of the energy contained in the exhaust air, which would otherwise be lost; this ensures better performance and efficiency.
All of these technological advantages are controlled by a thermoregulation that is able to manage the different functioning modes, ensuring maximum energy savings in all conditions of use via dedicated software.

MB3 CONFIGURATION WITH TWIN FAN SECTION FOR RECIRCULATION AIR, OUTSIDE AIR AND EXHAUST AIR. TOTAL FREE COOLING FUNCTION (WITH 100% OUTSIDE AIR) AND THERMODYNAMIC RECOVERY FUNCTION AS STANDARD.



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STA: Room temperature probe
SUA: Room humidity probe.
SVOC: Probe VOC (not available on MB1 fittings).
UP: Manufacturer of immersed electrodes supplied and steam ramp installed.
VT: Antivibration mounts.

PERFORMANCE SPECIFICATIONS

MB1

Size		17	18	19	20	21	22	23
Configuration: MB1								
Cooling performances (1)								
Cooling capacity	kW	151,90	170,10	191,70	213,30	231,70	246,10	289,10
Sensible cooling capacity	kW	114,30	125,40	136,10	151,60	164,70	178,50	202,30
Compressors absorbed power	kW	32,70	39,20	45,30	54,00	60,70	69,00	68,90
EER compressors		4,65	4,34	4,23	3,95	3,82	3,57	4,20
Heating performances (2)								
Heating capacity	kW	152,70	170,80	192,80	216,20	230,80	245,50	296,30
Compressors absorbed power	kW	28,20	33,90	39,20	43,90	46,30	51,20	58,60
Compressor COP		5,41	5,04	4,92	4,92	4,98	4,79	5,06

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

MB2

Size		17	18	19	20	21	22	23
Configuration: MB2								
Cooling performances (1)								
Cooling capacity	kW	160,20	179,40	201,80	224,60	243,90	258,90	304,50
Sensible cooling capacity	kW	120,90	132,60	143,20	159,70	173,50	188,30	212,90
Compressors absorbed power	kW	33,10	39,50	45,60	54,60	61,60	69,80	69,70
EER compressors		4,84	4,54	4,43	4,11	3,96	3,71	4,37
Heating performances (2)								
Heating capacity	kW	155,10	174,20	195,50	219,50	234,00	248,60	300,70
Compressors absorbed power	kW	25,80	31,10	35,70	40,40	42,50	47,00	54,10
Compressor COP		6,01	5,60	5,48	5,43	5,51	5,29	5,56

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

MB3

Size		17	18	19	20	21	22	23
Configuration: MB3								
Cooling performances (1)								
Cooling capacity	kW	161,30	181,10	203,70	226,90	246,70	262,10	307,20
Sensible cooling capacity	kW	121,30	133,30	143,80	160,50	174,50	189,20	213,90
Compressors absorbed power	kW	32,50	38,80	44,50	53,20	59,90	67,70	68,30
EER compressors		4,96	4,67	4,58	4,27	4,12	3,87	4,50
Heating performances (2)								
Heating capacity	kW	159,10	179,00	202,30	227,70	243,60	259,90	310,90
Compressors absorbed power	kW	26,20	31,40	36,30	41,00	43,30	47,90	55,00
Compressor COP		6,07	5,70	5,57	5,55	5,63	5,43	5,65

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

MB4

Size		17	18	19	20	21	22	23
Configuration: MB4								
Cooling performances (1)								
Cooling capacity	kW	161,30	181,10	203,70	226,90	246,70	262,10	307,20
Sensible cooling capacity	kW	121,30	133,30	143,80	160,50	174,50	189,20	213,90
Compressors absorbed power	kW	32,50	38,80	44,50	53,20	59,90	67,70	68,30
EER compressors		4,96	4,67	4,58	4,27	4,12	3,87	4,50
Heating performances (2)								
Heating capacity	kW	159,10	179,00	202,30	227,70	243,60	259,90	310,90
Compressors absorbed power	kW	26,20	31,40	36,30	41,00	43,30	47,90	55,00
Compressor COP		6,07	5,70	5,57	5,55	5,63	5,43	5,65

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

ENERGY INDEX

Size			17	18	19	20	21	22	23
Energy index									
SEER	H	W/W	4,01	3,94	4,18	3,92	4,15	3,94	3,85
ηsc	H	%	157.6%	154.6%	164.3%	153.8%	162.9%	154.5%	150.9%
Pdesignh	H	kW	89	98	109	123	130	141	168
SCOP	H	W/W	3,47	3,31	3,45	3,36	3,49	3,43	3,26
ηsh	H	%	135.7%	129.4%	134.8%	131.5%	136.4%	134.2%	127.3%

GENERAL TECHNICAL DATA

Size			17	18	19	20	21	22	23
Power supply									
Power supply	H		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz
Compressor									
Type	H	type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Number	H	no.	4	4	4	4	4	4	4
Circuits	H	no.	2	2	2	2	2	2	2
Refrigerant	H	type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Partialisation step	H	no.	6	6	6	6	6	6	6

FANS

External fans

Size			17	18	19	20	21	22	23
Configuration: MB1, MB2, MB3, MB4									
External fans									
Type	H	type	Assiali AC	Assiali AC	Assiali AC	Assiali AC	Assiali AC	Assiali AC	Assiali AC
Number	H	no.	4	4	4	4	4	4	4

Internal fans

Size			17	18	19	20	21	22	23
Configuration: MB1, MB2, MB3, MB4									
Internal fans									
Nominal air flow rate	H	m^3/h	26000	29000	33000	37000	40000	44000	48000
Minimum air flow rate	H	m^3/h	18200	20300	23100	25900	28000	30800	33600
Maximum air flow rate	H	m^3/h	36000	36000	44000	44000	53000	53000	53000

Internal recovery fans

Size			17	18	19	20	21	22	23
Configuration: MB3									
Recovery									
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	3	3	3	3	3	3	3

Expulsion fan

Size			17	18	19	20	21	22	23
Configuration: MB4									
Exhaust									
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	2	2	2	2	2	2	2

Internal flow fans

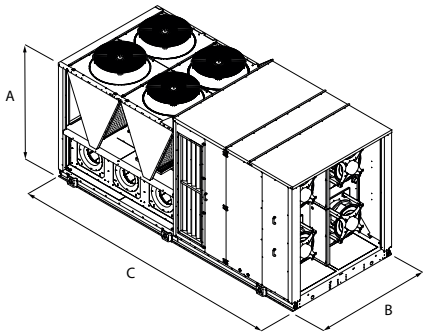
Size			17	18	19	20	21	22	23
Configuration: MB1									
Delivery									
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	2	2	3	3	3	4	4
Maximum useful head (1)	H	Pa	700	475	520	580	520	690	550
High static pressure (EN14511) (1)	H	Pa	350	350	350	350	350	350	350

(1) At the nominal/maximum flow rate with a new, clean air filter.

Size			17	18	19	20	21	22	23
Configuration: MB2, MB3, MB4									
Delivery									
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	2	2	3	3	3	4	4
Maximum useful head (1)	H	Pa	519	341	330	470	460	636	467
High static pressure (EN14511) (1)	H	Pa	350	350	350	350	350	350	350

(1) At the nominal/maximum flow rate with a new, clean air filter.

DIMENSIONS



Size			17	18	19	20	21	22	23
Dimensions and weights									
A	H	mm	2430	2430	2430	2430	2430	2430	2430
B	H	mm	2200	2200	2200	2200	2200	2200	2200
C	H	mm	5210	5210	5210	5210	7750	7750	7750

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RTY

Roof-Top for high-crowding applications

Cooling capacity 30.2 ÷ 133.6 kW
Heating capacity 29.3 ÷ 137.9 kW

- **For high-crowding applications**
- **Thermodynamic heat recovery**
- **Handling section with plug fan coupled with BRUSHLESS EC motors**
- **Free cooling option**

DESCRIPTION

Independent Roof -top type air cooled air conditioner, for treatment, filtration and renewal of the air , based on the chosen configuration.
The RTY 01-10 units are designed for highly crowded contexts such as cinemas, conference halls, restaurants and discos, as they work with 80% outside and exhaust air.

CONFIGURATIONS

MB3: double ventilating cross-section (flow and return) for recovery air, external air and exhaust air, thermodynamic recovery.
Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the useful flow static pressure while the recovery ventilating cross-section provides the useful recovery static pressure.
The double flow and recovery ventilating cross-section allows for total free-cooling (100% external air) without the need for a dedicated extraction system. The room overpressure or depression can be obtained by unbalancing the flow rates.
Thermodynamic recovery is performed by conveying expelled air on the external heat exchanger.

FEATURES

— 1 refrigerant circuit;
— Scroll compressors (UNEVEN tandem) with high capacity and low electrical power consumption;
— Finned pack direct expansion internal and external exchangers;
— Plug fan type (EC) flow and exhaust fans (if any). The impellers are facing so as to ensure that the air flows through all the internal components with minimum noise;
— Axial fan unit for extremely silent functioning positioned on the condensing section.
— Filter with 55% COARSE efficiency (according to EN ISO 16890) on the fresh air flow; Also available: compact filter with ePM1 50% efficiency (according to EN ISO 16890). Positioning upstream of the components to be protected to ensure low pressure drops, having a large surface. Air quality control systems are also available (VOC and $CO_{2\ probe}$);
— Electronic control of condensation and evaporation as standard, to further extend the operating limits of the unit;

The standard unit permits the use of free cooling mode and the thermodynamic recovery of the energy in the exhaust air, guaranteeing higher output and efficiency levels.

VERSIONS

H Heat pump.

— The structure consists of a galvanised sheet metal base, frame in galvanised sheet metal shaped profiles powder coated in RAL9003 (self-bearing structure), pre-painted sheet metal panels (external) insulated with 28kg/mc dense adhesive insulation and sandwich type panels insulated with 25 mm thick 45kg/mc polyurethane, eco-friendly "GWP 0" (Global Warming Potential);
— The casing, designed to allow the internal components to be accessed for routine and extraordinary maintenance.

CONTROL

Microprocessor control able to manage the different functioning modes, ensuring maximum energy savings in any conditions of use. Interfaces to connect to remote supervision and control systems available as options.

FUNCTIONALITY AND TECHNOLOGICAL ADVANTAGES

RTX units are designed with the aim of reducing the energy consumption that subsequently dictated the technological choices made on the unit we will now introduce in brief.

Very high ventilation efficiency

As ventilation is one of the major power consumption factors, we dedicated particular attention to designing and constructing the ventilation system.
State-of-the-art plug fans with EC brushless motors have been used both in flow and in recovery (if any), which enable high performance and reduced consumption. Furthermore, compared to conventional centrifugal fans, they have no belts or pulleys, thus facilitating flow rate adjustment and resulting in compactness, versatility and easy maintenance.
Special adaptive logic allows you to adjust the air flow rate to actual system demand with further resulting advantages in terms of consumption reduction.

Axial fans for the external section of the unit are helical. Electronic condensation control is available as an accessory, which regulates fan speed based on the load required, allowing for noise reduction. As an option, the motors can have electronic control (EC) to reduce consumption even in the condensing part.

Maximum seasonal efficiency

To improve the efficiency of the cooling circuit, tandem scroll compressors of different power levels are used (UNEVEN compressors on all size taglie except size 08). This distinctive trait, combined with the use of next generation fans, means reduced consumption and enhanced adaptability to system requests (particularly in partial load operation), guaranteeing boosted seasonal efficiency levels.

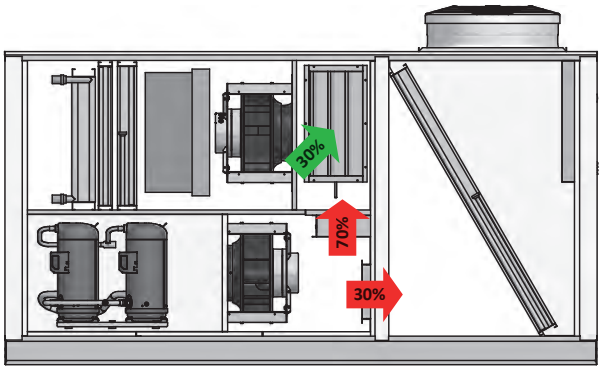
Room air quality

Special attention has been paid to the quality of the air in the room, entrusted to filters that ensure 55% COARSE efficiency as standard. There is also the option of F7, F9 or electronic filters on the fresh air flow.

Active thermodynamic recovery

In the MB3 configuration, the unit with thermodynamic recovery function also takes advantage of the energy contained in the exhaust air, which would otherwise be lost; this ensures better performance and efficiency.
All of these technological advantages are controlled by a thermoregulation that is able to manage the different functioning modes, ensuring maximum energy savings in all conditions of use via dedicated software.

MB3 CONFIGURATION WITH TWIN FAN SECTION FOR RECIRCULATION AIR, OUTSIDE AIR AND EXHAUST AIR. TOTAL FREE COOLING FUNCTION (WITH 100% OUTSIDE AIR) AND THERMODYNAMIC RECOVERY FUNCTION AS STANDARD.



ACCESSORIES

AXEC: Axial fans with EC motors with speed control function according to the pressure of condensation and evaporation.
AXECP: EC axial fans with available useful static pressure.
BAC: Interface card BACnet MS/TP pCOnet.
BE: Electric heating coil 2 stages.
BEM: Modulating electric heating coil.
BIP: Interface card Ethernet-pCOweb (BACNET IP)
BPGC: After heating coil with hot gas.
BW: 2-rows-heating coil with hot water.
BWV2V: 2 -rows -heating coil with hot water, with 2-way modulating valve.
BWV3V: 2-rows heating coil with hot water, with 3-way modulating valve.
CA: Waterproof covers on external air intake.
CF: Flue, only on unit with gas burner module.
DP: Dehumidification control (humidity probe in recovery) and of after-heating (if present).
FT7: F7 efficiency pocket filters positioned on the supply air flow.
FT9: Pocket filters F9 efficiency placed on the flow of supply air.
FTH: Enthalpy free-cooling.
GP: External coil protection grid.
Gx: Heating module with gas burner.
LW: Interface card LonWorks.
MAN: High and low pressure gauges.
MSSM: Flow silencer module, only for rear flow.
MSSR: Recovery silencer module, only for rear air recovery.
PR1: Remote control panel.
PSF2: Differential pressure switch signalling dirty recovery and renewal filters (if any).
PSTEP: Adjusting constant flow, step flow in function of the modulation of the cooling circuit.
RF: Smoke detector.
RFC: Smoke detector and damper management.
RS: Serial card BMS RS485.
SCMRM: Modulating Servo-control with spring return.
SCO2: Probe CO2 (not available on MB1 fittings).
SSV: Supervision systems.
STA: Room temperature probe
SUA: Room humidity probe.
SVOC: Probe VOC (not available on MB1 fittings).
U: Steam ramp installed.
UP: Manufacturer of immersed electrodes supplied and steam ramp installed.
VT: Antivibration mounts.

PERFORMANCE SPECIFICATIONS

MB3

Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
Cooling performances (1)											
Cooling capacity	kW	30,20	39,60	48,70	65,40	75,30	84,30	90,90	107,60	121,40	133,60
Sensible cooling capacity	kW	21,20	27,10	32,60	43,10	48,90	55,20	61,10	70,50	80,60	87,40
Compressors absorbed power	kW	5,30	8,40	9,70	13,10	15,20	17,50	18,50	23,30	27,60	32,60
EER compressors		5,70	4,71	5,00	5,00	4,96	4,82	4,92	4,61	4,39	4,09
Heating performances (2)											
Heating capacity	kW	29,30	39,70	48,50	66,50	76,60	85,80	91,40	110,40	123,40	137,90
Compressors absorbed power	kW	4,40	7,00	8,40	12,40	14,20	15,70	15,50	19,20	21,80	25,50
Compressor COP		6,67	5,68	5,77	5,38	5,39	5,47	5,89	5,73	5,66	5,41

(1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

ENERGY INDEX

Size			01	02	03	04	05	06	07	08	09	10
Energy index												
SEER	H	W/W	4,78	4,68	4,19	3,46	3,37	3,40	3,27	3,46	3,45	3,24
ηsc	H	%	188,40	184,40	164,60	135,50	131,80	133,00	127,70	135,60	134,90	126,70
Pdesignh	H	kW	26	35	44	62	70	78	82	99	110	122
SCOP	H	W/W	4,16	3,97	3,55	2,97	2,95	3,01	2,99	3,15	3,10	2,99
ηsh	H	%	163,60	155,70	139,00	115,70	115,10	117,40	116,40	122,90	121,20	116,60

GENERAL TECHNICAL DATA

Size			01	02	03	04	05	06	07	08	09	10
Configuration: MB3												
Power supply												
Power supply	H						400V 3 ~ 50Hz					
Compressor												
Type	H	type					Scroll					
Number	H	no.	2	2	2	2	2	2	2	2	2	2
Circuits	H	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	H	type					R410A					
Partialisation step	H	no.	3	3	3	3	3	3	3	3	3	3

FANS

External fans

Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
External fans											
Type	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	no.	1	1	2	2	2	2	2	2	2	2

Internal fans

Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
Internal fans											
Nominal air flow rate	m^3/h	3500	4500	5500	7000	8000	9500	11500	14000	15000	16500
Minimum air flow rate	m^3/h	2450	3150	3850	4900	5600	6650	8050	9800	10500	11550
Maximum air flow rate	m^3/h	3500	4500	5500	7000	8000	9500	11500	14000	15000	16500

Internal recovery fans

Size			01	02	03	04	05	06	07	08	09	10
Configuration: MB3												
Recovery												
Type	H	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	H	no.	1	1	1	1	1	1	1	2	2	2

Expulsion fan

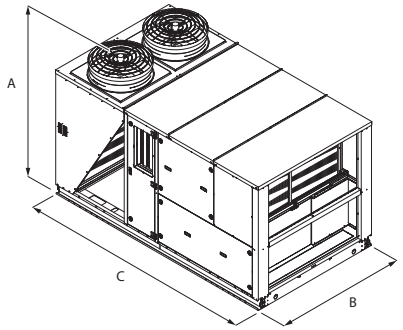
Size			01	02	03	04	05	06	07	08	09	10
Configuration: MB3												
Exhaust												
Type	H	type	-	-	-	-	-	-	-	-	-	-
Number	H	no.	-	-	-	-	-	-	-	-	-	-

Internal flow fans

Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
Delivery											
Type	type	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC	RAD EC
Number	no.	1	1	1	1	1	1	1	1	1	2
Maximum useful head (1)	Pa	150	150	200	200	200	250	250	250	300	300
High static pressure (EN14511) (1)	Pa	-	-	-	-	-	-	-	-	-	-

(1) At the nominal/maximum flow rate with a new, clean air filter.

DIMENSIONS



Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
Dimensions and weights											
A	mm	2061	2061	2061	2373	2373	2373	2373	2373	2373	2373
B	mm	1900	1900	1900	2100	2100	2100	2100	2100	2100	2100
C	mm	3400	3400	3400	3400	3400	3400	3400	3400	3400	3400

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AIR/WATER CHILLERS AND HEAT PUMPS

Aermec plant engineering really comes into its own in the field of machines and technology for centralised systems. Aermec offer a full range of chillers and heat pumps from the small domestic system up to that of the large size for the service industry.

The cooling capacity range is extremely wide, and the fittings solutions are equally diverse, for scroll, screw or centrifugal compressor applications.

The careful selection of materials and the close attention paid to every detail of assembly coupled with the huge selection of accessories complete the industry-leading products designed for use in this sector, making Aermec units a real "must" in the world of Italian and European climate control.

AIR / WATER CHILLERS AND HEAT PUMPS

			Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll compressors					
	ANKI 020-080	Reversible heat pumps inverter	-	5,8-24,8	6,1-20,8	336
	HMI	Reversible air/water heat pump	-	3,0-14,5	4,0-15,5	342
new	**HMI 180T-220T**	Reversible air/water heat pump	-	17,5-21,0	18,0-22,0	349
	BHP	Air/Water split type reversible heat pump	-	3,2-11,5	4,0-16,0	354
	HMG	Reversible air/water heat pump	-	32-60	35-65	367
	HMG_P		-	33-60	36-65	
	ANLI	Reversible heat pumps inverter	-	29,0-42,3	31,4-33,3	375
	ANK 020-150	Reversible air/water heat pump optimised for use in heating mode	-	6,8-39,8	8,0-35,3	381
new	**SHW**	Heat pump water heater	-	-	-	388
	MIC	Air-water chiller	-	3	-	391
	ANL 021-202	Air-water chiller	-	5,7-43,3	-	396
	ANL 021H-203H	Reversible air/water heat pump	-	5,7-49,1	6,2-43,3	402
	NRK 0090-0150	Reversible air/water heat pump optimised for use in heating mode	-	18,4-31,0	20,8-34,4	410
	NRK 0200-0700	Reversible air/water heat pump optimised for use in heating mode	-	35,5-148,0	42,3-175,0	414
	NRV 0550	Air-water chiller	-	108,3	-	420
new	**PRM 0504**	Air-cooled reversible modular heat pump	-	95,6	101,7	425
new	**PRG-0282H-0654H**	Reversible air/water heat pump	-	49-143	51-143	432
	NRB 0282-0754	Air-water chiller	-	56-202	-	441
	NRB 0282H-0754H	Reversible air/water heat pump		52-261	57-193	451
	NRG 0282-0804	Air-water chiller	-	55,8-224,6	-	459
	NRG 0282H-0804H	Reversible air/water heat pump	-	52,5-212,0	56,6-214,4	468
	NRGI 151-602	Air-water chiller	-	31,0-132,2	-	476
	NRGI 151H-602H	Reversible air/water heat pump	-	28,9-123,7	31,6-133,9	481
	NRL 0280-0350	Air-water chiller	-	56,0-82,0	-	487
	NRL 0280H-0350H	Reversible air/water heat pump	-	51,0-76,0	58,0-86,0	492
	NRG 0800-3600	Air-water chiller	-	225,7-725,0	-	497
	NRG 0800H-3600H	Reversible air/water heat pump	-	194,9-962,3	209,6-991,9	506
	NRB 0800-2406	Air-water chiller (plate heat exchanger)	-	216,9-716,9	-	515
	NRB 0800-2406 Q	Air-water chiller (shell and tube heat exchanger)	-	216,9-716,9	-	524
	NRB 0800H-2406H	Reversible air/water heat pump (plate heat exchanger)	-	196,4-647,7	209,8-683,9	533
	NRB 0800W-2406W	Reversible air/water heat pump (shell and tube heat exchanger)	-	196,4-647,7	209,8-683,9	542
	CL 025-200	Air-water chiller with Plug Fan	-	5,8-41,0	-	550
	CL 025H-200H	Reversible air/water heat pump with Plug Fan	-	6,5-50,9	7,7-44,8	555
	NLC 0280-1250	Air-water chiller with Plug Fan	-	53-322	-	561
	NLC 0280H-1250H	Reversible air/water heat pump with Plug Fan	-	53-322	55-342	568
	Units with screw compressors					
	NSM 1402-9603	Air-water chiller	-	302-2100	-	573
	NSMI 1251-6102	Chiller with Inverter screw compressors	-	285,6-1342,6	-	587
	NSH	Reversible air/water heat pump	-	251-731	281-786	591
	NSG	Air-water chiller (with R1234ze)	-	228-1580	-	597
	Units with centrifugal compressors					
	TBA 1300-4325	Air-water chiller	-	328-1404	-	609
	TBG 1230-4310	Air-water chiller	-	200-1165	-	614

ANKI 020-080

Reversible air/water heat pump

Cooling capacity 5,8 ÷ 24,8 kW – Heating capacity 6,1 ÷ 20,8 kW

- **Production of hot water up to 60 °C**
- **Production of hot domestic water with outside temperatures from –20 °C up to 42 °C**
- **Quick & easy installation**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.
It's optimised for use in heating mode, and can be combined not only with low-temperature emission systems such as floor heating or fan coils, but also conventional radiators.
All the units are equipped with inverter scroll compressors, axial fans, external coils with aluminium louvers, a plate heat exchanger on the side.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
X With inverter pump

FEATURES

Operating field

Working at full load up to -20°C outside air temperature in winter, and up to 46°C in summer. Possibility production technical hot water production up to 60°C (for more information see the technical documentation).

Version with Integrated hydronic kit

If a plug&play solution is required, there's also a version with an integrated hydronic unit containing the main hydraulic components including the water filter (supplied).

■ *The water filter must be installed to validate the warranty.*

CONTROL PCO

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Adjustment includes complete management of the alarms and their log.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

ACCESSORIES

AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
MOD485K: RS-485 simplified interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PGD1: Allows you to control the unit at a distance.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *For the installation of the PR4 remote panel, the MOD485K communication interface is indispensable.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
VT: Anti-vibration supports.
BDX: Condensate drip.

BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

FACTORY FITTED ACCESSORIES

KR: Anti-freeze electric heater for the plate heat exchanger.
KRB: Electric anti-freeze resistance kit for base.

ACCESSORIES COMPATIBILITY

Model	Ver	020	025	040	045	070	075	080
AERLINK	°,X	•	•	•	•	•	•	•
MOD485K	°,X	•	•	•	•	•	•	•
MULTICONTROL	°,X	•	•	•	•	•	•	•
PGD1	°,X	•	•	•	•	•	•	•
PR3	°,X	•	•	•	•	•	•	•
SAF (1)	°,X	•	•	•	•	•	•	•
SDHW (2)	°,X	•	•	•	•	•	•	•
SGD	°,X	•	•	•	•	•	•	•
SPLW (3)	°,X	•	•	•	•	•	•	•

(1) For more information about SAF refer to the dedicated documentation.
(2) Probe required for MULTICONTROL for managing the domestic hot water system.
(3) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	020	025	040	045	070	075	080
PR4	°,X	•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MOD485K communication interface is indispensable.

Condensation control temperature

Ver	020	025	040	045	070	075	080
°, X	DCPX71	DCPX71	DCPX71	DCPX71	DCPX71	DCPX71	DCPX71

Antivibration

Ver	020	025	040	045	070	075	080
°, X	VT9	VT9	VT9	VT9	VT9	VT9	VT9

Condensate drip

Ver	020	025	040	045	070	075	080
°, X	BDX30	BDX30	BDX30	BDX30	BDX50	BDX50	BDX50

Heater exchanger

Ver	020	025	040	045	070	075	080
°, X	KR2	KR2	KR2	KR2	KR2	KR2	KR2

A grey background indicates the accessory must be assembled in the factory

Electric heater kit for the base

Ver	020	025	040	045	070	075	080
°, X	KRB1	KRB1	KRB1	KRB1	KRB2	KRB2	KRB2

CONFIGURATOR

Field		Description
1,2,3,4		**ANKI**
5,6,7		**Size** 020, 025, 040, 045, 070, 075, 080
8		**Model**
	H	Heat pump
9		**Version**
	°	Standard
	X	With inverter pump
10		**Heat recovery**
	°	Without heat recovery
11		**Coils**
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
12		**Fans**
	F	Phase cut
	J	Inverter
	°	Standard
13		**Operating field**
	°	Electronic thermostatic expansion valve
14		**Evaporator**
	°	Standard - PED
15		**Power supply**
	M	230V ~ 50Hz (1)
	T	400V ~ 3N 50Hz (2)
16		**Field for future development**
	°	Future developments

(1) For sizes from 020 ÷ 045
(2) For sizes from 070 ÷ 080

PERFORMANCE SPECIFICATIONS

Version without pump

ANKI - 230V-1-50Hz

Size		020	025	040	045
Power supply: M					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	5,8	7,3	9,4	11,8
Input power	kW	2,0	2,6	3,2	4,2
Cooling total input current	A	8,3	11,0	14,0	18,0
EER	W/W	2,98	2,80	2,98	2,79
Water flow rate system side	l/h	1005	1256	1613	2024
Pressure drop system side	kPa	16	22	13	19
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	6,2	7,7	9,3	12,3
Input power	kW	1,9	2,4	3,0	4,0
Heating total input current	A	8,2	10,0	13,0	18,0
COP	W/W	3,26	3,22	3,08	3,03
Water flow rate system side	l/h	1077	1345	1619	2131
Pressure drop system side	kPa	14	21	10	17
Power supply					
Power supply		230-1-50	230-1-50	230-1-50	230-1-50

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANKI - 400V-3N-50Hz

Size		070	075	080
Power supply: T				
Cooling performance 12 °C / 7 °C (1)				
Cooling capacity	kW	13,7	16,4	18,6
Input power	kW	4,8	6,2	7,6
Cooling total input current	A	7,3	9,4	11,0
EER	W/W	2,85	2,67	2,44
Water flow rate system side	l/h	2354	2818	3196
Pressure drop system side	kPa	17	25	31
Heating performance 40 °C / 45 °C (2)				
Heating capacity	kW	15,3	17,7	20,2
Input power	kW	4,8	6,0	7,1
Heating total input current	A	7,3	9,1	11,0
COP	W/W	3,21	2,97	2,83
Water flow rate system side	l/h	2660	3072	3507
Pressure drop system side	kPa	17	23	30
Power supply				
Power supply		400-3N-50	400-3N-50	400-3N-50

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Version with pump

ANKI - 230V-1-50Hz

Size		020	025	040	045
Power supply: M					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	5,8	7,3	9,4	11,8
Input power	kW	2,0	2,7	3,2	4,3
Cooling total input current	A	8,9	12,0	14,0	19,0
EER	W/W	2,88	2,72	2,90	2,73
Water flow rate system side	l/h	1005	1256	1613	2024
Useful head system side	kPa	75	68	73	60
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	6,2	7,7	9,3	12,3
Input power	kW	2,0	2,5	3,1	4,1
Heating total input current	A	8,7	11,0	14,0	18,0
COP	W/W	3,14	3,11	3,00	2,96
Water flow rate system side	l/h	1077	1345	1619	2131
Useful head system side	kPa	76	67	74	59
Power supply					
Power supply		230-1-50	230-1-50	230-1-50	230-1-50

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANKI - 400V-3N-50Hz

Size		070	075	080
Power supply: T				
Cooling performance 12 °C / 7 °C (1)				
Cooling capacity	kW	13,8	16,5	18,7
Input power	kW	4,8	6,2	7,7
Cooling total input current	A	8,3	10,0	12,0
EER	W/W	2,88	2,68	2,44
Water flow rate system side	l/h	2354	2818	3196
Useful head system side	kPa	82	62	43
Heating performance 40 °C / 45 °C (2)				
Heating capacity	kW	15,2	17,6	20,1
Input power	kW	4,8	6,0	7,2
Heating total input current	A	8,3	10,0	12,0
COP	W/W	3,19	2,95	2,80
Water flow rate system side	l/h	2660	3072	3507
Useful head system side	kPa	73	55	33
Power supply				
Power supply		400-3N-50	400-3N-50	400-3N-50

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			020	025	040	045
Power supply: M						
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)						
Efficiency energy class	°		A+	A+	A+	A+
	X		A++	A++	A+	A+
Pdesignh	°,X	kW	6,00	7,00	9,00	12,00
ηsh	°	%	140,00	139,00	133,00	125,00
	X	%	150,00	150,00	141,00	131,00
SCOP	°	W/W	3,58	3,55	3,40	3,20
	X	W/W	3,83	3,83	3,60	3,35
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)						
Efficiency energy class	°,X		A+	A+	-	-
Pdesignh	°	kW	6,00	7,00	-	-
	X	kW	5,00	7,00	-	-
ηsh	°	%	112,00	113,00	-	-
	X	%	113,00	115,00	-	-
SCOP	°	W/W	2,88	2,90	-	-
	X	W/W	2,90	2,95	-	-
SEER - 12/7 (EN14825: 2018) (3)						
SEER	°	W/W	3,50	3,54	3,76	3,77
	X	W/W	4,12	4,25	4,38	4,37
Seasonal efficiency	°	%	137,10	138,40	147,30	147,70
	X	%	161,70	167,00	172,30	171,90

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)
(3) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

Size			070	075	080
Power supply: T					
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)					
Efficiency energy class	°,X		A+	A+	A+
Pdesignh	°	kW	14,00	17,00	19,00
	X	kW	14,00	16,00	19,00
ηsh	°	%	137,00	130,00	129,00
	X	%	141,00	134,00	133,00
SCOP	°	W/W	3,50	3,33	3,30
	X	W/W	3,50	3,43	3,40
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)					
Efficiency energy class	°,X		A+	A+	A+
Pdesignh	°	kW	14,00	16,00	19,00
	X	kW	13,00	16,00	18,00
ηsh	°	%	113,00	112,00	110,00
	X	%	112,00	112,00	110,00
SCOP	°	W/W	2,90	2,88	2,83
	X	W/W	2,88	2,88	2,83
SEER - 12/7 (EN14825: 2018) (3)					
SEER	°	W/W	3,49	3,47	3,44
	X	W/W	3,78	3,81	3,77
Seasonal efficiency	°	%	136,70	135,60	134,40
	X	%	148,00	149,40	147,80

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)
(3) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

ELECTRIC DATA

Size			020	025	040	045	070	075	080
Electric data									
Maximum current (FLA)	°	A	12,1	14,1	20,0	23,6	12,5	13,5	15,0
	X	A	12,9	14,9	20,8	24,4	13,6	14,6	16,1
Peak current (LRA)	°	A	8,0	8,0	10,0	10,0	15,0	15,0	15,0
	X	A	8,8	8,8	10,8	10,8	16,1	16,1	16,1
Power supply									
Power supply	°,X		230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	400V ~ 3N 50Hz	400V ~ 3N 50Hz	400V ~ 3N 50Hz

GENERAL TECHNICAL DATA

Size			020	025	040	045	070	075	080
Compressor									
Type	°,X	type	Rotary	Rotary	Rotary	Rotary	Scroll	Scroll	Scroll
Compressor regulation	°,X	Type				Inverter			
Number	°,X	no.	1	1	1	1	1	1	1

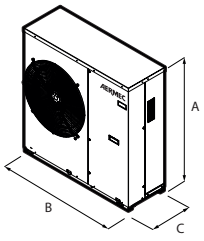
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			020	025	040	045	070	075	080
Circuits	°,X	no.	1	1	1	1	1	1	1
Refrigerant	°,X	type				R410A			
Refrigerant charge (1)	°,X	kg	1,4	1,4	2,3	2,3	3,5	3,5	3,5
System side heat exchanger									
Type	°,X	type				Brazed plate			
Number	°,X	no.	1	1	1	1	1	1	1
Hydraulic connections									
Connections (in/out)	°,X	Type				Gas-M			
Size (in)	°,X	Ø				1"			
Size (out)	°,X	Ø				1"			
Fan									
Type	°,X	type				Axial			
Fan motor	°,X	type				Asynchronous			
Number	°,X	no.	1	1	2	2	2	2	2
Air flow rate	°,X	m^3/h	3590	3590	7480	7480	7400	7400	7400
Sound data calculated in cooling mode (2)									
Sound power level	°,X	dB(A)	64,0	65,4	66,7	67,7	67,7	69,0	69,0
Sound pressure level (10 m)	°,X	dB(A)	32,7	34,1	35,4	36,3	36,3	37,6	37,6

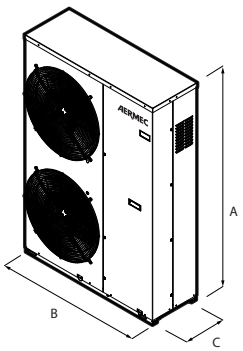
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

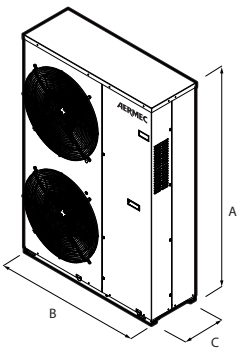
ANKI020
ANKI025



ANKI040
ANKI045



ANKI070
ANKI075
ANKI080



Size			020	025	040	045	070	075	080
Dimensions and weights									
A	°,X	mm	1028	1028	1481	1481	1481	1481	1481
B	°,X	mm	1000	1000	1000	1000	1000	1000	1000
C	°,X	mm	346	346	346	346	450	450	450
Empty weight	°	kg	80	80	113	113	174	174	174
	X	kg	82	82	115	115	178	178	178

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www.aermec.com

HMI

Reversible air/water heat pump

Cooling capacity 3,0 ÷ 14,5 kW – Heating capacity 4,0 ÷ 15,5 kW

- **New R32 ecological refrigerant gas**
- **Production of hot water up to 60 °C**
- **Production of hot domestic water with external temperatures from -25 °C to 45 °C**
- **Quick & easy installation**

EUROVENT LCP

DESCRIPTION

Reversible outdoor heat pump for air-conditioning systems where, in addition to cooling rooms, high-temperature hot water is required for heating or for the production of domestic hot water. **For the production of DHW it is mandatory to combine it with the Aermec compatible domestic hot water storage tank.**

HMI is designed to meet the needs of both the new constructions market and the renovation market, **replacing or working alongside conventional boilers**.

It can be combined with low-temperature emission systems such as floor heating or fan coils, and also with more traditional radiators, **and comes supplied with the main hydraulic components needed, thereby facilitating the final installation**.

FEATURES

Operating limits

Working at full load up to -25 °C outside air temperature in winter, and up to 48 °C in summer. Maximum temperature of water produced in heating mode 60 °C.

— Refrigerant circuit with economizer.
— Inverter rotary compressor.
— DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
— Electronic expansion valve.

Main hydraulic components

— Inverter pump.
— Plate heat exchanger.
— Expansion tank
— Safety valve.
— Flow switch.
— Water filter supplied **(mandatory installation)**.

Regulation

Adjustment via **a multi-language touch-screen control panel:**

— Management of a 3 way diverting valve (not supplied) for the production of domestic hot water.
— Management of a 2 way valve (not supplied) for shutting off part of the system.
— Weekly programming in time periods.
— **Auto-restart** function.
— Emergency operation (a supplementary heat source may be activated).
— **Quick hot water** function, for quickly heating domestic hot water.
— **Weather dependent mode** function for climate control.
— **Quiet** function for reduced noise operation (programmable with a timer).
— Condensation check
— When the anti-legionella cycle is activated (it's easily set via the control panel), the whole tank is heated once a week to a temperature (max. 70 °C) that weakens the bacteria responsible for the infection.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

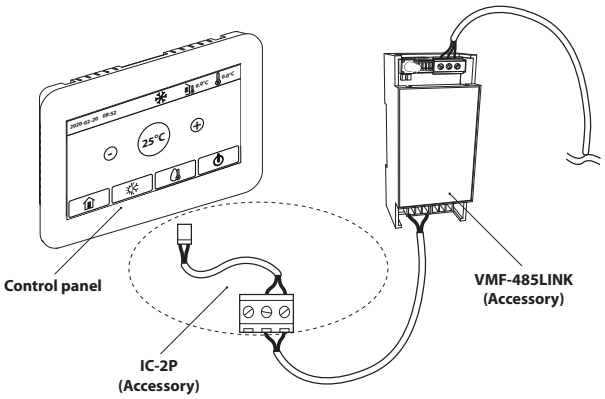
Smart APP Ewpe

The system is equipped standard with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.

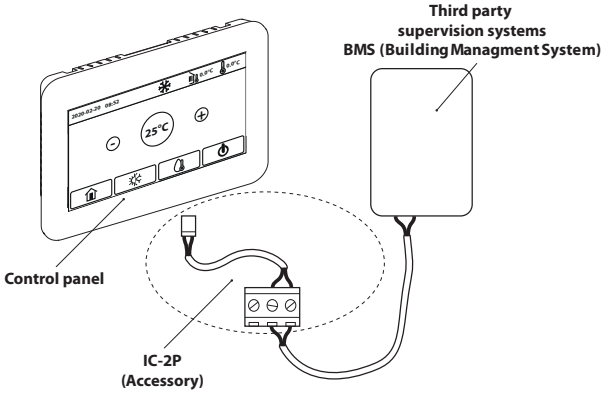
ACCESSORIES

HMICB15: Connection cable for the control panel. Cable length 15m.
IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.
VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.
VMF-E5: Black recessed panel with backlit graphic LCD display and capacitive keyboard, it allows the centralised command/control of a complete hydronic system consisting of Fan coils: up to 64 fan coil zones consisting of 1 master + up to 5 slaves; Chiller/heat pump (accessory required for RS 485 interface), pumps: up to 12 configurable zone pumps; boiler: boiler hook-up management for hot water production; heat recovery units: up to 3 hook-ups per programmable recovery units based on time periods and/or by measuring air quality with the VMF-VOC accessory; domestic water module: complete management of the domestic hot water production through the control of: diverter valve/pump, integrated heating element, storage tank temperature sensor, anti-legionella circuit system. The panel is available in both white (VMF-E5B) and black (VMF-E5N).
VMF-E6: White flush-mounting panel with 4.3 inch colour touchscreen. For the centralised command/control of a complete hydronic/aeraulic system consisting of: fan coils (up to 64 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (up to 4), MZC accessories (up to 5) for the management of radiant panels (using a suitable number of VMF-REB accessories, up to 64 radiant panels associated with the fan coil zones and up to 32 radiant panels associated with the zones served by MZC), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/Os, control of heat recovery units and VOC probes (up to 4).
LOGATW: Diagnostic tool for air-water heat pumps.
DHWT300S: (220-240V~50Hz) DHW storage tank in enamelled steel. Single-phase power supply, tank capacity 300 litres with main and secondary coils and 3 kW back-up electric heater. Magnesium sacrificial anode. Indoor installation.

Connection with VMF-485LINK



Connection with third party supervision systems



Accessories compatibility

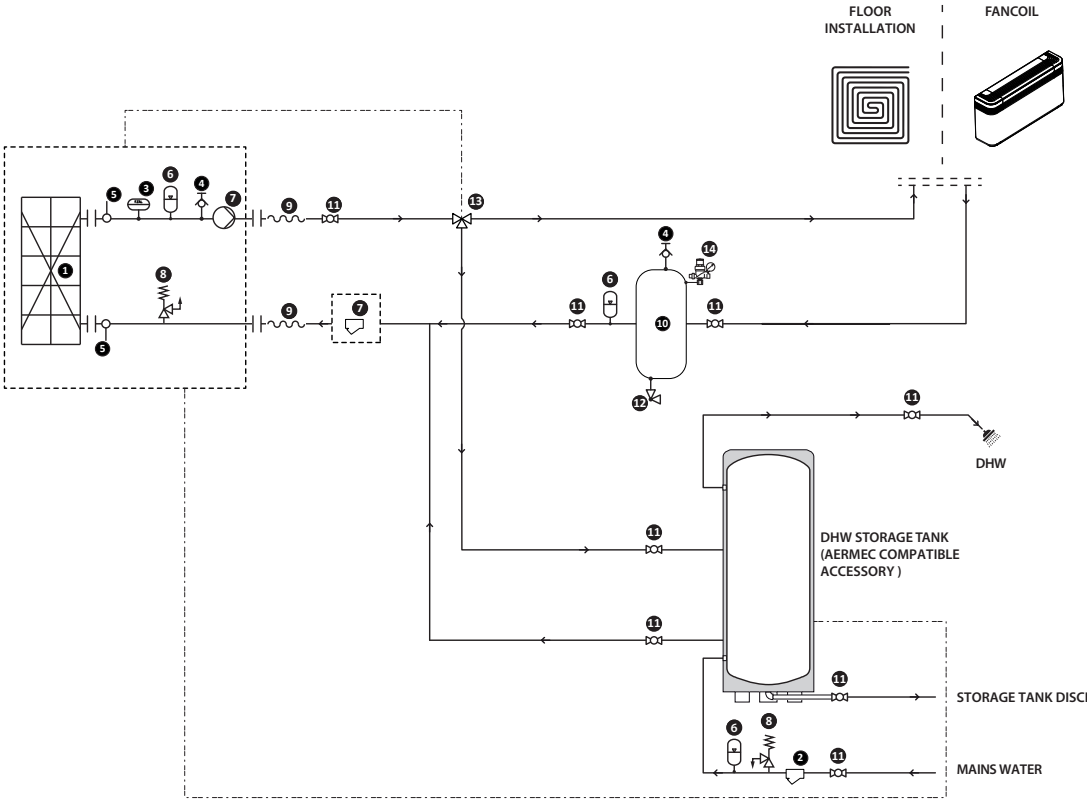
For more information about VMF system, refer to the dedicated documentation.

Accessory	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
LOGATW	•	•	•	•	•	•	•	•	•	•

Accessory	HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
HMICB15	•	•	•	•	•	•	•	•	•	•	•

Accessory	HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
IC-2P	•	•	•	•	•	•	•	•	•	•	•
VMF-485LINK	•	•	•	•	•	•	•	•	•	•	•
VMF-E5	•	•	•	•	•	•	•	•	•	•	•
VMF-E6	•	•	•	•	•	•	•	•	•	•	•

FLOOR SYSTEM + DHW



COMPONENTS AS STANDARD

1 Plate heat exchanger
2 Water filter (as standard)
3 Flow switch
4 Air drain valve
5 Water temperature sensor (IN/OUT)
6 Expansion vessel
7 Pump
8 Pressure relief valve

HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE INSTALLER'S RESPONSIBILITY)

4 Air drain valve
9 Anti-vibration joints
10 System storage tank (recommended installation if the system water content is lower than that indicated in the technical manual).
11 Flow shut-off valves
6 Expansion vessel
12 Drain valve
13 3 way valve
14 Loading unit

In case of a free-standing system, the bypass valve must be installed to ensure the circulation of a minimum amount of water to the system.

PERFORMANCE SPECIFICATIONS

EUROVENT TECHNICAL DATA EN 14511:2022

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120
Cooling performance 12 °C / 7 °C (1)							
Cooling capacity	kW	2,98	3,97	4,96	7,75	7,75	9,45
Input power	kW	0,94	1,29	1,61	2,48	2,64	3,20
Input current	A	4,7	6,4	7,9	12,0	4,6	15,0
EER	W/W	3,17	3,08	3,08	3,12	2,94	2,95
Water flow rate	l/h	504	673	842	1318	1318	1609
Useful head	kPa	74,0	74,0	74,0	69,0	69,0	64,0
Heating performance 40 °C / 45 °C (2)							
Heating capacity	kW	4,03	6,04	7,55	10,06	10,06	12,06
Input power	kW	1,00	1,58	2,00	2,70	2,70	3,48
Input current	A	5,1	7,8	9,7	13,0	4,7	17,0
COP	W/W	4,03	3,83	3,78	3,72	3,72	3,46
Water flow rate	l/h	710	1062	1326	1762	1762	2110
Useful head	kPa	74,0	73,0	71,0	60,0	60,0	50,0

		HMI120T	HMI140	HMI140T	HMI160	HMI160T
Cooling performance 12 °C / 7 °C (1)						
Cooling capacity	kW	9,45	11,94	11,94	12,95	12,95
Input power	kW	3,11	4,14	4,38	4,96	4,91
Input current	A	5,3	20,0	7,3	23,0	8,1
EER	W/W	3,04	2,88	2,73	2,61	2,64
Water flow rate	l/h	1609	2038	2038	2210	2210
Useful head	kPa	64,0	52,0	52,0	47,0	47,0
Heating performance 40 °C / 45 °C (2)						
Heating capacity	kW	12,06	14,05	14,05	15,54	15,54
Input power	kW	3,48	4,18	4,18	4,70	4,70
Input current	A	5,9	20,0	6,9	22,0	7,7
COP	W/W	3,46	3,36	3,36	3,31	3,31
Water flow rate	l/h	2110	2456	2456	2714	2714
Useful head	kPa	50,0	39,0	39,0	29,0	29,0

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120
Cooling performance 23 °C / 18 °C (1)							
Cooling capacity	kW	3,77	5,76	6,75	8,75	8,75	10,94
Input power	kW	0,82	1,32	1,55	1,96	1,96	2,56
Input current	A	4,2	6,6	7,6	9,5	3,6	12,0
EER	W/W	4,60	4,36	4,36	4,46	4,46	4,27
Water flow rate	l/h	641	982	1152	1495	1495	1873
Useful head	kPa	74,0	74,0	73,0	66,0	66,0	57,0
Heating performance 30 °C / 35 °C (2)							
Heating capacity	kW	4,03	6,04	7,55	10,06	10,06	12,06
Input power	kW	0,79	1,20	1,63	2,17	2,17	2,64
Input current	A	4,1	6,0	8,0	11,0	3,9	13,0
COP	W/W	5,10	5,04	4,63	4,63	4,63	4,57
Water flow rate	l/h	708	1058	1321	1756	1756	2102
Useful head	kPa	74,0	73,0	71,0	60,0	60,0	50,0

		HMI120T	HMI140	HMI140T	HMI160	HMI160T
Cooling performance 23 °C / 18 °C (1)						
Cooling capacity	kW	10,94	12,44	12,44	14,45	14,45
Input power	kW	2,56	3,05	3,05	3,82	3,82
Input current	A	4,5	15,0	5,2	18,0	6,4
EER	W/W	4,27	4,08	4,08	3,78	3,78
Water flow rate	l/h	1873	2132	2132	2478	2478
Useful head	kPa	57,0	50,0	50,0	38,0	38,0
Heating performance 30 °C / 35 °C (2)						
Heating capacity	kW	12,06	14,05	14,05	15,54	15,54
Input power	kW	2,64	3,22	3,22	3,60	3,60
Input current	A	4,6	15,0	5,5	17,0	6,1
COP	W/W	4,57	4,36	4,36	4,32	4,32
Water flow rate	l/h	2102	2447	2447	2704	2704
Useful head	kPa	50,0	39,0	39,0	30,0	30,0

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

GENERAL TECHNICAL DATA

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120
Electric data							
Rated current input (1)	A	10,4	10,4	10,4	23,0	12,0	25,0
Compressor							
Type	type	Rotary DC Inverter					
Number	no.	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1
Refrigerant	type	R32					
Potential global heating	GWP	675 kgCO_2eq					
Refrigerant charge (2)	kg	0,9	0,9	0,9	2,2	2,2	2,2
Oil	Type	FW68DA					
Total oil charge	kg	0,5	0,5	0,5	1,1	1,1	1,1
System side heat exchanger							
Type	type	Brazed plate					
Number	no.	1	1	1	1	1	1
Connections (in/out)	Type	Gas Maschio					
Size (in)	Ø	1″					
Size (out)	Ø	1″					
Fan							
Type	type	Axial					
Fan motor	type	Inverter					
Number	no.	1	1	1	1	1	1
Air flow rate	m^3/h	2600	2600	2600	4500	4500	4500
Sound data calculated in cooling mode (3)							
Sound pressure level (1 m)	dB(A)	51,0	52,0	53,0	56,0	56,0	56,0
Sound data calculated in heating mode (3)							
Sound power level	dB(A)	64,0	64,0	65,0	69,0	69,0	69,0
Sound pressure level (1 m)	dB(A)	50,0	50,0	51,0	54,0	54,0	54,0
Power supply							
Power supply		220-240V ~ 50Hz				380-415V 3N ~ 50Hz	220-240V ~ 50Hz

		HMI120T	HMI140	HMI140T	HMI160	HMI160T
Electric data						
Rated current input (1)	A	12,0	29,0	12,0	29,0	12,0
Compressor						
Type	type	Rotary DC Inverter				
Number	no.	1	1	1	1	1
Circuits	no.	1	1	1	1	1
Refrigerant	type	R32				
Potential global heating	GWP	675 kgCO_2eq				
Refrigerant charge (2)	kg	2,2	2,2	2,2	2,2	2,2
Oil	Type	FW68DA				
Total oil charge	kg	1,1	1,1	1,1	1,1	1,1
System side heat exchanger						
Type	type	Brazed plate				
Number	no.	1	1	1	1	1
Connections (in/out)	Type	Gas Maschio				
Size (in)	Ø	1″				
Size (out)	Ø	1″				
Fan						
Type	type	Axial				
Fan motor	type	Inverter				
Number	no.	1	1	1	1	1
Air flow rate	m^3/h	4500	4500	4500	4500	4500
Sound data calculated in cooling mode (3)						
Sound pressure level (1 m)	dB(A)	56,0	57,0	57,0	59,0	59,0
Sound data calculated in heating mode (3)						
Sound power level	dB(A)	69,0	70,0	70,0	72,0	72,0
Sound pressure level (1 m)	dB(A)	54,0	55,0	55,0	57,0	57,0
Power supply						
Power supply		380-415V 3N ~ 50Hz	220-240V ~ 50Hz	380-415V 3N ~ 50Hz	220-240V ~ 50Hz	380-415V 3N ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(3) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

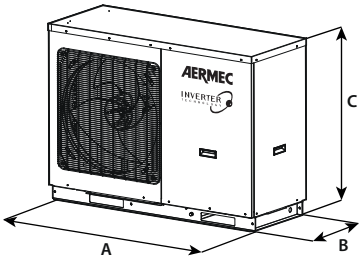
ENERGY DATA

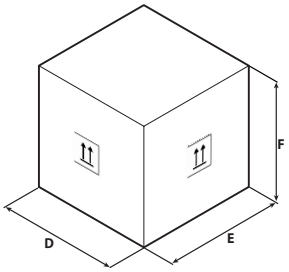
		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)							
Pdesignh	kW	5	5	6	9	9	11
ηsh	%	185,00	185,00	183,00	176,00	176,00	175,00
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)							
Pdesignh	kW	6	6	7	8	8	10
ηsh	%	126,00	126,00	127,00	128,00	128,00	126,00
Efficiency energy class		A++	A++	A++	A++	A++	A++

		HMI120T	HMI140	HMI140T	HMI160	HMI160T
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)						
Pdesignh	kW	11	11	11	13	13
ηsh	%	175,00	168,00	168,00	164,00	164,00
Efficiency energy class		A+++	A++	A++	A++	A++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)						
Pdesignh	kW	10	11	11	13	13
ηsh	%	126,00	125,00	125,00	125,00	125,00
Efficiency energy class		A++	A++	A++	A++	A++

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

DIMENSIONS





Carton Box Example

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120
Dimensions and weights							
A	mm	1150	1150	1150	1200	1200	1200
B	mm	345	345	345	460	460	460
C	mm	758	758	758	878	878	878
D	mm	1260	1260	1260	1295	1295	1295
E	mm	490	490	490	595	595	595
F	mm	900	900	900	1020	1020	1020
Net weight	kg	96,0	96,0	96,0	151,0	151,0	151,0
Weight for transport	kg	109,0	109,0	109,0	166,0	166,0	166,0

		HMI120T	HMI140	HMI140T	HMI160	HMI160T
Dimensions and weights						
A	mm	1200	1200	1200	1200	1200
B	mm	460	460	460	460	460
C	mm	878	878	878	878	878
D	mm	1295	1295	1295	1295	1295
E	mm	595	595	595	595	595
F	mm	1020	1020	1020	1020	1020
Net weight	kg	151,0	151,0	151,0	151,0	151,0
Weight for transport	kg	166,0	166,0	166,0	166,0	166,0

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

HMI 180T - 220T

Reversible air/water heat pump

Cooling capacity 17,5 ÷ 21,0 kW
Heating capacity 18,0 ÷ 22,0 kW

- **R32 ecological refrigerant gas.**
- **Quick & easy installation**
- **Production of hot domestic water with external temperatures from -25 °C to 45 °C**
- **Hermetically sealed equipment**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

HMI is a reversible outdoor heat pump for air-conditioning systems where, in addition to cooling rooms, high-temperature hot water is required for heating or for the production of domestic hot water.
For the production of DHW it is mandatory to combine it with a domestic hot water storage tank Aermec compatibile.

HMI is designed to meet the needs of both the new constructions market and the renovation market, **replacing or working alongside conventional boilers.**
It can be combined with low-temperature emission systems such as floor heating or fan coils, and also with more traditional radiators, **and comes supplied with the main hydraulic components needed, thereby facilitating the final installation**.

FEATURES

Operating limits

Full load operation down to -25°C (outside air temperature in winter), and up to 48°C in summer.
Maximum processed water temperature in heating mode 65°C.
Production of domestic hot water up to 80°C with electric heater.
— Refrigerant circuit with economizer.
— Inverter rotary compressor.
— DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
— Electronic expansion valve.

Main hydraulic components

— Inverter pump.
— Plate heat exchanger.
— Expansion tank
— Safety valve.
— Flow switch.
— Water filter supplied **(mandatory installation)**.

Regulation

Adjustment via **a multi-language touch-screen control panel:**
— Management of a 3 way diverting valve (not supplied) for the production of domestic hot water.
— Management of a 2 way valve (not supplied) for shutting off part of the system.
— Weekly programming in time periods.
— **Auto-restart** function.
— Emergency operation (a supplementary heat source may be activated).
— **Quick hot water** function, for quickly heating domestic hot water.
— **Weather dependent mode** function for climate control.
— **Quiet** function for reduced noise operation (programmable with a timer).
— Condensation check
— When the anti-legionella cycle is activated (it's easily set via the control panel), the whole tank is heated once a week to a temperature (max. 70 °C) that weakens the bacteria responsible for the infection.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

Smart APP Ewpe

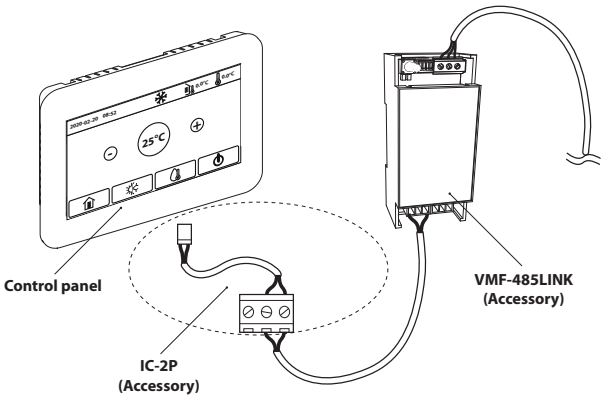
The system is equipped standard with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.

ACCESSORIES

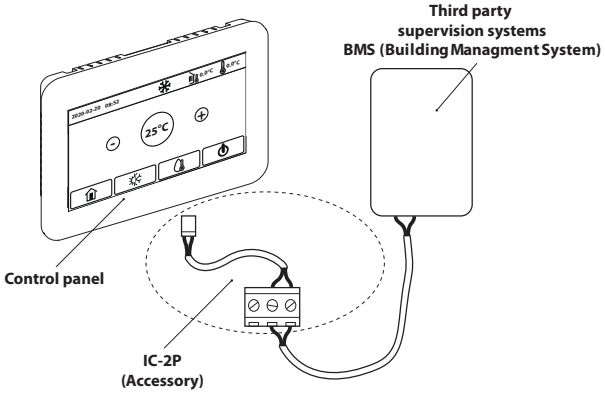
HMICB15: Connection cable for the control panel. Cable length 15m.
IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.
VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.
VMF-E5: Black recessed panel with backlit graphic LCD display and capacitive keyboard, it allows the centralised command/control of a complete hydronic system consisting of Fan coils: up to 64 fan coil zones consisting of 1 master + up to 5 slaves; Chiller/heat pump (accessory required for RS 485 interface), pumps: up to 12 configurable zone pumps; boiler: boiler hook-up management for hot water production; heat recovery units: up to 3 hook-ups per programmable recovery units based on time periods and/or by measuring air quality with the VMF-VOC accessory; domestic water module: complete management of the domestic hot water production through the control of: diverter valve/pump, integrated heating element, storage tank temperature sensor, anti-legionella circuit system. The panel is available in both white (VMF-E5B) and black (VMF-E5N).
VMF-E6: White flush-mounting panel with 4.3 inch colour touchscreen. For the centralised command/control of a complete hydronic/aeraulic system consisting of: fan coils (up to 64 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (up to 4), MZC accessories (up to 5) for the management of radiant panels (using a suitable number of VMF-REB accessories, up to 64 radiant panels associated with the fan coil zones and up to 32 radiant panels associated with the zones served by MZC), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/Os, control of heat recovery units and VOC probes (up to 4).
LOGATW: Diagnostic tool for air-water heat pumps.
DHWT300S: (220-240V~50Hz) DHW storage tank in enamelled steel. Single-phase power supply, tank capacity 300 litres with main and secondary coils and 3 kW back-up electric heater. Magnesium sacrificial anode. Indoor installation.

For more information about VMF system, refer to the dedicated documentation.

Connection with VMF-485LINK



Connection with third party supervision systems



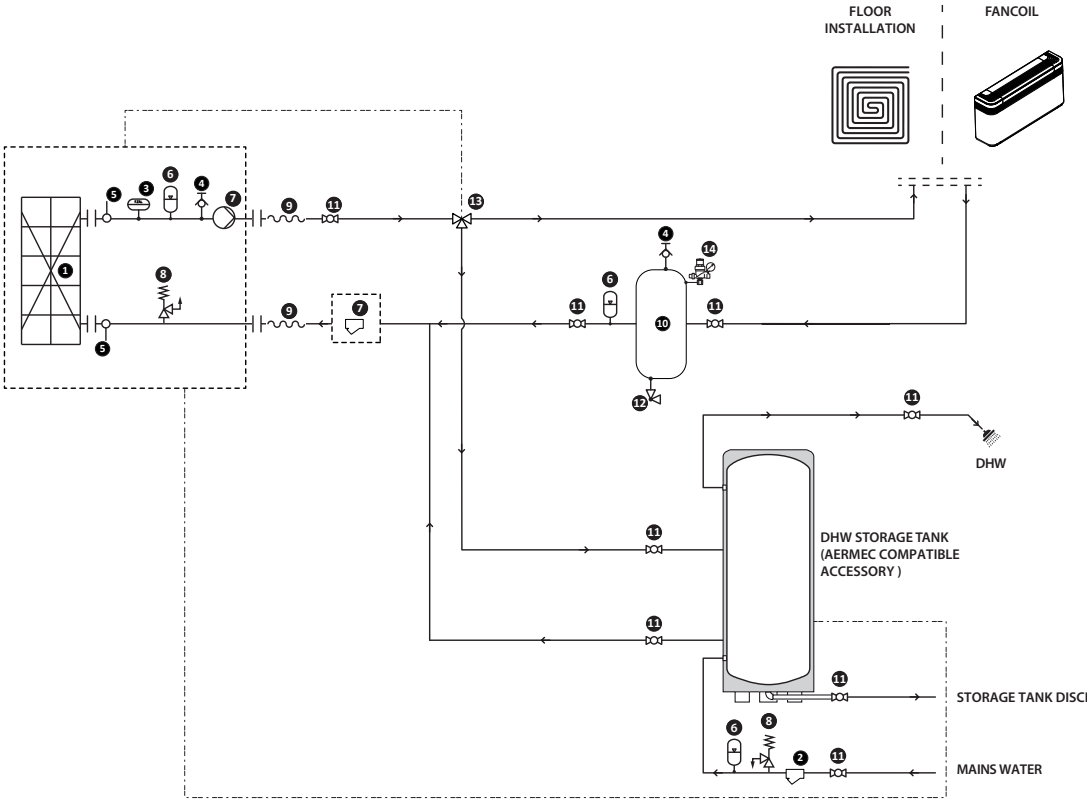
Accessories compatibility

Accessory	HMI180T	HMI220T
LOGATW	•	•

Accessory	HMI180T	HMI220T
HMICB15	•	•

Accessory	HMI180T	HMI220T
IC-2P	•	•
VMF-485LINK	•	•
VMF-E5	•	•
VMF-E6	•	•

FLOOR SYSTEM + DHW



COMPONENTS AS STANDARD

1 Plate heat exchanger
2 Water filter (as standard)
3 Flow switch
4 Air drain valve
5 Water temperature sensor (IN/OUT)
6 Expansion vessel
7 Pump
8 Pressure relief valve

HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE INSTALLER'S RESPONSIBILITY)

4 Air drain valve
9 Anti-vibration joints
10 System storage tank (recommended installation if the system water content is lower than that indicated in the technical manual).
11 Flow shut-off valves
6 Expansion vessel
12 Drain valve
13 3 way valve
14 Loading unit

In case of a free-standing system, the bypass valve must be installed to ensure the circulation of a minimum amount of water to the system.

PERFORMANCE SPECIFICATIONS

		HMI180T	HMI220T
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	17,50	21,00
Input power	kW	5,65	7,00
EER	W/W	3,10	3,00
Water flow rate	l/h	3010	3612
Useful head	kPa	59,1	55,2
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	18,00	22,00
Input power	kW	5,00	6,29
COP	W/W	3,60	3,50
Water flow rate	l/h	3096	3784
Useful head	kPa	62,4	57,9

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

		HMI180T	HMI220T
Cooling performance 23 °C / 18 °C (1)			
Cooling capacity	kW	18,50	23,00
Input power	kW	3,85	4,89
EER	W/W	4,80	4,70
Water flow rate	l/h	3182	3956
Useful head	kPa	56,1	53,5
Heating performance 30 °C / 35 °C (2)			
Heating capacity	kW	18,00	22,00
Input power	kW	3,75	4,89
COP	W/W	4,80	4,50
Water flow rate	l/h	3096	3784
Useful head	kPa	62,2	58,0

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

GENERAL TECHNICAL DATA

		HMI180T	HMI220T
Electric data			
Rated power input	W	10000	10800
Compressor			
Type	type	Rotativo Inverter	Rotativo Inverter
Number	no.	1	1
Circuits	no.	1	1
Refrigerant	type	R32	R32
Potential global heating	GWP	675 kgCO_2eq	675 kgCO_2eq
Refrigerant charge	kg	4,0	4,0
Oil	Type	FW68S	FW68S
Total oil charge	l	1,9	1,9
System side heat exchanger			
Type	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Type	Gas Maschio	Gas Maschio
Size (in)	Ø	1"1/4	1"1/4
Size (out)	Ø	1"1/4	1"1/4
Fan			
Type	type	Axial	Axial
Fan motor	type	Inverter	Inverter
Number	no.	2	2
Air flow rate	m^3/h	9700	9700
Sound data calculated in cooling mode			
Sound pressure level (1 m)	dB(A)	57,0	58,0
Sound data calculated in heating mode			
Sound power level	dB(A)	65,0	65,0
Sound pressure level (1 m)	dB(A)	56,0	57,0
Sound power by centre octave band dB(A)			
63 Hz	dB(A)	42,1	42,6
125 Hz	dB(A)	52,8	54,9
250 Hz	dB(A)	59,2	54,1
500 Hz	dB(A)	60,4	56,6
1000 Hz	dB(A)	58,0	55,8
4000 Hz	dB(A)	48,6	50,2
8000 Hz	dB(A)	42,7	45,2
Power supply			
Power supply		380-415V 3N ~ 50Hz	380-415V 3N ~ 50Hz

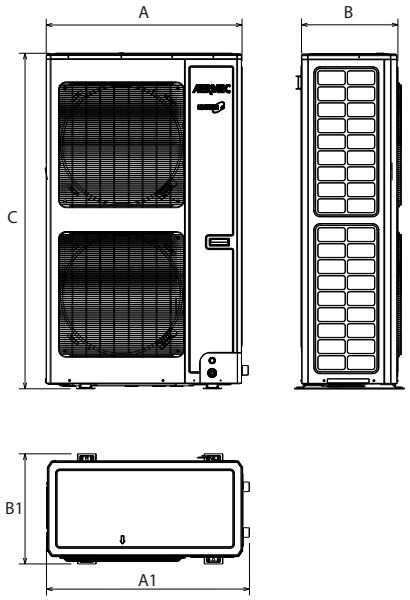
— The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
— The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
— Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.
— Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

ENERGY DATA

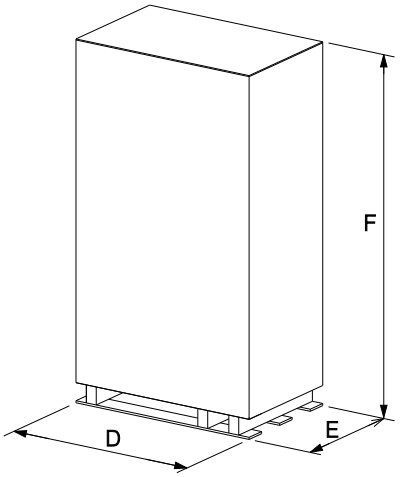
		HMI180T	HMI220T
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)			
Pdesignh	kW	19	22
ηsh	%	181,00	180,00
Efficiency energy class		A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)			
Pdesignh	kW	18	20
ηsh	%	127,00	127,00
Efficiency energy class		A++	A++

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

DIMENSIONS



HMI180T-HMI220T



Example of packaging

		HMI180T	HMI220T
Dimensions and weights			
A	mm	943	943
A1	mm	977	977
B	mm	464	464
B1	mm	530	530
C	mm	1615	1615
D	mm	1073	1073
E	mm	593	593
F	mm	1760	1760
Net weight	kg	205,0	205,0
Weight for transport	kg	221,0	221,0

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

BHP

Reversible air/water split heat pump

Cooling capacity 3,2 ÷ 11,5 kW – Heating capacity 4,0 ÷ 16,0 kW

- **Indoor unit available in two versions, with and without DHW**
- **New R32 ecological refrigerant gas**
- **Production of hot water up to 60 °C**
- **Anti-legionella function**
- **Multi-language touch-screen control panel**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

BHP It's the new "split" type inverter heat pump system, more efficient than standard boiler systems as it guarantees sustainable, efficient heating, cooling and domestic hot water supply in every season.
BHP is designed to meet the needs of both the new constructions market and the renovation market, replacing or working alongside conventional boilers.
The system can be installed in systems with any hydronic terminal, and is already supplied with the main hydraulic components, thus facilitating final installation.
The indoor unit comes in two versions:

— **BHP_W wall-mounting**, without DHW storage tank but complete with a 3-way DHW-system diverting valve. **For the production of DHW it is mandatory to combine it with a domestic hot water storage tank Aermec compatibile.**
— **BHP_F with base**, complete with DHW storage tank.

FEATURES

Main hydraulic components

BHP outdoor unit
— inverter compressor,
— finned pack heat exchanger with copper pipes and aluminium louvers, with protective golden fin treatment,
— economizer,
— electronic valve,
— DC axial brushless fan,
— electric heater for the base.

BHP_W wall indoor unit
— plate heat exchanger,
— flow switch,
— inverter pump,
— expansion tank,
— drain valve,
— safety valve,
— Electric resistance system side,
— 3 way valve,
— DHW-system connections,
— water filter supplied **(mandatory installation)**.

BHP_F indoor base unit
— plate heat exchanger,
— flow switch,
— inverter pump,
— expansion tank,
— drain valve,
— safety valve,
— Electric resistance system side,
— 3 way valve,
— DHW-system connections,
— water filter supplied **(mandatory installation)**,
— DHW storage tank of 185 litres with coil and supplementary electric heater, and anti-legionella function,
— **tank with Titanium electronic sacrificial anode.**

The indoor and outdoor units are connected by means of suitably sized cooling lines (supplied by the installer).
Cooling circuit use R32 (A2L) refrigerant with low GWP.

Operating limits

Full load operation down to -25°C (outside air temperature in winter), and up to 48°C in summer.

Regulations

Adjustment via **multi-language touch-screen control panel**:
— ganagement of a 3-way diverting valve for the production of domestic hot water,
— management of a 2 way valve (not supplied) for shutting off part of the system,
— weekly programming in time periods,
— **auto-restart** function,
— emergency operation,
— function **quick water heating** for a quick heating of domestic hot water
— forced operating **mode**,
— intelligent operation **based on weather conditions** for climate adjustment,
— **quiet** function for reduced noise operation (programmable with a timer),
— **Anti-freeze** function,
— condensation check,

— when the **anti-legionella cycle** is activated (it's easily set via the control panel), the whole tank is heated once a week to a temperature (max. 70 °C) that weakens the bacteria responsible for the infection,
— pre heating **function of the floor** to pre-heat the floor system before unit commissioning.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

Smart APP Ewpe

The system is equipped standard with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.

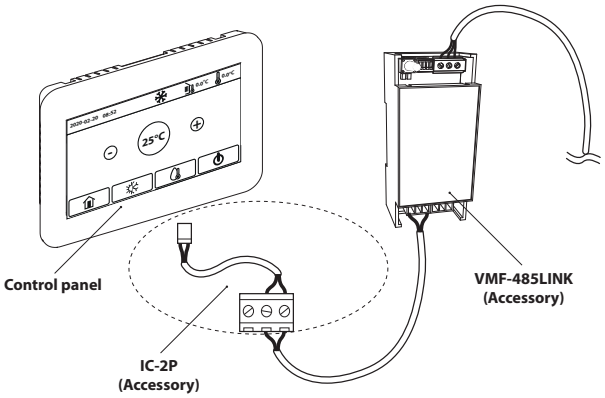
ACCESSORIES

IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.
VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.
LOGATW: Diagnostic tool for air-water heat pumps.
DHWT300S: (220-240V~50Hz) DHW storage tank in enamelled steel. Single-phase power supply, tank capacity 300 litres with main and secondary coils and 3 kW back-up electric heater. Magnesium sacrificial anode. Indoor installation.
For the production of DHW it is mandatory to combine it with BHP_W.

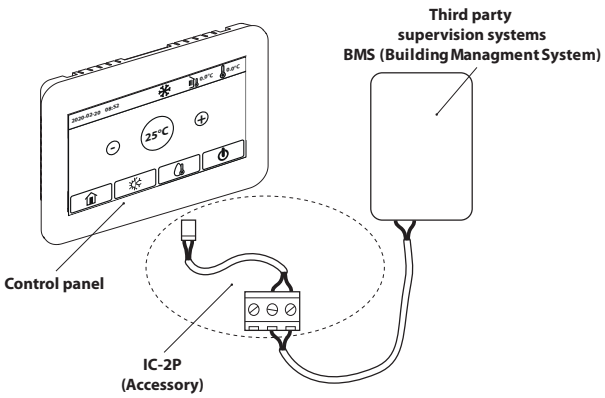
Compatibility with VMF system

For more information about VMF system, refer to the dedicated documentation.

Connection with VMF-485LINK



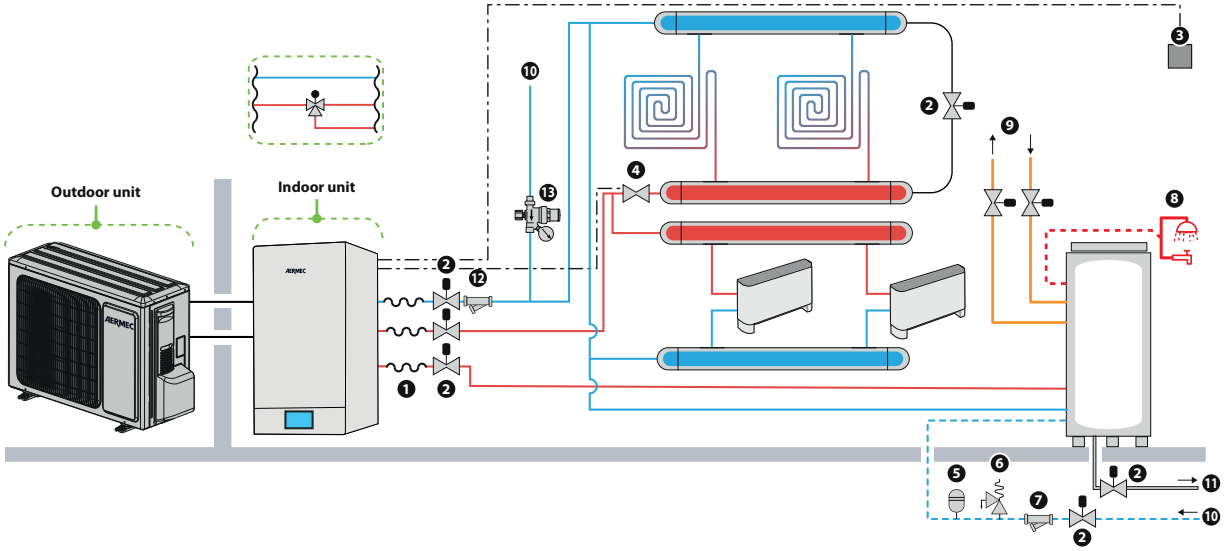
Connection with third party supervision systems



Compatibility with DHW storage tank

	BHP060W	BHP100W	BHP100WT	BHP160W	BHP160WT
DHWT300S	•	•	•	•	•

BHP_W: DOMESTIC HOT WATER STORAGE TANK CONNECTION AND CONNECTION TO THE FLOOR SYSTEM AND FCU



HYDRAULIC COMPONENTS SUPPLIED AS STANDARD IN THE INDOOR UNIT

— Plate heat exchanger
— Flow switch
— Inverter circulator
— Expansion vessel
— Drain valve
— Pressure relief valve
— Electric resistance system side
— 3 way valve
— DHW-system connections

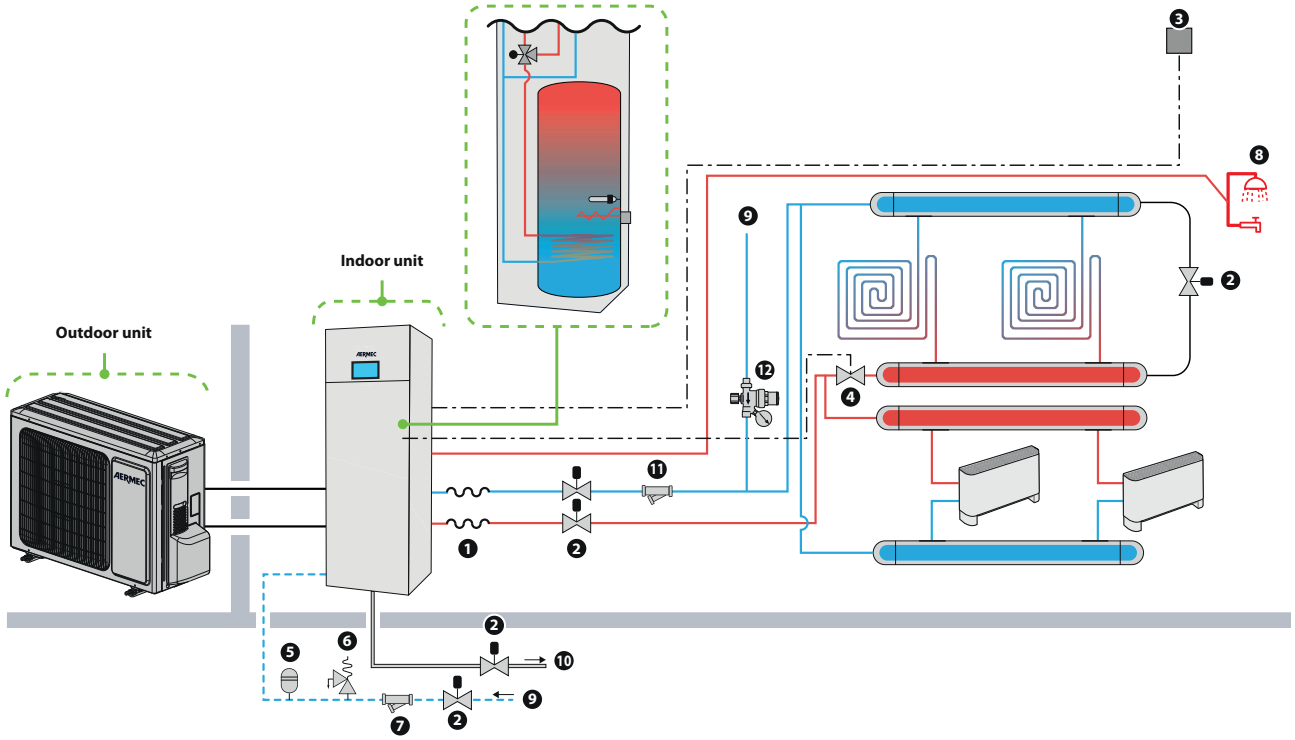
SUPPLIED HYDRAULIC COMPONENTS

12. Water filter supplied **(mandatory installation)**

HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE INSTALLER'S RESPONSIBILITY)

1. Anti-vibration joints
2. Shut-off tap
3. Ambient thermostat
4. 2 way valve
5. Expansion tank **NOT supplied**
6. Safety valve **supplied with Aermec ACS storage system compatible (installation is mandatory)**
7. Water filter **NOT supplied (installation is mandatory)**
8. Hot domestic water
9. Auxiliary heat sources
10. Aqueduct
11. Storage discharge
13. Loading unit

BHP_F: CONNECTION TO THE FLOOR SYSTEM AND FCU



HYDRAULIC COMPONENTS SUPPLIED AS STANDARD IN THE INDOOR UNIT

— Plate heat exchanger
— Flow switch
— Inverter pump
— Expansion vessel
— Drain valve
— Pressure relief valve
— Electric resistance system side
— 3 way valve
— DHW-system connections

SUPPLIED HYDRAULIC COMPONENTS

11. Water filter supplied **(mandatory installation)**

HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE INSTALLER'S RESPONSIBILITY)

1. Anti-vibration joints
2. Shut-off tap
3. Ambient thermostat
4. 2 way valve
5. Expansion tank **NOT supplied**
6. Safety valve **NOT supplied (installation is mandatory)**
7. Water filter **NOT supplied (installation is mandatory)**
8. Hot domestic water
9. Aqueduct
10. Storage discharge
12. Loading unit

PERFORMANCE SPECIFICATIONS

Technical data Wall unit

Indoor unit		BHP060W	BHP060W	BHP100W	BHP100W	BHP160W	BHP160W	BHP160W
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**	**BHP120**	**BHP140**	**BHP160**
Cooling performance 12 °C / 7 °C (1)								
Cooling capacity	kW	3,20	4,09	5,30	6,50	10,07	11,30	11,60
Input power	kW	0,94	1,28	1,73	2,27	3,65	4,04	4,38
EER	W/W	3,42	3,20	3,06	2,86	2,93	2,80	2,65
Water flow rate system side	l/h	550	703	912	1118	1840	1944	1995
Useful head system side	kPa	76	74	70	63	56	54	48
Heating performance 40 °C / 45 °C (2)								
Heating capacity	kW	4,00	5,90	8,00	9,50	12,40	14,50	16,10
Input power	kW	1,02	1,51	2,14	2,64	3,22	3,87	4,41
COP	W/W	3,92	3,91	3,74	3,60	3,85	3,75	3,65
Water flow rate system side	l/h	688	1015	1376	1634	2133	2494	2769
Useful head system side	kPa	74	67	51	36	45	26	11
Cooling performance 23 °C / 18 °C (3)								
Cooling capacity	kW	3,80	5,80	7,00	8,52	11,00	12,60	13,00
Input power	kW	0,82	1,32	1,75	2,25	2,50	3,41	3,60
EER	W/W	4,63	4,40	4,00	3,79	4,40	3,70	3,61
Water flow rate system side	l/h	655	992	1204	1465	1892	2167	2236
Useful head system side	kPa	74	67	60	46	54	40	34
Heating performance 30 °C / 35 °C (4)								
Heating capacity	kW	4,00	6,00	8,00	9,50	12,00	14,00	15,50
Input power	kW	0,78	1,20	1,70	2,07	2,40	2,98	3,44
COP	W/W	5,13	5,00	4,71	4,59	5,00	4,70	4,50
Water flow rate system side	l/h	688	1032	1376	1634	2064	2408	2666
Useful head system side	kPa	74	66	51	36	45	26	15
Heating performance 47 °C / 55 °C (5)								
Heating capacity	kW	3,60	5,40	7,20	8,55	12,00	14,00	16,00
Input power	kW	1,40	2,16	3,05	3,72	3,81	4,52	5,42
COP	W/W	2,57	2,50	2,36	2,30	3,15	3,10	2,95
Useful head system side	kPa	27	19	19	12	65	60	53

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.
(5) Data EN 14511:2022; System side water heat exchanger 47 °C / 55 °C; External air 7 °C d.b. / 6 °C w.b.

Three-phase Wall unit technical data

Indoor unit		BHP100WT	BHP100WT	BHP160WT	BHP160WT	BHP160WT
Outdoor unit		**BHP080T**	**BHP100T**	**BHP120T**	**BHP140T**	**BHP160T**
Cooling performance 12 °C / 7 °C (1)						
Cooling capacity	kW	7,60	8,20	10,07	11,30	11,60
Input power	kW	2,35	2,73	3,65	4,04	4,38
EER	W/W	3,23	3,00	2,93	2,80	2,65
Water flow rate system side	l/h	1307	1410	1840	1944	1995
Useful head system side	kPa	66	58	56	54	48
Heating performance 40 °C / 45 °C (2)						
Heating capacity	kW	8,00	10,20	12,40	14,50	16,13
Input power	kW	1,93	2,55	3,22	3,87	4,42
COP	W/W	4,15	4,00	3,85	3,75	3,65
Water flow rate system side	l/h	1376	1720	2133	2494	2774
Useful head system side	kPa	60	45	45	26	11
Cooling performance 23 °C / 18 °C (3)						
Cooling capacity	kW	8,50	10,00	11,00	12,60	13,00
Input power	kW	1,74	2,33	2,50	3,41	3,60
EER	W/W	4,89	4,29	4,40	3,70	3,61
Water flow rate system side	l/h	1462	1720	1892	2167	2236
Useful head system side	kPa	54	41	54	40	34
Heating performance 30 °C / 35 °C (4)						
Heating capacity	kW	8,00	10,00	12,00	14,00	15,54
Input power	kW	1,63	2,15	2,40	2,98	3,45
COP	W/W	4,91	4,65	5,00	4,70	4,50
Water flow rate system side	l/h	1376	1754	2064	2408	2673
Useful head system side	kPa	60	46	46	26	14
Heating performance 47 °C / 55 °C (5)						
Heating capacity	kW	8,00	10,00	12,00	14,00	16,00
Input power	kW	2,78	3,80	3,81	4,52	5,42
COP	W/W	2,88	2,63	3,15	3,10	2,95
Useful head system side	kPa	74	70	65	60	53

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.
(5) Data EN 14511:2022; System side water heat exchanger 47 °C / 55 °C; External air 7 °C d.b. / 6 °C w.b.

Technical data base unit

Indoor unit		BHP060F	BHP060F	BHP100F	BHP100F
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	3,20	4,09	5,30	6,50
Input power	kW	0,94	1,28	1,73	2,27
EER	W/W	3,42	3,20	3,06	2,86
Water flow rate system side	l/h	550	703	912	1118
Useful head system side	kPa	76	74	70	63
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	4,00	5,90	8,00	9,50
Input power	kW	1,02	1,51	2,14	2,64
COP	W/W	3,92	3,91	3,74	3,60
Water flow rate system side	l/h	688	1015	1376	1634
Useful head system side	kPa	74	67	51	36
Cooling performance 23 °C / 18 °C (3)					
Cooling capacity	kW	3,80	5,80	7,00	8,52
Input power	kW	0,82	1,32	1,75	2,25
EER	W/W	4,63	4,40	4,00	3,79
Water flow rate system side	l/h	655	992	1204	1465
Useful head system side	kPa	74	69	60	46
Heating performance 30 °C / 35 °C (4)					
Heating capacity	kW	4,00	6,00	8,00	9,50
Input power	kW	0,78	1,20	1,70	2,07
COP	W/W	5,13	5,00	4,71	4,59
Water flow rate system side	l/h	688	1032	1376	1634
Useful head system side	kPa	74	66	51	36
Heating performance 47 °C / 55 °C (5)					
Heating capacity	kW	3,60	5,40	7,20	8,55
Input power	kW	1,40	2,16	3,05	3,72
COP	W/W	2,57	2,50	2,36	2,30
Useful head system side	kPa	27	19	19	12

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.
(5) Data EN 14511:2022; System side water heat exchanger 47 °C / 55 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Energy data Wall unit

Indoor unit		BHP060W	BHP060W	BHP100W	BHP100W	BHP160W	BHP160W	BHP160W
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**	**BHP120**	**BHP140**	**BHP160**
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)								
Pdesignh	kW	5	6	7	9	11	12	13
SCOP	W/W	4,66	4,54	4,60	4,60	4,63	4,65	4,61
ηsh	%	183,50	178,70	181,00	181,00	182,00	183,00	181,20
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)								
Pdesignh	kW	5	5	7	8	11	13	13
SCOP	W/W	3,27	3,25	3,30	3,25	3,24	3,50	3,50
ηsh	%	128,10	127,40	129,00	127,00	126,40	137,00	137,00
Efficiency energy class		A++	A++	A++	A++	A++	A++	A++
Performance as combined heat generator								
Bleeding profile		XL	XL	XL	XL	XL	XL	XL
Efficiency energy class		A	A	A	A	A	A	A

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Indoor unit		BHP060W	BHP060W	BHP100W	BHP100W	BHP160W	BHP160W	BHP160W
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**	**BHP120**	**BHP140**	**BHP160**
Indoor unit quantity		**1**	**1**	**1**	**1**	**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**	**1**	**1**	**1**	**1**
Cooling capacity with low leaving water temp (UE n° 2016/2281)								
SEER	W/W	4,21	4,12	4,11	4,12	4,90	4,91	4,78
ηsc	%	165,00	162,00	161,00	162,00	193,00	193,00	188,00

Three-phase Wall unit energy data

Indoor unit		BHP100WT	BHP100WT	BHP160WT	BHP160WT	BHP160WT
Outdoor unit		**BHP080T**	**BHP100T**	**BHP120T**	**BHP140T**	**BHP160T**
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)						
Pdesignh	kW	8	9	11	12	13
SCOP	W/W	4,53	4,70	4,48	4,48	4,45
ηsh	%	178,10	185,20	176,00	176,00	175,00
Efficiency energy class		A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)						
Pdesignh	kW	9	10	11	13	13
SCOP	W/W	3,48	3,49	3,23	3,38	3,38
ηsh	%	136,10	136,70	126,00	132,00	132,00
Efficiency energy class		A++	A++	A++	A++	A++
Performance as combined heat generator						
Bleeding profile		XL	XL	XL	XL	XL
Efficiency energy class		A	A	A	A	A

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Indoor unit		BHP100WT	BHP100WT	BHP160WT	BHP160WT	BHP160WT
Outdoor unit		**BHP080T**	**BHP100T**	**BHP120T**	**BHP140T**	**BHP160T**
Cooling capacity with low leaving water temp (UE n° 2016/2281)						
SEER	W/W	4,11	4,12	4,74	4,76	4,64
ηsc	%	161,00	162,00	187,00	187,00	183,00

Energy data base unit

Indoor unit		BHP060F	BHP060F	BHP100F	BHP100F
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)					
Pdesignh	kW	5	6	7	9
SCOP	W/W	4,66	4,54	4,60	4,60
ηsh	%	183,50	178,70	181,00	181,00
Efficiency energy class		A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)					
Pdesignh	kW	5	5	7	8
SCOP	W/W	3,28	3,26	3,30	3,25
ηsh	%	128,10	127,40	129,00	127,00
Efficiency energy class		A++	A++	A++	A++
Performance as combined heat generator					
Bleeding profile		L	L	L	L
Efficiency energy class		A	A	A	A

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Indoor unit		BHP060F	BHP060F	BHP100F	BHP100F
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**
Cooling capacity with low leaving water temp (UE n° 2016/2281)					
SEER	W/W	4,21	4,12	4,11	4,12
ηsc	%	165,00	162,00	161,00	162,00

INDOOR UNIT

BHP_W indoor wall unit

		BHP060W	BHP100W	BHP160W
Electric data				
Rated power input (1)	kW	3,10	6,10	6,10
Electric heater				
Number	no.	2	2	2
Power of the single heater	kW	1,50	3,00	3,00
System side heat exchanger				
Type	type		Brazed plate	
Number	no.	1	1	1
Unit / system input	type		G1 male	
Unit / system output	type		G1 male	
DHW output	type		G1 male	
Circulator				
Quantity	no.	1	1	1
Motor	type		DC brushless	
Expansion vessel				
Number	no.	1	1	1
Volume	l	10,0	10,0	10,0
Maximum pressure	bar	2,5	2,5	2,5
Sound data calculated in cooling mode (2)				
Sound power level	dB(A)	42,0	42,0	42,0
Sound pressure level	dB(A)	14,0	14,0	14,0
Power supply				
Power supply			230V ~ 50Hz	

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Three-phase wall unit BHP_WT

		BHP100WT	BHP160WT
Electric data			
Rated power input (1)	kW	6,10	6,10
Electric heater			
Number	no.	2	2
Power of the single heater	kW	3,00	3,00
System side heat exchanger			
Type	type	Brazed plate	
Number	no.	1	1
Unit / system input	type	G1 male	
Unit / system output	type	G1 male	
DHW output	type	G1 male	
Circulator			
Quantity	no.	1	1
Motor	type	DC brushless	
Expansion vessel			
Number	no.	1	1
Volume	l	10,0	10,0
Maximum pressure	bar	2,5	2,5
Sound data calculated in cooling mode (2)			
Sound power level	dB(A)	42,0	42,0
Sound pressure level	dB(A)	14,0	14,0
Power supply			
Power supply		400V ~ 3N 50Hz	

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

BHP_F indoor base unit

		BHP060F	BHP100F
Electric data			
Rated power input (1)	kW	3,10	6,10
Electric heater			
Number	no.	2	2
Power of the single heater	kW	1,50	3,00
System side heat exchanger			
Type	type	Brazed plate	
Number	no.	1	1
Unit / system input	type	G1 male	
Mains water input	type	G1 male	
Unit / system output	type	G1 male	
DHW output	type	G1 male	
Circulator			
Quantity	no.	1	1
Motor	type	DC brushless	
Expansion vessel			
Number	no.	1	1
Volume	l	10,0	10,0
Maximum pressure	bar	2,5	2,5
Storage tank (DHW)			
Volume	l	185	185
Sound data calculated in cooling mode (2)			
Sound power level	dB(A)	42,0	42,0
Sound pressure level	dB(A)	14,0	14,0
Power supply			
Power supply		230V ~ 50Hz	

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

OUTDOOR UNIT

		BHP040	BHP060	BHP080	BHP080T	BHP100	BHP100T
Electric data							
Rated current input (1)	A	10,0	10,0	19,0	7,5	22,0	7,5
Compressor							
Type	type	Rotativo doppio stadio inverter					
Number	no.	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1
Refrigerant	type	R32					
Refrigerant charge	kg	1,00	1,00	1,60	1,84	1,60	1,84
Potential global heating	GWP	675kgCO_2eq					
Oil							
Type	type	FW68DA					
Quantity	l	0,47	0,47	0,84	0,84	0,84	0,84
Refrigeration pipework							
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")					
Diameter of refrigerant gas connections	mm (inch)	12,7 (1/2")					
Exchanger							
Type	type	Finned coil					
Louvers type	type	Golden fin					
Number	no.	1	1	1	1	1	1
Expansion vessel							
Type	type	Electronic expansion valve					
Number	no.	1	1	1	1	1	1
Fan							
Type	type	Inverter axial					
Fan motor	type	DC brushless					
Number	no.	1	1	1	1	1	1
Air flow rate	m^3/h	3200	3200	3300	3300	3300	3300
Sound data calculated in cooling mode (2)							
Sound power level	dB(A)	62,0	62,0	67,0	68,0	68,0	68,0
Sound pressure level (1 m)	dB(A)	52,0	52,0	55,0	55,0	55,0	55,0
Sound pressure level (10 m)	dB(A)	34,0	34,0	39,0	40,0	40,0	40,0
Power supply							
Power supply		230V ~ 50Hz			400V 3N ~ 50Hz	230V ~ 50Hz	400V 3N ~ 50Hz

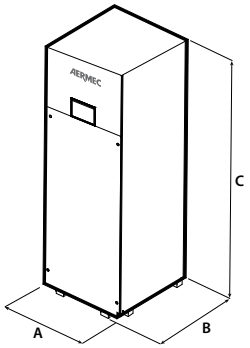
		BHP120	BHP120T	BHP140	BHP140T	BHP160	BHP160T
Electric data							
Rated current input (1)	A	25,6	9,2	28,7	11,5	30,3	11,5
Compressor							
Type	type	Rotativo doppio stadio inverter					
Number	no.	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1
Refrigerant	type	R32					
Refrigerant charge	kg	1,84	1,84	1,84	1,84	1,84	1,84
Potential global heating	GWP	675kgCO_2eq					
Oil							
Type	type	FW68DA					
Quantity	l	1,05	1,05	1,05	1,05	1,05	1,05
Refrigeration pipework							
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")					
Diameter of refrigerant gas connections	mm (inch)	12,7 (1/2")			15,87 (5/8")		
Exchanger							
Type	type	Finned coil					
Louvers type	type	Golden fin					
Number	no.	1	1	1	1	1	1
Expansion vessel							
Type	type	Electronic expansion valve					
Number	no.	1	1	1	1	1	1
Fan							
Type	type	Inverter axial					
Fan motor	type	DC brushless					
Number	no.	1	1	1	1	1	1
Air flow rate	m^3/h	5044	5044	5044	5044	5044	5044
Sound data calculated in cooling mode (2)							
Sound power level	dB(A)	68,0	68,0	68,0	68,0	68,0	68,0
Sound pressure level (1 m)	dB(A)	60,0	60,0	61,0	61,0	61,0	61,0
Sound pressure level (10 m)	dB(A)	40,0	40,0	40,0	40,0	40,0	40,0
Power supply							
Power supply		230V ~ 50Hz	400V 3N ~ 50Hz	230V ~ 50Hz	400V 3N ~ 50Hz	230V ~ 50Hz	400V 3N ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

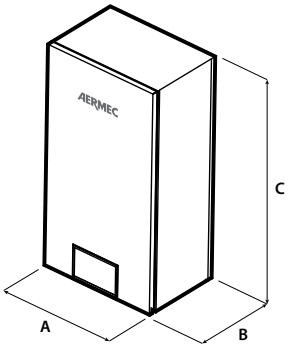
DIMENSIONS AND WEIGHTS

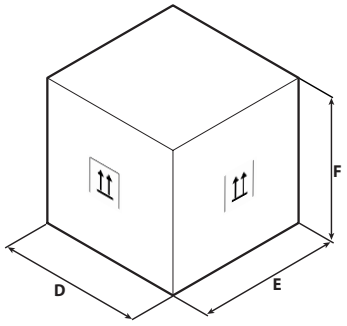
Indoor units

BHP_F



BHP_W





Carton Box Example

BHP_W

		BHP060W	BHP100W	BHP160W
Indoor unit				
A	mm	460	460	460
B	mm	318	318	318
C	mm	860	860	860
D	mm	568	568	568
E	mm	390	390	390
F	mm	1133	1133	1133
Net weight	kg	62,0	62,0	58,0
Weight for transport	kg	71,0	71,0	71,0

BHP_WT

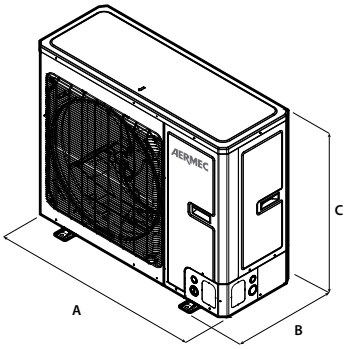
		BHP100WT	BHP160WT
Indoor unit			
A	mm	460	460
B	mm	318	318
C	mm	860	860
D	mm	568	568
E	mm	390	390
F	mm	1133	1133
Net weight	kg	60,0	60,0
Weight for transport	kg	71,0	71,0

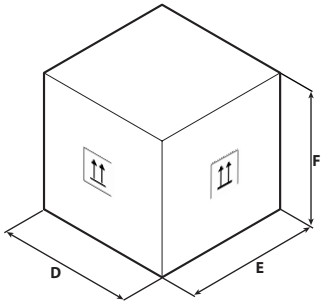
BHP_F

		BHP060F	BHP100F
Indoor unit			
A	mm	600	600
B	mm	600	600
C	mm	1756	1756
D	mm	803	803
E	mm	683	683
F	mm	2000	2000
Net weight	kg	210,0	210,0
Weight for transport	kg	233,0	233,0

Outdoor units

BHP





Carton Box Example

BHP

		BHP040	BHP060	BHP080	BHP080T	BHP100	BHP100T
Outdoor unit							
A	mm	975	975	982	982	982	982
B	mm	396	396	427	360	427	360
C	mm	702	702	787	787	787	787
D	mm	1028	1028	1097	1097	1097	1097
E	mm	458	458	478	478	478	478
F	mm	830	830	937	937	937	937
Net weight	kg	55,0	55,0	82,0	88,0	82,0	88,0
Weight for transport	kg	65,0	65,0	92,0	98,0	92,0	98,0

		BHP120	BHP120T	BHP140	BHP140T	BHP160	BHP160T
Outdoor unit							
A	mm	940	940	940	940	940	940
B	mm	460	460	460	460	460	460
C	mm	820	820	820	820	820	820
D	mm	1103	1103	1103	1103	1103	1103
E	mm	573	573	573	573	573	573
F	mm	973	973	973	973	973	973
Net weight	kg	104,0	110,0	104,0	110,0	104,0	110,0
Weight for transport	kg	114,0	121,0	114,0	121,0	114,0	121,0

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HMG – HMG_P

Reversible air/water heat pump

HMG: Cooling capacity 32 ÷ 60 kW – Heating capacity 35 ÷ 65 kW
HMG_P: Cooling capacity 33 ÷ 60 kW – Heating capacity 36 ÷ 65 kW

- **R32 ecological refrigerant gas.**
- **Touch-screen control panel**
- **Easy and quick to install**
- **Reliability and compactness**
- **Hermetically sealed equipment**
- **Modularity**

HMG

HMG_P

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

HMG and HMG_P are the new outdoor reversible inverter heat pump system for producing chilled and heated water.
These units are designed to meet the plant engineering needs of residential or commercial contexts, or industrial applications.
HMG and HMG_P Are designed to meet the needs of both the new constructions market and the renovation market, replacing or working alongside conventional boilers.
They can be combined with low-temperature emission systems such as floor heating or fan coils.
They are formed of fully independent modules that can be linked together to create a modular system.
The base, the structure and the panels are made of galvanized steel treated with polyester paint.
HMG_P comes supplied with the main hydraulic components needed, thereby facilitating the final installation and is supplied with Integrated hydronic kit

FEATURES

Operating limits

Operation from -20°C outside air temperature (winter) to 52°C (summer).
Production of hot water up to 50 °C.
For more information about the operating limits of these units, refer to the specific paragraph on this product data sheet.

Modularity

HMG and HMG_P unit can be installed in a modular system of reversible inverter heat pumps for producing hot and chilled water, with connectable base modules purposely designed to minimise the overall dimensions.

For HMG units it is possible to connect units with different capacity.

For HMG_P units, connection is only possible between units of the same capacity.
Modularity allows the installation of these units to be adapted to the real system development requirements, so the installed power can be increased over time in a simple and cost effective manner.
On the basis of these requirements, the user can choose either: **homogeneous modularity** or **sequential modularity**.

Homogeneous modularity

Made possible with the use of a control panel **TCP** (mandatory accessory) to be connected to the master unit of the system.
This type of modularity allows the modules to work with a homogeneous capacity control logic whilst still guaranteeing delay switch-on and switch-off to avoid power consumption peaks and intelligent defrosting (the simultaneous defrosting of up to 1/3 of the modules installed).
Up to 16 modules for HMG also of different capacity., and 3 modules for HMG_P modules of equal capacity, can be linked together with this operating mode.

For HMG
To take full advantage of the characteristics of this working mode, you are advised to use it in systems with a pump (or a group of pumps) that serves all the units. The control logic manages the switch-on and switch-off of the pump(s) on the basis of the operating conditions of the generation system.

Sequential modularity

Made possible with the use of accessories **TCP** (mandatory accessory), **IC-2P, VMF-485LINK** and **VMF-E6.**
This type of modularity allows the HMG and HMG_P units to be added to the control system of the whole hydraulic/aeraulic system, so DHW can also be managed.
Unit switch-on and switch-off is managed in a sequential manner, according to a selected control logic (free regulation, regulation by load or regulation by temperature difference).
For more information about VMF system, refer to the dedicated documentation.
Up to 4 modules for HMG also of different capacity., and 3 modules for HMG_P modules of equal capacity, can be linked together with this operating mode.
Management is optimised for systems where each unit HMG commands its own pump.

Main components

HMG

— Flow switch.
— DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
— Compressor twin rotary inverter.
— Special coil with fin golden coating.
— High-efficiency shell & tube heat exchanger (system side) for excellent reliability and a long lifespan.
— Electronic expansion valve.
— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.

HMG_P

— DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
— Compressor twin rotary inverter.
— Special coil with fin golden coating.
— High-efficiency plate heat exchanger (system side) for excellent reliability and a long lifespan.
— Electronic expansion valve.
— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.

Main hydraulic components HMG_P

— Flow switch.
— Inverter pump.
— Expansion tank.
— Drain valve.
— Safety valve.
— Water filter supplied (mandatory installation).

Regulation

Adjustment via **touch-screen control panel (TCP accessory compulsory)**::

— **Only for HMG**: management of (up to) two pumps (not supplied) that can work alternately, boosting the reliability of the system,
— management of (up to) two auxiliary electric resistors (not supplied),
— **Quiet** function for reduced noise operation,
— climatic regulation function,
— unit anti-freeze protection at low temperatures,
— weekly programming in time periods,
— high and low pressure protection,
— smart compressor control, extending the lifespan of the unit and enhancing its reliability,
— alarm history.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

ACCESSORIES

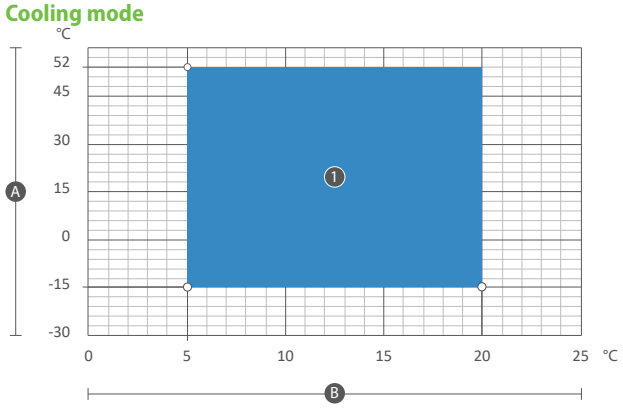
TCP: Touch-screen control panel. (Accessory compulsory).
IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.
VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.
VMF-E6: White flush-mounting panel with 4.3 inch colour touchscreen. For the centralised command/control of a complete hydronic/aeraulic system consisting of: fan coils (up to 64 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (up to 4), MZC accessories (up to 5) for the management of radiant panels (using a suitable number of VMF-REB accessories, up to 64 radiant panels associated with the fan coil zones and up to 32 radiant panels associated with the zones served by MZC), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/Os, control of heat recovery units and VOC probes (up to 4).
LOGATW: Diagnostic tool for air-water heat pumps.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

OPERATING LIMITS

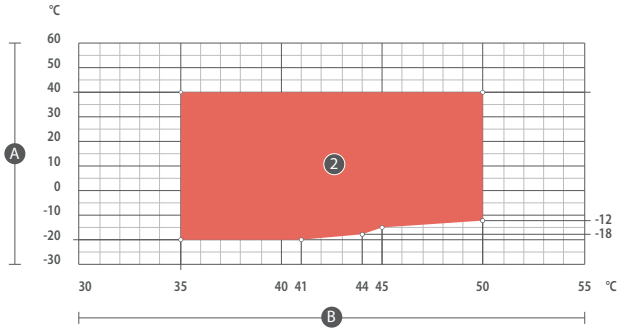
Cooling mode



KEY

1	cooling mode
A	outdoor air temperature (°C)
B	water produced temperature (°C)

Heating mode range



KEY

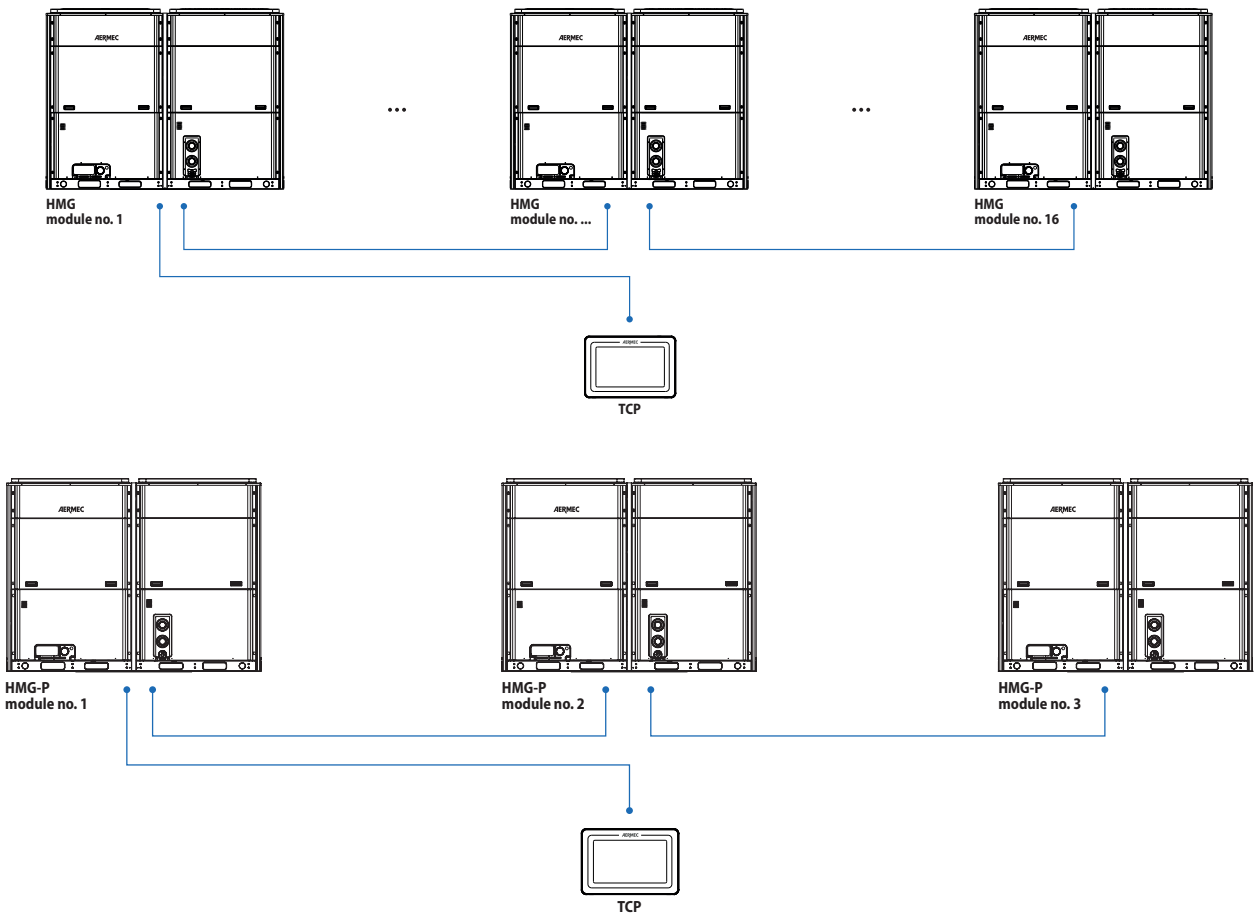
2	heating mode
A	outdoor air temperature (°C)
B	water produced temperature (°C)

MODULARITY

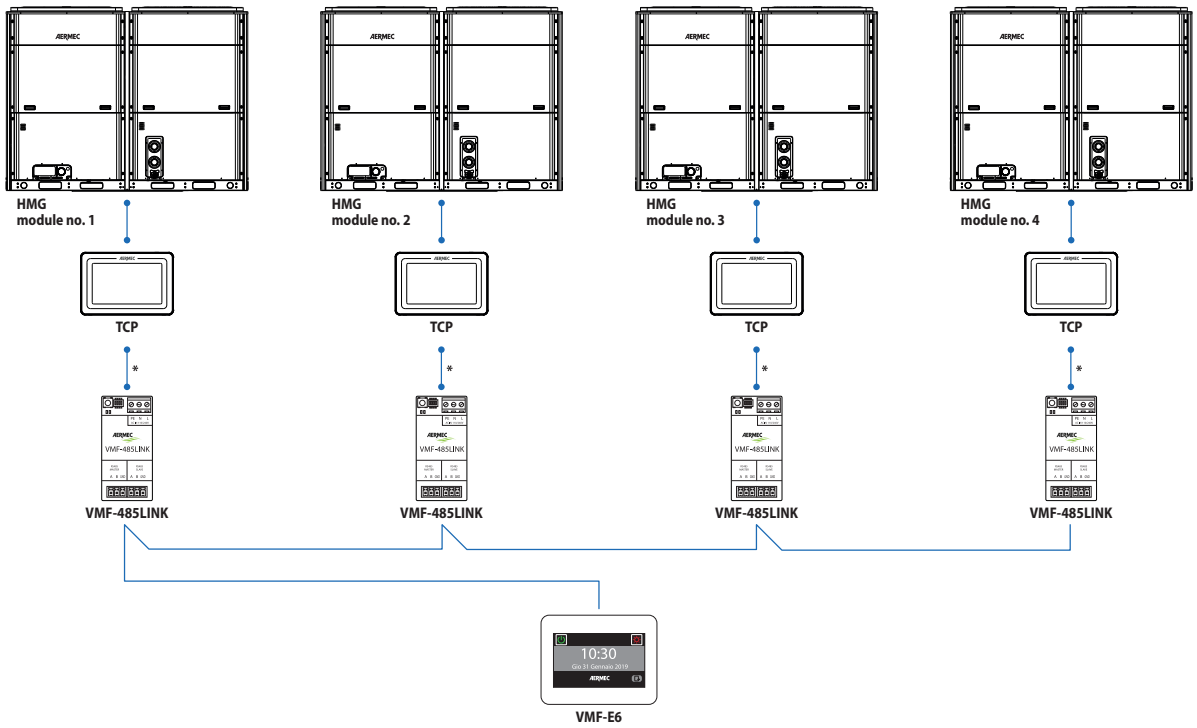
For HMG units it is possible to connect units with different capacity.

For HMG_P units, connection is only possible between units of the same capacity.

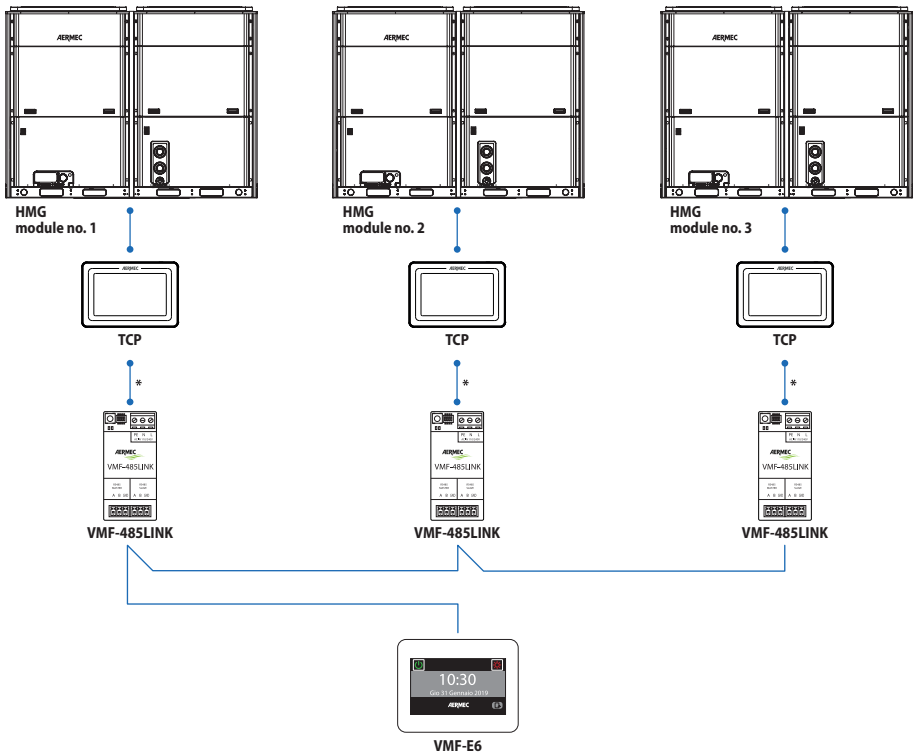
Homogeneous modularity - connection diagram



Sequential modularity - connection diagram



* Connection to be made with the aid of the accessory IC-2P.



* Connection to be made with the aid of the accessory IC-2P.

PERFORMANCE SPECIFICATIONS

		HMG0350	HMG0600
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	32,0	60,0
Input power	kW	11,7	20,8
Water flow rate system side	l/h	5528	10346
Pressure drop system side	kPa	80	55
Cooling total input current	A	19,2	32,9
EER	W/W	2,74	2,88
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	35,0	65,0
Input power	kW	10,6	19,9
Water flow rate system side	l/h	6039	11249
Heating total input current	A	17,5	30,7
COP	W/W	3,30	3,27
Cooling performance 23 °C / 18 °C (3)			
Cooling capacity	kW	41,4	72,5
Input power	kW	10,5	19,1
Water flow rate system side	l/h	7198	12574
Cooling total input current	A	16,2	31,0
EER	W/W	3,94	3,80
Heating performance 30 °C / 35 °C (4)			
Heating capacity	kW	36,0	62,6
Input power	kW	8,8	15,1
Water flow rate system side	l/h	6191	10798
Heating total input current	A	12,4	24,2
COP	W/W	4,09	4,15

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

		HMG0350P	HMG0600P
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	33,0	60,0
Input power	kW	11,4	21,1
Water flow rate system side	l/h	5680	10320
Useful head	kPa	203,0	210,0
Cooling total input current	A	18,7	33,2
EER	W/W	2,89	2,84
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	36,0	65,0
Input power	kW	10,9	19,7
Water flow rate system side	l/h	6190	11180
Useful head	kPa	180,0	200,0
Heating total input current	A	18,1	32,3
COP	W/W	3,30	3,30
Cooling performance 23 °C / 18 °C (3)			
Cooling capacity	kW	32,8	64,0
Input power	kW	8,0	18,0
Water flow rate system side	l/h	5648	11015
Cooling total input current	A	13,3	28,4
EER	W/W	4,10	3,57
Heating performance 30 °C / 35 °C (4)			
Heating capacity	kW	33,4	61,6
Input power	kW	8,4	16,0
Water flow rate system side	l/h	5729	10650
Heating total input current	A	13,8	25,4
COP	W/W	4,00	3,86

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

		HMG0350	HMG0600
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)			
Pdesignh	kW	24	51
SCOP	W/W	3,90	3,90
ηsh	%	153,00	153,00
Efficiency energy class		A++	A++
Cooling capacity with low leaving water temp (UE n° 2016/2281)			
ηsc	%	173,00	181,00
SEER	W/W	4,40	4,60

(1) Efficiencies for low temperature applications (35 °C)

		HMG0350P	HMG0600P
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)			
Pdesignh	kW	24	52
SCOP	W/W	4,00	4,01
ηsh	%	157,00	157,50
Efficiency energy class		A++	A++
Cooling capacity with low leaving water temp (UE n° 2016/2281)			
ηsc	%	183,00	186,60
SEER	W/W	4,65	4,74

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

		HMG0350	HMG0600
Electric data			
Rated current input (1)	A	22,0	52,0
Power supply			
Power supply		380-415V 3N ~ 50Hz	380-415V 3N ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		HMG0350P	HMG0600P
Electric data			
Rated power input (1)	kW	13,40	25,60
Power supply			
Power supply		380-415V 3N ~ 50Hz	380-415V 3N ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

GENERAL TECHNICAL DATA

		HMG0350	HMG0600
Compressor			
Type	type	Inverter rotary	
Number	no.	1	2
Circuits	no.	1	2
Refrigerant	type	R32	
Refrigerant load circuit 1 (1)	kg	5,5	5,5
Refrigerant load circuit 2 (1)	kg	-	5,5
System side heat exchanger			
Type	type	Shell and tube	
Number	no.	1	1
Connections (in/out)	Type	G1" 1/2 (male)	G2" (male)
Fan			
Type	type	Axial	
Fan motor	type	Inverter	
Number	no.	2	2
Air flow rate	m^3/h	12600	24000
Sound data calculated in cooling mode (2)			
Sound power level	dB(A)	81,0	86,0
Sound pressure level (10 m)	dB(A)	49,5	54,3
Sound pressure level (1 m)	dB(A)	65,0	69,0

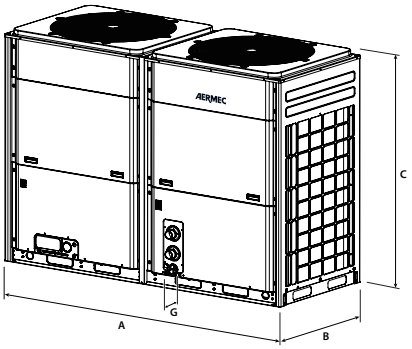
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

		HMG0350P	HMG0600P
Compressor			
Type	type	Inverter rotary	
Number	no.	1	2
Circuits	no.	1	2
Refrigerant	type	R32	
Compressor			
Refrigerant load circuit 1	kg	5,20	5,35
Refrigerant load circuit 2	kg	-	5,35
System side heat exchanger			
Type	type	Brazed plate	
Number	no.	1	1
Connections (in/out)	Type	Gas maschio	
Fan			
Type	type	Axial	
Fan motor	type	Inverter	
Number	no.	2	2
Air flow rate	m^3/h	12600	24000
Sound data calculated in cooling mode (1)			
Sound power level	dB(A)	81,0	86,0
Sound pressure level (10 m)	dB(A)	-	-
Sound pressure level (1 m)	dB(A)	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

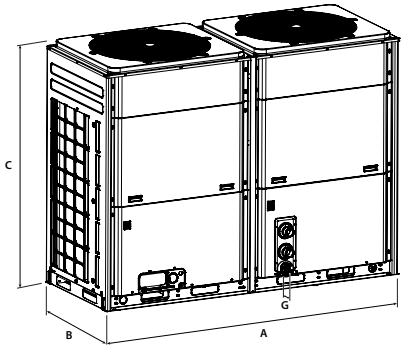
HMG



		HMG0350	HMG0600
Dimensions and weights			
A	mm	1340	2200
B	mm	765	880
C	mm	1605	1675
G	mm	80	85
D	mm	1420	2267
E	mm	920	1030
F	mm	1775	1867
Net weight	kg	405,0	686,0
Weight for transport	kg	422,0	722,0

G: tap protrusion

HMG_P



		HMG0350P	HMG0600P
Dimensions and weights			
A	mm	1340	2200
B	mm	765	880
C	mm	1605	1675
G	mm	37	57
D	mm	1775	1867
E	mm	1420	2267
F	mm	905	1030
Net weight	kg	323,0	609,0
Weight for transport	kg	340,0	645,0

G: tap protrusion

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

ANLI

Reversible air/water heat pump

Cooling capacity 29,0 ÷ 42,3 kW – Heating capacity 31,4 ÷ 33,3 kW

- **Version with built-in hydronic kit inverter**
- **High efficiency also at partial loads**
- **Production of hot domestic water (d.H.W.)**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible inverter heat pump for outdoor use suitable for responding to heating / cooling requests and the production of domestic hot water. Equipped with inverter compressor, axial fans, external copper coils with aluminum fins, plate heat exchanger on the system side.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
It can be combined in systems with hydronic terminals or even with traditional radiators and perfectly meets the needs of the residential market: low noise, easy installation.

VERSIONS

° Standard
P With on/off pump
X With inverter pump

FEATURES

Operating field

Work at full load up to 42 °C outside air temperature in the summer season with the possibility of producing hot water up to 60 °C (for more details refer to the technical documentation).

Components

— High efficiency scroll and Twin rotary compressors with permanent magnet DC motors of "high side" type (with high pressure casing), designed for variable speed operation
— Differential pressure switch / flow switch as standard
— Water filter
— High efficiency heat exchangers
— Axial flow fan units for extremely quiet operation
— Fitted with EMC filters

Integrated hydronic kit

The built-in hydraulic kit includes:
— Expansion vessel
— Safety valve water side
— Air vent valve

Inverter pumps variable speed pump with water side pressure transducer installed and unit mounted microprocessor, capable of controlling various operating modes:
— ΔP constant: the differential pressure between pump inlet and outlet is kept constant, the number of revolutions is reduced with the progressive closing of the terminals;
— ΔP variable: the differential pressure is reduced as the flow rate decreases, to take into account the lower pressure drops along the supply pipes to the terminals (recommended if the development of these pipes is high).

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.
— Capable of variable water flow rates on primary circuit (terminals with 2-way valves);
— Perfect water temperature control even in systems with low water content;
— Suitable for heat pump mode summer operation to provide domestic hot water (DHW) with the DCPX fan speed controller accessory (when provided).

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
VT: Anti-vibration supports.
BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

NB: if the SAF thermo-accumulator is used, the MOD485-BL accessory is not required.

FACTORY FITTED ACCESSORIES

KR: Anti-freeze electric heater for the plate heat exchanger.
KRB: Electric anti-freeze resistance kit for base.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	101
AERBAC-MODU	°,P,X	•
AERLINK	°,P,X	•
AERSET	°,P,X	•
MODU-485BL	°,P,X	•
MULTICONTROL	°,P,X	•
PR3	°,P,X	•
SAF (1)	°,P,X	•
SDHW (2)	°,P,X	•
SGD	°,P,X	•
SPLW (3)	°,P,X	•
VMF-CRP	°,P,X	•

(1) For more information about SAF refer to the dedicated documentation.
(2) Probe required for MULTICONTROL for managing the domestic hot water system.
(3) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	101
PR4	°,P,X	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

BSKW: Electric heater kit

Model	Ver	101
BS6KW400T	°,P,X	•
BS9KW400T	°,P,X	•

DCPX: Condensation control temperature

Ver	101
°, P, X	DCPX53

VT: Antivibration

Ver	101
°, P, X	VT15

KR: electric heater for the heat exchanger

Ver	101
°, P, X	KR100

A grey background indicates the accessory must be assembled in the factory

KRB: Electric heater for the base

Ver	101
°, P, X	KRB3 (1)

(1) Incompatible with the condensate collection basin accessory with integrated resistance.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3,4	**ANLI**
5,6,7	**Size** 101
8	**Model**
H	Heat pump
9	**Version**
°	Standard
P	With on/off pump
X	With inverter pump
10	**Heat recovery**
°	Without heat recovery
11	**Coils**
R	Copper pipes-copper fins
S	Tinned copper
V	Copper pieps-Coated aluminium fins
°	Alluminium
12	**Operating field (1)**
°	Electronic thermostatic expansion valve
13	**Evaporator**
°	Standard
14	**Power supply**
T	400V 3N ~ 50Hz

(1) Water produced up to +4 °C. For different temperature please contact the factory.

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

ANLI - (H°)

Size		101
Cooling performance 12 °C / 7 °C (1)		
Cooling capacity	kW	28,9
Input power	kW	11,7
Cooling total input current	A	16,0
EER	W/W	2,48
Water flow rate system side	l/h	4986
Pressure drop system side	kPa	50
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	31,5
Input power	kW	11,3
Heating total input current	A	16,0
COP	W/W	2,78
Water flow rate system side	l/h	5458
Pressure drop system side	kPa	59

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANLI - (HX)

Size		101
Cooling performance 12 °C / 7 °C (1)		
Cooling capacity	kW	29,3
Input power	kW	11,9
Cooling total input current	A	18,0
EER	W/W	2,47
Water flow rate system side	l/h	4986
Useful head system side	kPa	175
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	31,2
Input power	kW	11,5
Heating total input current	A	17,0
COP	W/W	2,70
Water flow rate system side	l/h	5458
Useful head system side	kPa	158

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANLI - (HP)

Size		101
Cooling performance 12 °C / 7 °C (1)		
Cooling capacity	kW	29,2
Input power	kW	11,7
Cooling total input current	A	17,0
EER	W/W	2,49
Water flow rate system side	l/h	4986
Useful head system side	kPa	92
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	31,2
Input power	kW	11,4
Heating total input current	A	17,0
COP	W/W	2,74
Water flow rate system side	l/h	5458
Useful head system side	kPa	76

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

ANLI - (H°)

Size		101
Cooling performance 23 °C / 18 °C (1)		
Cooling capacity	kW	42,3
Input power	kW	13,1
Cooling total input current	A	19,0
EER	W/W	3,22
Water flow rate system side	l/h	7301
Pressure drop system side	kPa	107
Heating performance 30 °C / 35 °C (2)		
Heating capacity	kW	33,3
Input power	kW	9,5
Heating total input current	A	13,0
COP	W/W	3,51
Water flow rate system side	l/h	5763
Pressure drop system side	kPa	66

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANLI - (HX)

Size		101
Cooling performance 23 °C / 18 °C (1)		
Cooling capacity	kW	42,3
Input power	kW	14,3
Cooling total input current	A	21,0
EER	W/W	2,96
Water flow rate system side	l/h	7301
Useful head system side	kPa	81
Heating performance 30 °C / 35 °C (2)		
Heating capacity	kW	33,3
Input power	kW	10,5
Heating total input current	A	15,0
COP	W/W	3,17
Water flow rate system side	l/h	5763
Useful head system side	kPa	147

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANLI - (HP)

Size		101
Cooling performance 23 °C / 18 °C (1)		
Cooling capacity	kW	42,3
Input power	kW	14,3
Cooling total input current	A	21,0
EER	W/W	2,96
Water flow rate system side	l/h	7301
Useful head system side	kPa	81
Heating performance 30 °C / 35 °C (2)		
Heating capacity	kW	33,3
Input power	kW	10,5
Heating total input current	A	15,0
COP	W/W	3,17
Water flow rate system side	l/h	5763
Useful head system side	kPa	147

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			101
Cooling capacity with low leaving water temp (UE n° 2016/2281)			
SEER	°	W/W	3,81
	P,X	W/W	3,57
ηsc	°	%	149,20
	P,X	%	139,80
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)			
Pdesignh	°,P,X	kW	-
SCOP	°,X	W/W	3,23
	P	W/W	3,25
ηsh	°,X	%	126,00
	P	%	127,00
Efficiency energy class	°,P,X		A+

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

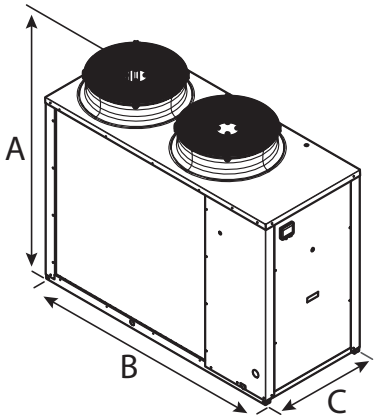
Size			101
Electric data			
Maximum current (FLA)	°	A	21,0
	P	A	24,4
	X	A	25,5
Peak current (LRA)	°,P,X	A	-

GENERAL TECHNICAL DATA

Size			101
Compressor			
Type	°,P,X	type	Scroll
Number	°,P,X	no.	1
Compressor regulation	°,P,X	Type	Inverter
Circuits	°,P,X	no.	1
Refrigerant	°,P,X	type	R410A
Refrigerant charge (1)	°,P,X	kg	4,5
System side heat exchanger			
Type	°,P,X	type	Brazed plate
Number	°,P,X	no.	1
Hydraulic connections			
Connections (in/out)	°,P,X	Type	Gas - F
Sizes (in/out)	°,P,X	Ø	1"1/4
Fan			
Type	°,P,X	type	Axial
Fan motor	°,P,X	type	On/Off
Number	°,P,X	no.	2
Air flow rate	°,P,X	m^3/h	13200
Sound data calculated in cooling mode (2)			
Sound power level	°,P,X	dB(A)	76,0
Sound pressure level (10 m)	°,P,X	dB(A)	44,5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			101
Dimensions and weights			
A	°,P,X	mm	1450
B	°,P,X	mm	1750
C	°,P,X	mm	750
Empty weight	°	kg	293
	P,X	kg	308

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Tel. 0442633111 - Telefax 044293577
www.aermec.com

ANK 020-150

Reversible air/water heat pump

Cooling capacity 6,8 ÷ 39,8 kW – Heating capacity 8,0 ÷ 35,3 kW

- **Production of hot water up to 60 °C**
- **Production of hot domestic water with external temperatures from –20 °C up to 42 °C**
- **Compact dimensions**
- **Quick & easy installation**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.
It's optimised for use in heating mode, and can be combined not only with low-temperature emission systems such as floor heating or fan coils, but also conventional radiators.
Equipped with scroll compressors, axial fans, external coil with aluminium louvers, plate heat exchanger on the side.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A With storage tank and pump
P With pump

FEATURES

Operating field

Working at full load up to -20°C outside air temperature in winter, and up to 46°C in summer. Possibility production technical hot water production up to 60°C (for more information see the technical documentation).

Soft-start

Version with Integrated hydronic kit

To have a Plug & Play solution is also available the version with the integrated Hydronic group that contains the main hydraulic components including the water filter.

Inverter fan

Inverter fans as standard in size up 020 to 085 in all versions.

■ *The DCPX accessory is not required for these sizes.*

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring
VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the

VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
VT: Anti-vibration supports.

BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
KRB: Electric anti-freeze resistance kit for base.
BDX: Condensate drip with resistance

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	020	030	040	045	050	085	100	150
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•
AERSET	°,A,P	•	•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•
SDHW (1)	°,A,P	•	•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	•
SPLW (2)	°,A,P	•	•	•	•	•	•	•	•
VMF-CRP	°,A,P	•	•	•	•	•	•	•	•

(1) Probe required for MULTICONTROL for managing the domestic hot water system.
(2) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	020	030	040	045	050	085	100	150
PR4	°,A,P	•	•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

Condensation control temperature

Ver	020	030	040	045	050	085	100	150
°, A, P	-	-	-	-	-	-	DCPX53	DCPX53

The accessory cannot be fitted on the configurations indicated with -

Electric heater kit with case IP44

Ver	020	030	040	045	050	085	100	150
Power supply: M								
°, A, P	BS4KW230M, BS6KW230M	BS4KW230M, BS6KW230M	BS4KW230M, BS6KW230M	-	-	-	-	-
Power supply: °								
°, A, P	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T

Antivibration

Ver	020	030	040	045	050	085	100	150
°, P	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15
A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15	VT15

Device for peak current reduction.

Ver	020	030	040	045	050	085	100	150
°, A, P	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Electric heater for the base.

Ver	020	030	040	045	050	085	100	150
°, A, P	KRB1 (1)	KRB2 (1)	KRB2 (1)	KRB2 (1)	KRB2 (1)	KRB2 (1)	KRB3 (1)	KRB3 (1)

(1) Incompatible with the condensate collection basin accessory with integrated resistance.
A grey background indicates the accessory must be assembled in the factory

Condensate drip

Ver	020	030	040	045	050	085	100	150
°, A, P	BDX8	BDX9	BDX9	BDX9	BDX9	BDX9	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**ANK**
4,5,6		**Size** 020, 030, 040, 045, 050, 085, 100, 150
7		**Model**
	H	Heat pump
8		**Version**
	°	Standard
	A	With storage tank and pump
	P	With pump
9		**Execution**
	°	Standard
10		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
11		**Operating field**
	Y	Low temperature mechanic thermostatic valve (1)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (3)
12		**Evaporator**
	°	Standard
13		**Power supply**
	M	230V ~ 50Hz (4)
	°	400V 3N ~ 50Hz (5)

(1) Water produced from 0 °C ÷ -8 °C
(2) Water produced from +4 °C up to +0 °C
(3) Water produced up to +4 °C
(4) Only for ANK 020 ÷ 045 sizes
(5) For ANK 020 ÷ 045 sizes

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

ANK - (°) / 12/7 °C - 40/45 °C

Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,8	8,2	9,6	11,7	-	-	-	-
Input power	kW	2,3	2,8	3,2	3,7	-	-	-	-
Cooling total input current	A	11,0	13,0	16,0	19,0	-	-	-	-
EER	W/W	2,92	2,91	2,97	3,16	-	-	-	-
Water flow rate system side	l/h	1179	1406	1649	2018	-	-	-	-
Pressure drop system side	kPa	16	9	14	14	-	-	-	-
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	8,0	10,0	10,9	13,5	-	-	-	-
Input power	kW	2,5	3,1	3,4	3,8	-	-	-	-
Heating total input current	A	12,0	15,0	17,0	19,0	-	-	-	-
COP	W/W	3,16	3,24	3,15	3,50	-	-	-	-
Water flow rate system side	l/h	1376	1738	1881	2332	-	-	-	-
Pressure drop system side	kPa	22	14	18	19	-	-	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,8	8,2	10,5	11,6	13,1	15,5	25,3	29,3
Input power	kW	2,3	2,8	3,5	4,0	4,3	5,2	8,1	10,0
Cooling total input current	A	4,3	5,6	7,1	7,7	8,7	11,0	17,0	20,0
EER	W/W	2,93	2,91	2,98	2,93	3,03	3,00	3,12	2,92
Water flow rate system side	l/h	1169	1406	1811	1997	2253	2677	4362	5056
Pressure drop system side	kPa	16	9	16	14	18	24	32	36
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	8,0	10,0	12,2	14,0	15,3	17,4	27,1	33,3
Input power	kW	2,5	3,1	3,8	4,2	4,4	5,0	8,3	10,5
Heating total input current	A	4,7	6,2	7,6	8,0	9,0	10,0	18,0	21,0
COP	W/W	3,21	3,24	3,25	3,38	3,48	3,46	3,24	3,19
Water flow rate system side	l/h	1376	1738	2117	2430	2656	3021	4689	5774
Pressure drop system side	kPa	22	14	22	21	25	31	37	47

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANK - (A/P) / 12/7 °C - 40/45 °C

Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,9	8,2	9,7	11,8	-	-	-	-
Input power	kW	2,3	2,8	3,2	3,7	-	-	-	-
Cooling total input current	A	12,0	14,0	16,0	20,0	-	-	-	-
EER	W/W	2,99	2,96	3,02	3,17	-	-	-	-
Water flow rate system side	l/h	1179	1406	1649	2018	-	-	-	-
Useful head system side	kPa	78	71	62	70	-	-	-	-
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	7,9	9,9	10,8	13,4	-	-	-	-
Input power	kW	2,5	3,1	3,4	3,9	-	-	-	-
Heating total input current	A	13,0	15,0	18,0	20,0	-	-	-	-
COP	W/W	3,17	3,25	3,16	3,45	-	-	-	-
Water flow rate system side	l/h	1376	1738	1881	2332	-	-	-	-
Useful head system side	kPa	72	58	52	57	-	-	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,9	8,2	10,6	11,7	13,2	15,7	25,6	29,7
Input power	kW	2,3	2,8	3,5	4,0	4,3	5,2	8,2	10,4
Cooling total input current	A	4,6	6,0	7,5	8,3	9,3	11,0	18,0	22,0
EER	W/W	3,00	2,97	3,05	2,95	3,06	3,03	3,12	2,87
Water flow rate system side	l/h	1169	1406	1811	1997	2253	2677	4362	5056
Useful head system side	kPa	78	82	70	81	74	63	115	144
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	7,9	9,9	12,1	13,9	15,2	17,3	26,8	33,0
Input power	kW	2,4	3,0	3,7	4,2	4,4	5,0	8,4	10,8
Heating total input current	A	5,0	6,6	8,0	8,6	9,6	11,0	19,0	23,0
COP	W/W	3,22	3,26	3,27	3,35	3,46	3,44	3,18	3,05
Water flow rate system side	l/h	1376	1738	2117	2430	2656	3021	4689	5774
Useful head system side	kPa	72	76	61	68	59	50	105	109

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

ANK - (°) / 23/18 °C - 30/35 °C

Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,5	11,4	13,3	16,3	-	-	-	-
Input power	kW	2,5	2,9	3,4	3,9	-	-	-	-
Cooling total input current	A	12,0	14,0	17,0	19,0	-	-	-	-
EER	W/W	3,86	3,86	3,94	4,19	-	-	-	-
Water flow rate system side	l/h	1652	1969	2310	2826	-	-	-	-
Pressure drop system side	kPa	31	18	27	27	-	-	-	-
Heating performance 30 °C / 35 °C (2)									
Heating capacity	kW	8,5	10,6	11,6	14,0	-	-	-	-
Input power	kW	2,2	2,6	2,8	3,3	-	-	-	-
Heating total input current	A	10,0	12,0	14,0	16,0	-	-	-	-
COP	W/W	3,96	4,04	4,08	4,30	-	-	-	-
Water flow rate system side	l/h	1473	1830	2001	2424	-	-	-	-
Pressure drop system side	kPa	25	15	21	20	-	-	-	-

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,5	11,4	14,7	16,2	18,2	21,7	34,0	39,4
Input power	kW	2,4	2,9	3,7	4,2	4,5	5,5	8,8	10,9
Cooling total input current	A	4,5	5,8	7,4	8,0	9,1	11,0	18,0	22,0
EER	W/W	3,88	3,86	3,95	3,89	4,02	3,96	3,86	3,61
Water flow rate system side	l/h	1637	1969	2536	2797	3155	3749	5889	6826
Pressure drop system side	kPa	31	18	31	27	35	47	58	66
Heating performance 30 °C / 35 °C (2)									
Heating capacity	kW	8,5	10,6	13,0	14,6	16,2	18,2	29,2	35,6
Input power	kW	2,1	2,6	3,1	3,5	3,8	4,3	6,9	8,8
Heating total input current	A	4,0	5,2	6,2	6,8	7,7	8,9	15,0	18,0
COP	W/W	4,03	4,04	4,20	4,15	4,31	4,18	4,21	4,07
Water flow rate system side	l/h	1473	1830	2253	2525	2799	3137	5041	6147
Pressure drop system side	kPa	25	15	25	22	28	33	43	53

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANK - (A/P) / 23/18 °C - 30/35 °C

Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,6	11,5	13,4	16,4	-	-	-	-
Input power	kW	2,4	2,9	3,4	3,9	-	-	-	-
Cooling total input current	A	12,0	14,0	17,0	20,0	-	-	-	-
EER	W/W	3,99	3,93	4,00	4,18	-	-	-	-
Water flow rate system side	l/h	1652	1969	2310	2826	-	-	-	-
Useful head system side	kPa	62	47	29	32	-	-	-	-
Heating performance 30 °C / 35 °C (2)									
Heating capacity	kW	8,6	10,8	11,9	13,8	-	-	-	-
Input power	kW	2,2	2,6	2,9	3,4	-	-	-	-
Heating total input current	A	11,0	13,0	15,0	17,0	-	-	-	-
COP	W/W	3,88	4,11	4,10	4,11	-	-	-	-
Water flow rate system side	l/h	1486	1877	2061	2397	-	-	-	-
Useful head system side	kPa	58	65	58	79	-	-	-	-

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,5	11,5	14,8	16,3	18,4	21,8	34,3	39,8
Input power	kW	2,4	2,9	3,6	4,2	4,5	5,5	8,9	11,4
Cooling total input current	A	5,1	6,5	8,1	9,2	10,0	12,0	19,0	24,0
EER	W/W	4,00	3,98	4,06	3,92	4,05	3,99	3,85	3,48
Water flow rate system side	l/h	1637	1969	2536	2797	3155	3749	5889	6826
Useful head system side	kPa	62	70	45	55	38	16	66	51
Heating performance 30 °C / 35 °C (2)									
Heating capacity	kW	8,4	10,5	12,9	14,5	16,1	18,0	28,9	35,3
Input power	kW	2,1	2,6	3,0	3,5	3,8	4,3	7,0	9,2
Heating total input current	A	4,6	5,9	6,9	7,9	8,8	10,0	16,0	20,0
COP	W/W	4,07	4,08	4,26	4,12	4,28	4,16	4,11	3,85
Water flow rate system side	l/h	1473	1830	2253	2525	2799	3137	5041	6147
Useful head system side	kPa	69	73	56	65	54	45	95	90

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Energy index ANK - 400V

Size			020	030	040	045	050	085	100	150
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
Seasonal efficiency	°	%	119,80	124,10	129,80	129,80	135,00	135,00	149,40	142,30
	A,P	%	120,70	125,00	132,50	130,10	135,40	137,10	146,60	137,00
SEER	°	W/W	3,07	3,18	3,32	3,32	3,45	3,45	3,81	3,63
	A,P	W/W	3,09	3,20	3,59	3,33	3,46	3,50	3,74	3,50
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)										
Efficiency energy class	°		A+	A+	A+	A+	A+	A+	A++	A++
	A,P		A+	A+	A+	A+	A+	A+	A++	A+
ηsh	°	%	132,00	133,00	137,00	136,00	141,00	133,00	153,00	153,00
	A,P	%	135,00	137,00	140,00	138,00	143,00	135,00	150,00	145,00
SCOP	°	W/W	3,38	3,40	3,50	3,48	3,60	3,40	3,90	3,90
	A,P	W/W	3,45	3,50	3,58	3,53	3,65	3,45	3,83	3,70

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

Energy index ANK - 230V

Size			020	030	040	045
Power supply: M						
SEER - 12/7 (EN14825: 2018) (1)						
Seasonal efficiency	°	%	119,60	124,10	127,80	139,00
	A,P	%	121,10	125,00	130,70	138,40
SEER	°	W/W	3,07	3,18	3,27	3,55
	A,P	W/W	3,10	3,20	3,34	3,54
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)						
Efficiency energy class	°,A,P		A+	A+	A+	A+
Pdesignh	°,A,P	kW	7	9	10	12
ηsh	°	%	130,00	133,00	134,00	139,00
	A,P	%	133,00	137,00	137,00	141,00
SCOP	°	W/W	3,33	3,40	3,43	3,55
	A,P	W/W	3,40	3,50	3,50	3,60

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			020	030	040	045	050	085	100	150
Power supply: M										
Electric data										
Maximum current (FLA)	°	A	14,0	19,0	22,0	25,0	-	-	-	-
	A	A	14,6	20,1	22,9	26,3	-	-	-	-
	P	A	14,6	20,1	22,9	26,3	-	-	-	-
Peak current (LRA)	°,P	A	-	-	-	-	-	-	-	-
	A	A	-	-	-	-	-	-	-	-
Peak current with Soft-start	°	A	45,0	45,0	45,0	45,0	-	-	-	-
	A	A	45,7	45,7	45,7	46,3	-	-	-	-
	P	A	45,7	45,7	45,7	46,3	-	-	-	-

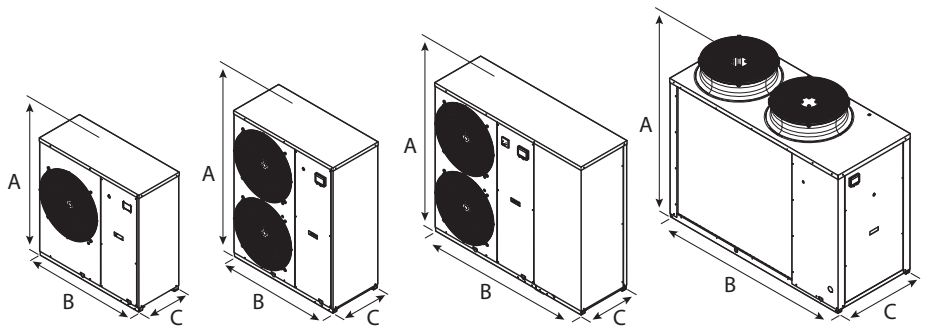
Size			020	030	040	045	050	085	100	150
Power supply: °										
Electric data										
Maximum current (FLA)	°	A	6,0	8,0	9,0	11,0	12,0	12,0	22,0	26,0
	A,P	A	6,8	8,4	9,8	11,9	13,1	13,6	23,6	28,9
Peak current (LRA)	°	A	40,0	40,0	54,0	61,0	71,0	91,0	73,0	105,0
	A,P	A	40,4	41,0	55,0	62,6	72,6	92,6	74,6	107,8
Peak current with Soft-start	°,A,P	A	-	-	-	-	-	-	-	-

GENERAL TECHNICAL DATA

Size			020	030	040	045	050	085	100	150
Compressor										
Type	°,A,P	type				Scroll				
Compressor regulation	°,A,P	Type				On-off				
Number	°,A,P	no.	1	1	1	1	1	1	2	2
Circuits	°,A,P	no.	1	1	1	1	1	1	1	1
Refrigerant	°,A,P	type				R410A				
Refrigerant charge (1)	°,A,P	kg	2,9	4,3	4,3	5,5	6,0	6,0	12,0	12,6
System side heat exchanger										
Type	°,A,P	type				Brazed plate				
Number	°,A,P	no.	1	1	1	1	1	1	1	1
Hydraulic connections										
Connections (in/out)	°,A,P	Type				Gas - F				
Size (in)	°,A,P	Ø				1"¼				
Size (out)	°,A,P	Ø				1"¼				
Fan										
Type	°,A,P	type				Axial				
Fan motor	°,A,P	type	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Asynchronous	Asynchronous
Number	°,A,P	no.	1	1	2	2	2	2	2	2
Air flow rate	°,A,P	m^3/h	3500	8000	8000	7500	7500	7500	14500	14500
Sound data calculated in cooling mode (2)										
Sound power level	°,A,P	dB(A)	68,0	70,5	70,5	70,5	70,5	70,5	77,0	78,0
Sound pressure level (10 m)	°,A,P	dB(A)	36,7	39,2	39,1	39,1	39,1	39,1	72,6	73,6

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



ANK H-HP **ANK HA** **ANK 100-150 H-HP-HA**

Size			020	030	040	045	050	085	100	150
Dimensions and weights										
A	°,A,P	mm	1028	1281	1281	1281	1281	1281	1450	1450
B	°,P	mm	1000	1000	1000	1000	1000	1000	1750	1750
	A	mm	1358	1450	1450	1450	1450	1450	1750	1750
C	°,A,P	mm	400	400	450	450	450	450	750	750
Empty weight	°	kg	118	149	152	165	172	174	296	341
	A	kg	160	211	214	232	238	241	364	412
	P	kg	123	154	157	175	182	184	314	362

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- **Full inverter system**
- **Enamelled tank**
- **Electronic anode**
- **Micro-channel exchanger**

DESCRIPTION

The heat pump water heater line Aermec represents a sustainable solution for domestic hot water production, ensuring high energy savings due to their high efficiency.
Unlike conventional water heaters, heat pump water heaters generate hot water by utilising heat in the air, thus reducing electricity costs.
The new air to water heat pump water heaters SHW feature a new natural refrigerant R290, a cutting-edge choice in domestic solutions, to provide hot water in a sustainable, environmentally friendly and comfortable manner.
R290 is a natural refrigerant with a global warming potential (GWP) of 3.
The series SHW is an innovation that perfectly combines silent operation and compact design with unrivalled efficiency. Its space-saving design lends itself to any home environment, while its advanced heat pump technology optimises energy saving, ensuring high energy performance.
The units SHW200S and SHW250S are also equipped with an additional coil that enables integration of an auxiliary heat source.

FEATURES

The heat pump water heater SHW is designed to provide the best possible experience and maximum savings by means of:
— **optimised to reduce noise and energy consumption**
— **coil for integral sources**: (only for models SHW200S and SHW250S)
— **automatic anti-legionella cycle**: to eliminate and prevent potential legionella formation
— **ductable up to 40m**: for models with wall installation and up to 11m for models with floor installation
— **standard electric heater**
— **The units SHW080 - SHW110 - SHW150 are equipped with an electric power supply cable with Schuko plug**

All units in the series SHW are equipped with a micro-channel heat exchanger. This fully covers the tank, significantly increasing the exchange surface area with respect to a classic tank with an internal coil. Furthermore, the heat exchanger is made up of high-quality materials that increase its resistance to high temperatures and corrosion.

VERSIONS

Wall-mount installation/ductable unit.
SHW080 - SHW110 - SHW150
Floor installation/ductable unit.
SHW150 - SHW200 - SHW250
Floor installation/ductable unit with solar coil.
SHW200S - SHW250S

special functions

Eco: allows the user to set time periods during which priority for DHW production is assigned to the heat pump.
Boost: this function enables to heat water faster by using both the heat pump and the electric heater simultaneously.
Holiday Mode: this function ensures hot water is available when returning home after a holiday period, preventing the tank from remaining operational during the absence period. Furthermore, the unit activates the anti-legionella cycle to obtain hot, bacteria-free water.
Quantity display: the dedicated icon on the display enables to immediately check the amount of water available in the tank
Photovoltaic Contact: when this contact is enabled, the unit's set point is increased, enabling electrical heater and compressor simultaneous operation.
External Contact: When this contact is enabled, the unit can start according to the set point.

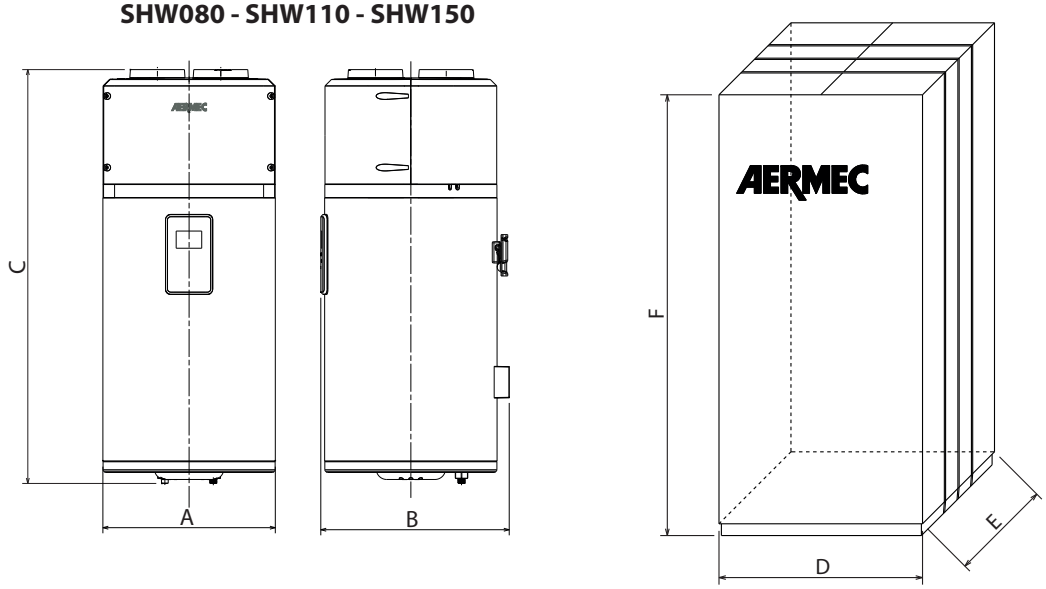
TECHNICAL DATA

		SHW080	SHW110	SHW150	SHW200	SHW200S	SHW250	SHW250S
Storage tank (DHW)								
Nominal volume of the tank	L	82	102	149	192	185	246	240
Operating range	°C	-7 ~ 45	-7 ~ 45	-7 ~ 45	-7 ~ 45	-7 ~ 45	-7 ~ 45	-7 ~ 45
Power supply		220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Maximum operating pressure	Mpa	0,8	0,8	0,8	0,7	0,7	0,7	0,7
Solar heat exchanger		no	no	no	no	si	no	si
Anode type		Electronic anode	Electronic anode	Electronic anode	Electronic anode	Electronic anode	Electronic anode	Electronic anode
Protection rating		IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4
Insulation thickness	mm	40	40	40	50	50	50	50
Set temperature	°C	56	56	56	56	56	56	56
Rated power input (PdC)	W	370	370	370	535	535	535	535
Rated power input (electrical heater)	W	1200	1200	1200	1500	1500	1500	1500
Rated total power input	W	1570	1570	1570	2035	2035	2035	2035
DHW temperature produced (heat pump only)	°C	35 ~ 65	35 ~ 65	35 ~ 65	35 ~ 65	35 ~ 65	35 ~ 65	35 ~ 65
DHW temperature produced (heat pump only + electrical heater)	°C	35 ~ 75	35 ~ 75	35 ~ 75	35 ~ 75	35 ~ 75	35 ~ 75	35 ~ 75
Refrigerant gas								
Type	type	R290	R290	R290	R290	R290	R290	R290
Refrigerant charge	kg	0,12	0,12	0,12	0,15	0,15	0,15	0,15
GWP		3,0	3,0	3,0	3,0	3,0	3,0	3,0
Sound data								
Sound power level	dB(A)	50,0	50,0	50,0	50,0	50,0	50,0	50,0
Sound pressure level (1 m)	dB(A)	37,7	37,7	37,7	36,0	36,0	36,0	36,0
Electric data								
Type of electrical connection	type	Schuko	Schuko	Schuko	Al magnetotermico	Al magnetotermico	Al magnetotermico	Al magnetotermico
Magnet circuit breaker	A	16	16	16	16	16	16	16
Section of the power cable	mm^2	3*1.5	3*1.5	3*1.5	3*1.5	3*1.5	3*1.5	3*1.5
Performance specifications								
COP (external air 2°C)	W/W	2,38	2,55	2,65	2,80	2,43	2,67	2,81
COP (external air 7°C)	W/W	2,91	2,79	3,03	3,27	3,27	3,20	3,29
COP (external air 14°C)	W/W	3,07	3,32	3,39	3,52	3,55	3,45	3,46
Heating time (external air 7°C)	h	4h26	5h38	8h37	8h20	6h43	10h31	10h5
Heating time (external air 14°C)	h	3h48	4h47	7h11	6h55	6h07	9h02	8h42
Air flow rate	m^3/h	180	180	180	300	300	300	300
Load Profile of Water Heaters, type		M	M	L	L	L	XL	L
Input power in standby (Pes)	W	15,3	19,3	22,5	22,0	35,0	43,0	35,0
Maximum volume of usable hot water at 40°C / V40	l	103,8	133,0	190,0	221,0	229,0	314,0	313,0
Efficiency energy class		A+	A+	A+	A+	A+	A+	A+
Reference temperature of hot water (θ'WH)	°C	53,75	53,88	52,98	54,11	53,11	54,05	53,70
Connections								
Water outlet	inch	R 1/2" M	R 1/2" M	R 1/2" M	Rp 3/4	Rp 3/4	Rp 3/4	Rp 3/4
Inlet water / Condensate drainage	inch	R 1/2" M	R 1/2" M	R 1/2" M	Rp 3/4	Rp 3/4	Rp 3/4	Rp 3/4
Safety valve	inch	R 1/2" M	R 1/2" M	R 1/2" M	Rp 3/4	Rp 3/4	Rp 3/4	Rp 3/4
Maximum length of ducts (supply + exhaust) (Ø160 - PVC pipe)	m	40	40	40	11	11	11	11
Maximum length of ducts (supply + exhaust) (Ø160 - corrugated pipe)	m	22	22	22	6	6	6	6
Maximum length of ducts (supply + exhaust) (Ø180 - PVC pipe)	m	-	-	-	22	22	22	22
Maximum length of ducts (supply + exhaust) (Ø180 - corrugated pipe)	m	-	-	-	13	13	13	13
Maximum working pressure of auxiliary coil	MPa	-	-	-	-	2,0	-	2,0
Auxiliary serpentine surface	m^2	-	-	-	-	0,585	-	0,585
Dimensions and weights								
Empty weight	kg	51	54	64	87	97	99	108
Weight for transport	kg	58,0	62,0	83,0	110,0	120,0	122,0	132,0

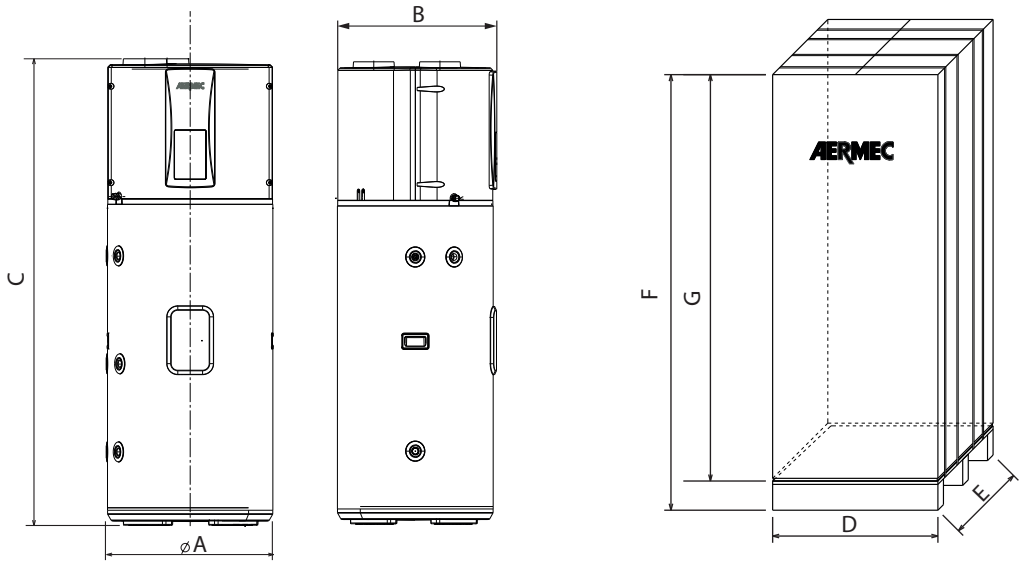
Performance specifications: in accordance EN 16147;
COP and noise data are calculated in the laboratory: The COP value is obtained with an outside air temperature of 2°C - 7°C - 14°C, inlet water temperature 10°C and the produced water set of 55°C for the (units SHW080-SHW110 according to EN 16147), inlet water temperature of 10°C and produced water set of 54°C for the (units SHW150-SHW200-SHW200S-SHW250-SHW250S).
Sound power level: measured with an outdoor air temperature of 7°C, an inlet water temperature of 10°C, and a supply water temperature setpoint of 55°C in accordance with EN12102.
In addition to the electronic anode, the unit is also equipped with a magnesium rod to protect the unit in the event of a power outage.

DIMENSIONS

SHW080 - SHW110 - SHW150



SHW200 - SHW200S - SHW250 - SHW250S



		SHW080	SHW110	SHW150	SHW200	SHW200S	SHW250	SHW250S
Dimensions and weights								
A	mm	492	492	492	600	600	600	600
B	mm	538	538	538	615	615	615	615
C	mm	1184	1334	1694	1697	1697	1985	1985
Net weight	kg	51,0	54,0	64,0	87,0	97,0	99,0	108,0
Dimensions and weights for transport								
D	mm	587	587	587	736	736	736	736
E	mm	587	587	587	695	695	695	695
F	mm	1247	1397	1894	1940	1940	2250	2250
G	mm	-	-	-	1810	1810	2120	2120
Weight for transport	kg	58,0	62,0	83,0	110,0	120,0	122,0	132,0

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MIC

Air-water chiller

Cooling capacity 3 kW

- **Easy and quick to install compact**
- **Separable hydraulic circuit and refrigerant**
- **AISI304 stainless steel tank and pump impeller**
- **R513A refrigerant gas in A1 class with low GWP**

DESCRIPTION

Air-cooled modular refrigerant to produce chilled water, designed and created to satisfy the cooling needs of industrial buildings.
Unit with alternative hermetic compressor and coaxial heat exchanger positioned in a 20-litre AISI304 stainless steel tank.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

FEATURES

Operating field

Operation at full load up to 45 °C external air temperature. Unit can produce chilled water 20 °C up to -10 °C.

Refrigerant circuit

The refrigerant circuit is in the upper part of the machine and can be lifted up to be cleaned, or completely removed if a broken module needs to be replaced, leaving the hydronic part in place to ensure the system works properly.

Hydraulic components

Standard configuration: is fitted as standard
— One differential pressure switch
— An interception tap on the heat exchanger, used to remove the upper part of the machine or to balance the load.
— An AISI304 STAINLESS steel tank
— Connection pipes made of copper
— Brass valves
— 4 STAINLESS steel grooved joints and 2 caps. The water input and output can only be defined in a unit without pumps by the client at the installation stage.

In the configuration with pumps, as well as the components supplied as standard, there is a choice between two pumps with different head.

Modularity

Thanks to its modular construction, the installation can be adapted to suit specific system development needs whilst guaranteeing improved safety and reliability.
As a result, the cooling capacity can be easily increased over time, at a limited cost.

The modules are easy to install and link together from the hydronic point of view, thanks to the connections with grooved joints.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

Modularity

There are 3 solutions for dealing with several modules:

Solution 1: no interconnection between modules
Each module works independently on its own set point.
If it is necessary to switch all the machines on or off, each module must be operated.

Solution 2: through remote ON-OFF contact (Master/Slave)
With this solution, several modules can be connected in parallel and, where necessary, the start-up and switch-off of all modules can be coordinated with a single command.
The electrical panel has a contact for remote ON/OFF, which can be used to connect several modules in parallel, so that the start-up of the first unit (Master) results in the cascade start-up of all subsequent connected units (Slaves).
Each module works independently on its own set point.

Solution 3: via an external supervisor (BMS)
The modules can be controlled with an external supervisor with this solution using a ModBus (accessory) communication module.

ACCESSORIES

ETHERNET-RS485: Gateway to change a Modbus RS485 serial into a TCP-IP serial.
FB_MIC: Air filter to protect the coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
MIC_RUE: Swivel wheels with locking system
MODBUSMICS: This accessory allows you to manage up to multiple units, making available a serial in ModBus RTU protocol on RS485, for supervision with an external BMS.

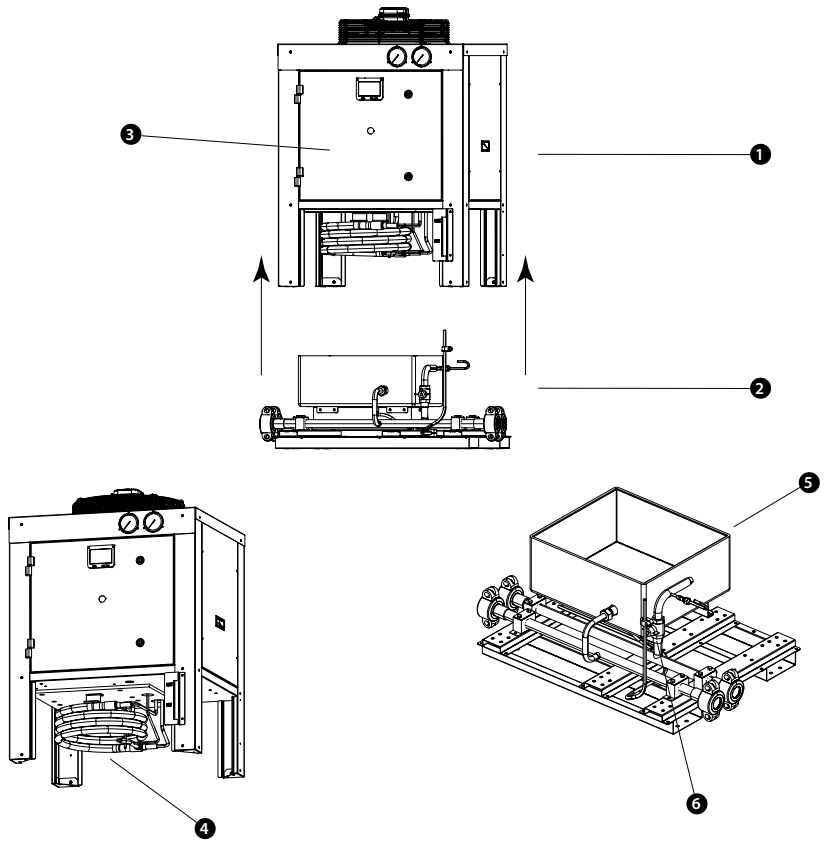
DCPXMICS: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

ACCESSORIES COMPATIBILITY

Accessory	MIC01°	MIC01P1	MIC01P2
ETHERNET-RS485	•	•	•
FB_MIC	•	•	•
MODBUSMICS	•	•	•

Accessory	MIC01°	MIC01P1	MIC01P2
DCPXMICS	•	•	•

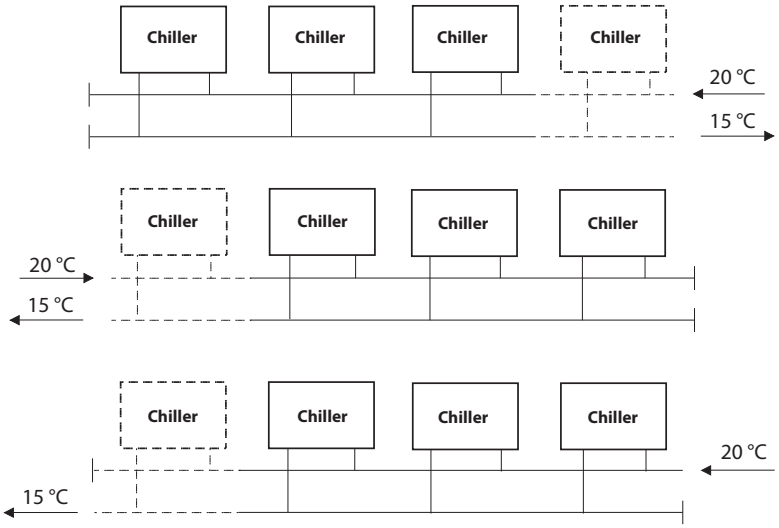
SEPARABLE HYDRAULIC CIRCUIT AND REFRIGERANT

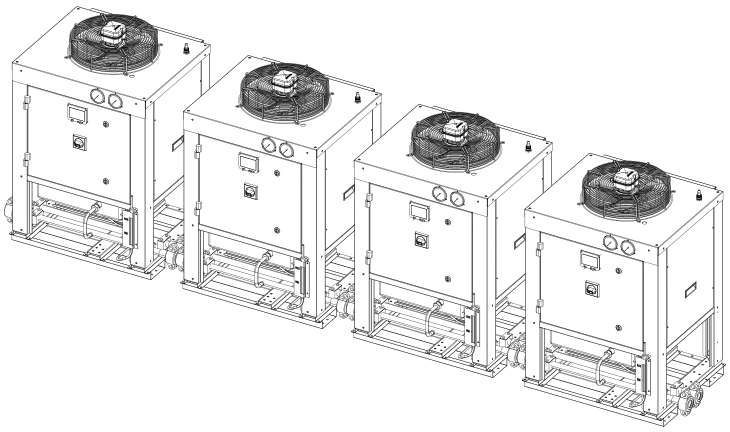


Key:
1 Refrigerant circuit
2 Hydraulic circuit
3 Electric power board
4 Conduit pipe evaporator
5 AISI304 stainless steel tank
6 Shut-off tap

MODULARITY OPTIONS

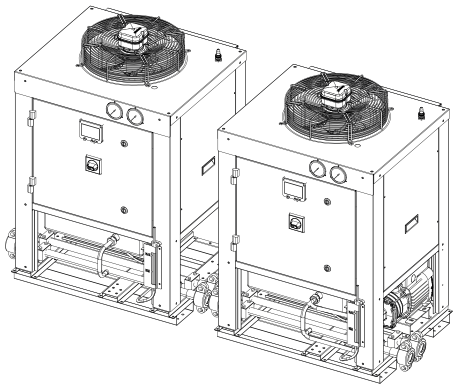
Units without pumps

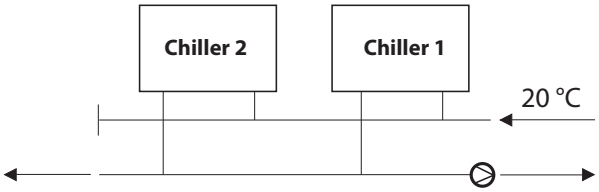




- *Each machine is supplied with 4 grooved joints and two caps (machine input and output defined by the user depending on where the caps are positioned).*

Several units and only one with a pump





- *The chiller with pump needs to be the first in the «chain» and the water entry position is secured.*

CONFIGURATOR

Field		Description
1,2,3		**MIC**
4,5		**Size** 01
6		**Version**
	°	Cooling only
7		**Coils**
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
8		**Fans**
	F	Phase cut
	°	Standard
9,10		**Integrated hydronic kit**
	00	With storage tank without pumps
	P1	With storage tank and low head pump
	P2	With storage tank and high head pump
11		**Power supply**
	M	230V ~ 50Hz (without Schuko plug)
	N	230V ~ 50Hz (with Schuko plug)

PERFORMANCE SPECIFICATIONS

		MIC01°	MIC01P1	MIC01P2
Cooling performances 20 °C / 15 °C - (14511:2022) (1)				
Cooling capacity	kW	3,0	2,9	2,9
Input power	kW	1,3	1,5	1,6
Input current	A	5,8	7,7	8,7
EER	W/W	2,31	2,01	1,83
Water flow rate system side	l/h	516	483	469
Pressure drop system side	kPa	10	-	-
Useful head system side	kPa	-	328	529

(1) Data EN 14511:2022; System side water heat exchanger 20 °C / 15 °C;; External air 32 °C

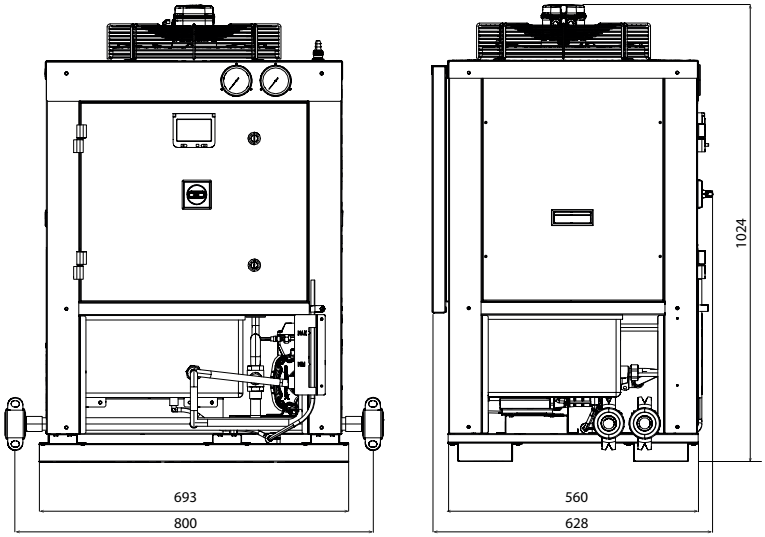
ELECTRIC DATA

		MIC01°	MIC01P1	MIC01P2
Cooling only mode				
Maximum current (FLA)	A	9,0	12,1	13,4
Peak current (LRA)	A	30,0	33,0	34,3

GENERAL TECHNICAL DATA

		MIC01°	MIC01P1	MIC01P2
System side hydraulic connections				
Sizes (in/out)	Ø		1"	
System side heat exchanger				
Type	type		Coassiale	
Number	no.	1	1	1
Water content	l	0,8	0,8	0,8
Minimum water flow rate	l/h	100	100	100
Maximum water flow rate	l/h	1200	1200	1200
Hydronic kit				
Storage tank capacity	l	20	20	20
Fan				
Type	type		Axial	
Fan motor	type		Asynchronous	
Number	no.	1	1	1
Air flow rate	m^3/h	1500	1500	1500
Total fan input power	W	120	120	120
Total fan input current	A	0,4	0,4	0,4

DIMENSIONS



		MIC01°	MIC01P1	MIC01P2
Dimensions and weights				
A	mm	1024	1024	1024
B	mm	628	628	628
C	mm	800	800	800

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ANL 021-202

Air-water chiller

Cooling capacity 5,7 ÷ 43,3 kW

- **Standard version**
- **Version with Integrated hydronic kit system side**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Chillers for external installation for chilled water production with scroll compressors, axial fans, external copper coils with aluminum louvers from size 020 to 090, microchannel from size 102 to 202.
The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A With storage tank and pump
N With increased pump
P With pump
Q With storage tank and increased pump

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to -10°C.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to facilitate installation.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

Double mechanical thermostat

On the configurator it is also possible to select the option **"W"** double mechanical thermostatic valve for low temperatures.
Using two electronic valves in parallel guarantees a precise and efficient control in a wide operating range. This allows them to produce chilled water from -10 °C to +18 °C.

■ *The option is only available for sizes from 050 to 090 in the °-A-Q versions and from size 102 to 202 in all versions.*

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RA: Anti-freeze electric heater for the buffer tank.
KR: Anti-freeze electric heater for the plate heat exchanger.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	021	026	031	041	050	070	080	090	102	152	202
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
SPLW (1)	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
VMF-CRP	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•

(1) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	021	026	031	041	050	070	080	090	102	152	202
PR4	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

DCPX: Condensation control temperature

Ver	021	026	031	041	050	070	080	090	102	152	202
°, A, P	DCPX50	DCPX50	DCPX50	DCPX50	DCPX50	DCPX50	DCPX50	DCPX50	DCPX52	DCPX52	DCPX52
N	-	-	-	-	-	-	-	-	DCPX52	DCPX52	DCPX52
Q	-	-	-	-	DCPX50	DCPX50	DCPX50	DCPX50	DCPX52	DCPX52	DCPX52

VT: Antivibration

Ver	021	026	031	041	050	070	080	090	102	152	202
°, P	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15	VT15
A	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15	VT15	VT15	VT15
N	-	-	-	-	-	-	-	-	VT15	VT15	VT15
Q	-	-	-	-	VT15	VT15	VT15	VT15	VT15	VT15	VT15

DRE: Device for peak current reduction

Ver	021	026	031	041	050	070	080	090	102	152	202
°, A, P, Q	-	-	-	-	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)
N	-	-	-	-	-	-	-	-	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

KR: electric heater for the plate heat exchanger

Ver	021	026	031	041	050	070	080	090	102	152	202
°, P	KR2	KR2	KR2	KR2	KR2	KR2	KR2	KR2	KR100	KR100	KR100
A, Q	-	-	-	-	KR2	KR2	KR2	KR2	KR100	KR100	KR100
N	-	-	-	-	-	-	-	-	KR100	KR100	KR100

A grey background indicates the accessory must be assembled in the factory

RA: electric heater for the buffer tank

Ver	021	026	031	041	050	070	080	090	102	152	202
A	RA	RA	RA	RA	RA	RA	RA	RA	RA100	RA100	RA100
Q	-	-	-	-	RA	RA	RA	RA	RA100	RA100	RA100

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**ANL**
4,5,6	**Size** 021, 026, 031, 041, 050, 070, 080, 090, 102, 152, 202
7	**Model**
°	Cooling only
8	**Version**
°	Standard
A	With storage tank and pump
N	With increased pump (1)
P	With pump
Q	With storage tank and increased pump (2)
9	**Heat recovery**
D	With desuperheater (3)
°	Without heat recovery
10	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium (4)
11	**Operating field**
W	Double mechanical thermostat for low temperature (5)
Y	Low temperature mechanic thermostatic valve (6)
Z	Low temperatures mechanic thermostatic valve (7)
°	Standard mechanic thermostatic valve (8)
12	**Evaporator**
°	Standard
13	**Power supply**
M	230V ~ 50Hz (9)
°	400V 3N ~ 50Hz (10)

(1) Only for ANL 102 ÷ 202 sizes
(2) Only for ANL 050 ÷ 202 sizes
(3) If the unit is also fitted with one of the low temperature valves in addition to the desuperheater, it is necessary to always guarantee a water temperature of 35°C at the inlet of the heat exchanger. The desuperheater is only available in sizes from 050 to 090 in the version with storage tank "A", and from size 102 to 202 in all versions.
(4) Sizes from 102 to 202 have a micro-channel coil
(5) Water produced from -10 °C to 18 °C; Option available only for sizes starting from 050 to 090 in the °-A-Q versions and from 102 to 202 in all versions
(6) Water produced from 0 °C up to -10 °C
(7) Water produced from +4 °C up to +0 °C
(8) Water produced up to +4 °C
(9) Only for ANL 021 ÷ 041 sizes
(10) For all sizes

PERFORMANCE SPECIFICATIONS

ANL - ° (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	13,4	16,4	20,4	22,2	26,5	32,9	42,8
Input power	kW	1,9	2,0	2,5	3,3	4,1	4,9	6,4	6,8	8,0	10,2	13,5
Cooling total input current	A	4,0	4,0	5,0	6,0	9,0	10,0	12,0	13,0	16,0	19,0	25,0
EER	W/W	3,03	3,04	2,99	2,90	3,26	3,33	3,18	3,28	3,32	3,21	3,18
Water flow rate system side	l/h	979	1065	1288	1649	2302	2834	3522	3831	4570	5669	7387
Pressure drop system side	kPa	21	21	22	24	30	30	36	50	58	61	68

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - P (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	13,5	16,6	20,6	22,4	26,8	33,2	43,2
Input power	kW	1,8	2,0	2,5	3,2	4,1	4,9	6,4	6,7	8,1	10,5	13,8
Cooling total input current	A	4,0	5,0	5,0	7,0	10,0	11,0	13,0	14,0	17,0	21,0	27,0
EER	W/W	3,11	3,12	3,07	2,97	3,31	3,38	3,23	3,35	3,32	3,15	3,13
Water flow rate system side	l/h	979	1065	1288	1649	2302	2834	3522	3831	4570	5669	7387
Useful head system side	kPa	73	73	71	65	76	72	57	52	84	115	91

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - N (400V 3N ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	-	-	-	-	-	-	-	-	26,8	33,3	43,3
Input power	kW	-	-	-	-	-	-	-	-	8,5	10,6	13,8
Cooling total input current	A	-	-	-	-	-	-	-	-	18,0	21,0	27,0
EER	W/W	-	-	-	-	-	-	-	-	3,17	3,15	3,13
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4570	5669	7387
Useful head system side	kPa	-	-	-	-	-	-	-	-	140	185	159

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - A (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	13,5	16,6	20,6	22,4	26,8	33,2	43,2
Input power	kW	1,8	2,0	2,5	3,2	4,1	4,9	6,4	6,7	8,1	10,5	13,8
Cooling total input current	A	4,0	5,0	5,0	7,0	10,0	11,0	13,0	14,0	17,0	21,0	27,0
EER	W/W	3,11	3,12	3,07	2,97	3,31	3,38	3,23	3,35	3,32	3,15	3,13
Water flow rate system side	l/h	979	1065	1288	1649	2302	2834	3522	3831	4570	5669	7387
Useful head system side	kPa	73	73	71	65	76	72	57	52	84	115	91

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - Q (400V 3N ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	-	-	-	-	13,6	16,7	20,7	22,5	26,8	33,3	43,3
Input power	kW	-	-	-	-	4,2	5,0	6,5	6,8	8,5	10,6	13,8
Cooling total input current	A	-	-	-	-	10,0	11,0	13,0	14,0	18,0	21,0	27,0
EER	W/W	-	-	-	-	3,24	3,33	3,19	3,31	3,17	3,15	3,13
Water flow rate system side	l/h	-	-	-	-	2302	2834	3522	3831	4570	5669	7387
Useful head system side	kPa	-	-	-	-	160	159	144	140	140	185	159

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			021	026	031	041	050	070	080	090	102	152	202
SEER - 12/7 (EN14825:2018) with standard fans (1)													
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A,P	W/W	4,18	4,20	4,17	4,10	4,16	4,34	4,19	4,31	4,11	4,11	4,10
	N	W/W	-	-	-	-	-	-	-	-	- (2)	- (2)	- (2)
	Q	W/W	-	-	-	-	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	°	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A,P	%	164,00	164,80	163,60	161,00	163,40	170,70	164,60	169,40	161,30	161,20	161,10
	N	%	-	-	-	-	-	-	-	-	- (2)	- (2)	- (2)
	Q	%	-	-	-	-	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEER - 23/18 (EN14825: 2018) with standard fans (3)													
SEER	°	W/W	4,34	4,35	4,31	4,21	4,55	4,68	4,49	4,61	4,83	4,73	4,69
	A,P	W/W	4,49	4,51	4,48	4,47	4,55	4,64	4,57	4,66	4,49	4,25	4,28
	N	W/W	-	-	-	-	-	-	-	-	4,15	4,18	4,23
	Q	W/W	-	-	-	-	4,18	4,44	4,35	4,49	4,15	4,18	4,23
Seasonal efficiency	°	%	170,40	170,90	169,20	165,20	179,10	184,30	176,60	181,50	190,30	186,00	184,70
	A,P	%	176,70	177,50	176,00	175,60	179,00	182,40	179,80	183,50	176,60	167,00	168,00
	N	%	-	-	-	-	-	-	-	-	163,10	164,20	166,00
	Q	%	-	-	-	-	164,30	174,50	171,10	176,70	163,10	164,20	166,00
SEPR - (EN14825: 2018) High temperature with standard fans (3)													
SEPR	°	W/W	5,92	5,92	5,85	5,69	6,36	6,50	6,21	6,43	6,79	6,58	6,49
	A,P	W/W	6,56	6,57	6,45	6,21	6,74	6,90	6,55	6,78	6,68	6,18	6,17
	N	W/W	-	-	-	-	-	-	-	-	5,91	6,09	6,10
	Q	W/W	-	-	-	-	6,03	6,28	6,08	6,30	5,91	6,09	6,10

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			021	026	031	041	050	070	080	090	102	152	202
Electric data													
Maximum current (FLA)	°,A,N,P,Q	A	-	-	-	-	-	-	-	-	-	-	-
Peak current (LRA)	°,A,N,P,Q	A	-	-	-	-	-	-	-	-	-	-	-

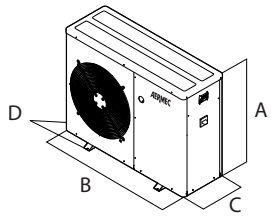
GENERAL TECHNICAL DATA

		ANL021	ANL026	ANL031	ANL041	ANL050	ANL070	ANL080	ANL090	ANL102	ANL152	ANL202
Compressor												
Type	type						Scroll					
Compressor regulation	Type						On-Off					
Number	no.	1	1	1	1	1	1	1	1	2	2	2
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type						R410A					
Refrigerant charge (1)	kg	1,2	1,2	1,2	1,3	2,8	2,8	3,0	3,9	5,9	5,9	5,9
System side heat exchanger												
Type	type						Brazed plate					
Number	no.	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections												
Sizes (in/out)	Ø						1"1/4					
Fan												
Type	type						Axial					
Fan motor	type						Asynchronous with phase cut					
Number	no.	1	1	1	1	2	2	2	2	2	2	2
Air flow rate	m^3/h	2500	2500	3500	3500	7200	7200	7300	7200	14000	13500	13500
Sound data calculated in cooling mode (2)												
Sound power level	dB(A)	61,0	61,0	68,0	68,0	69,0	69,0	69,0	68,0	76,0	77,0	78,0
Sound pressure level (1 m)	dB(A)	29,8	29,8	36,8	36,8	37,6	37,6	37,6	36,6	44,5	45,5	46,5

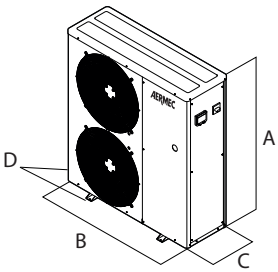
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

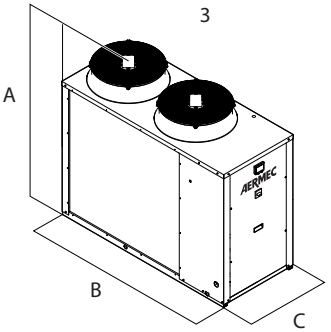
1



2



3



1 ANL 021-041
2 ANL 050-070
3 ANL 102-202

Size			021	026	031	041	050	070	080	090	102	152	202
Dimensions and weights													
A	°¸P	mm	1000	1000	1000	1000	1252	1252	1252	1252	1450	1450	1450
	A	mm	1015	1015	1015	1015	1281	1281	1281	1281	1450	1450	1450
	N	mm	-	-	-	-	-	-	-	-	1450	1450	1450
	Q	mm	-	-	-	-	1281	1281	1281	1281	1450	1450	1450
B	°¸P	mm	900	900	900	900	1124	1124	1124	1124	1750	1750	1750
	A	mm	1124	1124	1124	1124	1165	1165	1165	1165	1750	1750	1750
	N	mm	-	-	-	-	-	-	-	-	1750	1750	1750
	Q	mm	-	-	-	-	1165	1165	1165	1165	1750	1750	1750
C	°¸P	mm	310	310	310	310	384	384	384	384	750	750	750
	A	mm	384	384	384	384	550	550	550	550	750	750	750
	N	mm	-	-	-	-	-	-	-	-	750	750	750
	Q	mm	-	-	-	-	550	550	550	550	750	750	750
D	°¸P	mm	354	354	354	354	428	428	428	428	-	-	-
	A	mm	428	428	428	428	-	-	-	-	-	-	-
	N	mm	-	-	-	-	-	-	-	-	-	-	-
	Q	mm	-	-	-	-	-	-	-	-	-	-	-
Empty weight	°	kg	86	86	86	86	120	120	120	156	270	293	329
	A	kg	103	103	103	103	147	147	147	183	338	364	400
	N	kg	-	-	-	-	-	-	-	-	338	364	400
	P	kg	91	91	91	91	127	127	163	163	288	314	350
	Q	kg	-	-	-	-	151	151	151	187	338	364	400

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

ANL 021H -203H

Reversible air/water heat pump

Cooling capacity 5,7 ÷ 49,1 kW – Heating capacity 6,2 ÷ 43,3 kW

- **It is possible to produce hot domestic water**
- **Compact dimensions**
- **Quick & easy installation**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.
Equipped with scroll compressors, axial fans, external coil with aluminium louvers, plate heat exchanger on the side.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A With storage tank and pump
N With increased pump
P With pump
Q With storage tank and increased pump

FEATURES

Operating field

Full load up to 46 ° C ambient air temperature withthe possibility to produce chilled water down to -10° C in cooling mode (for more details refer to the technical documentation).

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to facilitate installation.

Inverter fans

Inverter fans from size 031 to 091 for all sizes.

■ *The DCPX accessory is not required for these sizes.*

Double mechanical thermostat

On the configurator it is also possible to select the option **"W"** double mechanical thermostatic valve for low temperatures.
Using two electronic valves in parallel guarantees a precise and efficient control in a wide operating range. This allows them to produce chilled water from -10 °C to +18 °C.

■ *The option is available only for sizes starting from 051 to 091 in the °-A-Q versions and from size 103 to 203 in all versions.*

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply

water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

VT: Anti-vibration supports.

BDX: Condensate drip.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RA: Anti-freeze electric heater for the buffer tank.

KR: Anti-freeze electric heater for the plate heat exchanger.

KRB: Electric anti-freeze resistance kit for base.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	021	026	031	041	051	071	081	091	103	153	203
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
SDHW (1)	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
SPLW (2)	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
VMF-CRP	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•

(1) Probe required for MULTICONTROL for managing the domestic hot water system.
(2) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	021	026	031	041	051	071	081	091	103	153	203
PR4	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

DCPX: Condensation control temperature

Ver	021	026	031	041	051	071	081	091	103	153	203
°, A, P	DCPX51	DCPX51	-	-	-	-	-	-	DCPX53	DCPX53	DCPX53
Q	-	-	-	-	-	-	-	-	DCPX53	DCPX53	DCPX53

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	021	026	031	041	051	071	081	091	103	153	203
°, P	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15	VT15
A	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15	VT15	VT15	VT15
N	-	-	-	-	-	-	-	-	VT15	VT15	VT15
Q	-	-	-	-	VT15	VT15	VT15	VT15	VT15	VT15	VT15

Condensate drip

Ver	021	026	031	041	051	071	081	091	103	153	203
°, P	BDX5	BDX5	BDX5	BDX5	BDX5	BDX5	BDX5	BDX5	-	-	-
A	BDX5	BDX5	BDX5	BDX5	BDX6	BDX6	BDX6	BDX6	-	-	-
Q	-	-	-	-	BDX6	BDX6	BDX6	BDX6	-	-	-

The accessory cannot be fitted on the configurations indicated with -

DRE: Device for peak current reduction

Ver	021	026	031	041	051	071	081	091	103	153	203
°, A, P, Q	-	-	-	-	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)
N	-	-	-	-	-	-	-	-	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

KR: electric heater for the heat exchanger

Ver	021	026	031	041	051	071	081	091	103	153	203
°, P	KR2	KR2	KR2	KR2	KR2	KR2	KR2	KR2	KR100	KR100	KR100
A	-	-	-	-	KR2	KR2	KR2	KR2	KR100	KR100	KR100
N, Q	-	-	-	-	-	-	-	-	KR100	KR100	KR100

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

RA: Anti-freeze electric heater for the buffer tank

Ver	021	026	031	041	051	071	081	091	103	153	203
A	RA	RA	RA	RA	RA	RA	RA	RA	RA100	RA100	RA100
Q	-	-	-	-	RA	RA	RA	RA	RA100	RA100	RA100

A grey background indicates the accessory must be assembled in the factory

KRB: Electric heater for the base

Ver	021	026	031	041	051	071	081	091	103	153	203
°, A, N, P, Q	-	-	-	-	-	-	-	-	KRB3 (1)	KRB3 (1)	KRB3 (1)

(1) Incompatible with the condensate collection basin accessory with integrated resistance.
The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**ANL**
4,5,6		**Size** 021, 026, 031, 041, 051, 071, 081, 091, 103, 153, 203
7		**Model**
	H	Heat pump
8		**Version**
	°	Standard
	A	With storage tank and pump
	N	With increased pump (1)
	P	With pump
	Q	With storage tank and increased pump (2)
9		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
10		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
11		**Operating field**
	W	Double mechanical thermostat for low temperature (4)
	°	Standard mechanic thermostatic valve
12		**Evaporator**
	°	Standard
13		**Power supply**
	M	230V ~ 50Hz (5)
	°	400V 3N ~ 50Hz (6)

(1) Only for ANL 103 ÷ 203 sizes
(2) Only for ANL 051 ÷ 203 sizes
(3) The desuperheater must be intercepted during heating mode. If the unit is also fitted with one of the low temperature valves in addition to the desuperheater, during cold operation, it is necessary to always guarantee a water temperature of 35°C at the inlet of the heat exchanger. It is only available in sizes from 051 to 091 in the version with storage tank "A", and from size 103 to 203 in all versions.
(4) Water produced from -10 °C to 18 °C; Option available only for sizes starting from 051 to 091 in the °-A-Q versions and from 103 to 203 in all versions
(5) Only for ANL 021 ÷ 041 sizes
(6) Only for ANL 021 ÷ 203 sizes

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

ANL - (°) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	13,4	16,3	20,1	21,6	25,6	31,8	40,3
Input power	kW	1,8	2,0	2,5	3,2	4,3	5,8	6,5	6,6	9,0	10,8	13,8
Cooling total input current	A	3,7	4,2	4,7	6,2	8,7	9,7	12,0	13,0	16,0	19,0	25,0
EER	W/W	3,10	3,10	3,05	2,95	3,12	2,82	3,07	3,30	2,85	2,94	2,92
Water flow rate system side	l/h	979	1065	1289	1649	2294	2807	3452	3713	4398	5467	6929
Pressure drop system side	kPa	30	31	32	30	34	35	44	60	55	57	62
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,4	9,8	13,2	17,3	20,9	22,0	26,1	35,3	41,8
Input power	kW	1,9	2,1	2,6	3,0	4,0	5,1	5,9	6,2	8,6	10,8	12,3
Heating total input current	A	3,8	4,4	5,4	6,8	9,5	10,0	13,0	14,0	17,0	19,0	25,0
COP	W/W	3,26	3,33	3,23	3,27	3,26	3,37	3,56	3,56	3,05	3,28	3,40
Water flow rate system side	l/h	1078	1217	1460	1700	2294	3007	3638	3827	4529	6137	7265
Pressure drop system side	kPa	36	40	41	37	38	39	53	72	70	70	78

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANL - (A) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	13,4	16,3	20,1	21,6	25,6	31,8	40,3
Input power	kW	1,9	2,1	2,5	3,3	4,5	6,0	6,7	6,7	9,6	11,8	14,9
Cooling total input current	A	4,0	4,5	5,0	6,6	9,3	10,0	13,0	13,0	17,0	21,0	27,0
EER	W/W	2,98	2,99	2,95	2,88	3,00	2,74	2,99	3,21	2,67	2,69	2,70
Water flow rate system side	l/h	979	1065	1289	1649	2294	2807	3452	3713	4398	5467	6929
Useful head system side	kPa	73	73	71	65	76	72	57	52	88	125	111
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,4	9,8	13,2	17,3	20,9	22,0	26,1	35,3	41,8
Input power	kW	2,0	2,2	2,7	3,1	4,2	5,3	6,1	6,4	9,2	11,8	13,4
Heating total input current	A	4,1	4,7	5,8	7,2	10,0	11,0	14,0	14,0	18,0	21,0	27,0
COP	W/W	3,14	3,21	3,13	3,18	3,13	3,26	3,45	3,45	2,85	2,98	3,11
Water flow rate system side	l/h	1078	1217	1460	1700	2294	3007	3638	3827	4529	6137	7265
Useful head system side	kPa	68	67	65	58	72	65	46	40	64	94	68

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANL - (P) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	13,4	16,3	20,1	21,6	25,6	31,8	40,3
Input power	kW	1,9	2,1	2,5	3,3	4,5	6,0	6,7	6,7	9,6	11,8	14,9
Cooling total input current	A	4,0	4,5	5,0	6,6	9,3	10,0	13,0	13,0	17,0	21,0	27,0
EER	W/W	2,98	2,99	2,95	2,88	3,00	2,74	2,99	3,21	2,67	2,69	2,70
Water flow rate system side	l/h	979	1065	1289	1649	2294	2807	3452	3713	4398	5467	6929
Useful head system side	kPa	73	73	71	65	76	72	57	52	88	125	111
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,4	9,8	13,2	17,3	20,9	22,0	26,1	35,3	41,8
Input power	kW	2,0	2,2	2,7	3,1	4,2	5,3	6,1	6,4	9,2	11,8	13,4
Heating total input current	A	4,1	4,7	5,8	7,2	10,0	11,0	14,0	14,0	18,0	21,0	27,0
COP	W/W	3,14	3,21	3,13	3,18	3,13	3,26	3,45	3,45	2,85	2,98	3,11
Water flow rate system side	l/h	1078	1217	1460	1700	2294	3007	3638	3827	4529	6137	7265
Useful head system side	kPa	68	67	65	58	72	65	46	40	64	94	68

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANL - (Q) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	-	-	-	-	13,4	16,3	20,1	21,6	25,6	31,8	40,3
Input power	kW	-	-	-	-	4,8	6,3	7,1	7,1	10,1	12,0	15,2
Cooling total input current	A	-	-	-	-	9,7	11,0	13,0	14,0	18,0	21,0	27,0
EER	W/W	-	-	-	-	2,81	2,59	2,83	3,04	2,54	2,64	2,66
Water flow rate system side	l/h	-	-	-	-	2294	2807	3452	3713	4398	5467	6929
Useful head system side	kPa	-	-	-	-	160	159	144	140	147	192	170
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	-	-	-	-	13,2	17,3	20,9	22,0	26,1	35,3	41,8
Input power	kW	-	-	-	-	4,5	5,7	6,4	6,8	9,7	12,1	13,7
Heating total input current	A	-	-	-	-	10,0	11,0	14,0	15,0	19,0	21,0	28,0
COP	W/W	-	-	-	-	2,92	3,06	3,24	3,26	2,69	2,92	3,06
Water flow rate system side	l/h	-	-	-	-	2294	3007	3638	3827	4529	6137	7265
Useful head system side	kPa	-	-	-	-	154	151	131	126	107	169	141

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANL - (N) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	-	-	-	-	-	-	-	-	25,8	32,1	40,6
Input power	kW	-	-	-	-	-	-	-	-	9,6	11,4	14,5
Cooling total input current	A	-	-	-	-	-	-	-	-	18,0	21,0	27,0
EER	W/W	-	-	-	-	-	-	-	-	2,68	2,82	2,81
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4398	5467	6929
Useful head system side	kPa	-	-	-	-	-	-	-	-	147	192	170
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	-	-	-	-	-	-	-	-	26,1	35,3	41,8
Input power	kW	-	-	-	-	-	-	-	-	9,7	12,1	13,7
Heating total input current	A	-	-	-	-	-	-	-	-	19,0	21,0	28,0
COP	W/W	-	-	-	-	-	-	-	-	2,69	2,92	3,06
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4529	6137	7265
Useful head system side	kPa	-	-	-	-	-	-	-	-	107	169	141

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

ANL - (°) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,1	11,6	16,1	19,8	24,3	26,1	31,0	38,5	48,8
Input power	kW	1,9	2,1	2,5	3,4	4,4	6,0	6,8	6,8	9,3	11,2	14,3
Cooling total input current	A	3,8	4,3	4,9	6,4	9,0	10,0	13,0	13,0	16,0	19,0	26,0
EER	W/W	3,62	3,62	3,56	3,45	3,64	3,30	3,59	3,85	3,33	3,44	3,41
Water flow rate system side	l/h	1189	1293	1564	2002	2784	3407	4189	4506	5338	6636	8410
Pressure drop system side	kPa	44	46	47	44	50	52	65	88	81	84	92
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	6,5	7,3	8,8	10,2	13,8	18,1	21,8	23,0	27,2	36,8	43,6
Input power	kW	1,6	1,8	2,2	2,7	3,5	4,6	5,2	5,5	7,6	9,6	10,9
Heating total input current	A	3,3	3,8	4,6	6,0	8,1	9,1	11,0	12,0	15,0	17,0	22,0
COP	W/W	3,98	4,06	3,94	3,84	3,97	3,96	4,18	4,18	3,58	3,85	4,00
Water flow rate system side	l/h	1120	1265	1518	1767	2385	3126	3782	3979	4709	6381	7553
Pressure drop system side	kPa	39	43	44	40	41	42	57	78	76	76	84

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANL - (A) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,1	11,6	16,1	19,8	24,3	26,1	31,0	38,5	48,8
Input power	kW	2,0	2,2	2,6	3,5	4,6	6,2	7,0	7,0	9,9	12,3	15,5
Cooling total input current	A	4,2	4,7	5,2	6,8	9,7	11,0	13,0	14,0	17,0	21,0	28,0
EER	W/W	3,48	3,49	3,45	3,36	3,50	3,20	3,49	3,75	3,11	3,13	3,14
Water flow rate system side	l/h	1189	1293	1564	2002	2784	3407	4189	4506	5338	6636	8410
Useful head system side	kPa	63	63	60	51	60	53	31	24	47	63	41
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	6,5	7,3	8,8	10,2	13,8	18,1	21,8	23,0	27,2	36,8	43,6
Input power	kW	1,7	1,9	2,3	2,7	3,6	4,7	5,4	5,7	8,2	10,6	12,1
Heating total input current	A	3,6	4,1	5,0	6,4	8,8	9,8	12,0	13,0	16,0	19,0	24,0
COP	W/W	3,80	3,89	3,79	3,72	3,78	3,81	4,03	4,04	3,31	3,46	3,61
Water flow rate system side	l/h	1120	1265	1518	1767	2385	3126	3782	3979	4709	6381	7553
Useful head system side	kPa	67	64	62	55	69	61	41	34	55	81	53

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANL - (P) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,1	11,6	16,1	19,8	24,3	26,1	31,0	38,5	48,8
Input power	kW	2,0	2,2	2,6	3,5	4,6	6,2	7,0	7,0	9,9	12,3	15,5
Cooling total input current	A	4,2	4,7	5,2	6,8	9,7	11,0	13,0	14,0	17,0	21,0	28,0
EER	W/W	3,48	3,49	3,45	3,36	3,50	3,20	3,49	3,75	3,11	3,13	3,14
Water flow rate system side	l/h	1189	1293	1564	2002	2784	3407	4189	4506	5338	6636	8410
Useful head system side	kPa	63	63	60	51	60	53	31	24	47	63	41
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	6,5	7,3	8,8	10,2	13,8	18,1	21,8	23,0	27,2	36,8	43,6
Input power	kW	1,7	1,9	2,3	2,7	3,6	4,7	5,4	5,7	8,2	10,6	12,1
Heating total input current	A	3,6	4,1	5,0	6,4	8,8	9,8	12,0	13,0	16,0	19,0	24,0
COP	W/W	3,80	3,89	3,79	3,72	3,78	3,81	4,03	4,04	3,31	3,46	3,61
Water flow rate system side	l/h	1120	1265	1518	1767	2385	3126	3782	3979	4709	6381	7553
Useful head system side	kPa	67	64	62	55	69	61	41	34	55	81	53

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANL - (Q) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	-	-	-	-	16,1	19,8	24,3	26,1	31,0	38,5	48,8
Input power	kW	-	-	-	-	4,9	6,5	7,4	7,4	10,5	12,5	15,8
Cooling total input current	A	-	-	-	-	10,0	11,0	14,0	14,0	18,0	22,0	28,0
EER	W/W	-	-	-	-	3,27	3,02	3,30	3,53	2,95	3,07	3,08
Water flow rate system side	l/h	-	-	-	-	2784	3407	4189	4506	5338	6636	8410
Useful head system side	kPa	-	-	-	-	136	135	114	108	79	146	114
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	-	-	-	-	13,8	18,1	21,8	23,0	27,2	36,8	43,6
Input power	kW	-	-	-	-	4,0	5,1	5,8	6,1	8,7	10,9	12,3
Heating total input current	A	-	-	-	-	9,1	10,0	13,0	13,0	17,0	19,0	25,0
COP	W/W	-	-	-	-	3,49	3,55	3,77	3,78	3,11	3,38	3,54
Water flow rate system side	l/h	-	-	-	-	2385	3126	3782	3979	4709	6381	7553
Useful head system side	kPa	-	-	-	-	149	146	125	119	92	159	129

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANL - (N) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz)

Size			021	026	031	041	051	071	081	091	103	153	203
Cooling performance 23 °C / 18 °C (1)													
Cooling capacity		kW	-	-	-	-	-	-	-	-	31,1	38,7	49,0
Input power		kW	-	-	-	-	-	-	-	-	10,2	11,9	15,2
Cooling total input current		A	-	-	-	-	-	-	-	-	18,0	22,0	28,0
EER		W/W	-	-	-	-	-	-	-	-	3,07	3,25	3,23
Water flow rate system side		l/h	-	-	-	-	-	-	-	-	5338	6636	8410
Useful head system side		kPa	-	-	-	-	-	-	-	-	79	146	114
Heating performance 30 °C / 35 °C (2)													
Heating capacity		kW	-	-	-	-	-	-	-	-	27,0	36,6	43,4
Input power		kW	-	-	-	-	-	-	-	-	8,4	10,2	11,7
Heating total input current		A	-	-	-	-	-	-	-	-	17,0	19,0	25,0
COP		W/W	-	-	-	-	-	-	-	-	3,22	3,57	3,71
Water flow rate system side		l/h	-	-	-	-	-	-	-	-	4709	6381	7553
Useful head system side		kPa	-	-	-	-	-	-	-	-	92	159	129

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			021	026	031	041	051	071	081	091	103	153	203
Cooling capacity with low leaving water temp (UE n° 2016/2281)													
SEER	°	W/W	3,13	3,19	3,28	3,34	3,76	3,49	3,80	3,91	3,58	3,74	3,73
	A,P	W/W	3,29	3,36	3,45	3,50	3,89	3,69	3,99	4,16	3,55	3,53	3,55
	N	W/W	-	-	-	-	-	-	-	-	3,14	3,48	3,53
	Q	W/W	-	-	-	-	3,30	3,24	3,53	3,75	3,14	3,48	3,53
ηsc	°	%	122,00	125,00	128,00	131,00	147,00	137,00	149,00	153,00	140,00	146,00	146,00
	A,P	%	129,00	131,00	135,00	137,00	153,00	145,00	157,00	163,00	139,00	138,00	139,00
	N	%	-	-	-	-	-	-	-	-	123,00	136,00	138,00
	Q	%	-	-	-	-	129,00	127,00	138,00	147,00	123,00	136,00	138,00
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)													
Pdesignh	°,A,N,P,Q	kW	-	-	-	-	-	-	-	-	-	-	-
SCOP	°	W/W	3,31	3,39	3,33	3,26	3,44	3,43	3,56	3,50	3,53	3,57	3,69
	A,P	W/W	3,40	3,48	3,41	3,34	3,48	3,48	3,61	3,52	3,45	3,45	3,61
	N	W/W	-	-	-	-	-	-	-	-	3,22	3,35	3,52
	Q	W/W	-	-	-	-	3,22	3,28	3,43	3,39	3,22	3,35	3,52
ηsh	°	%	129,47	132,68	130,12	127,57	134,49	134,10	139,54	137,05	138,02	139,67	144,75
	A,P	%	133,00	136,00	133,00	131,00	136,00	136,00	141,00	138,00	135,00	135,00	141,00
	N	%	-	-	-	-	-	-	-	-	126,00	131,00	138,00
	Q	%	-	-	-	-	126,00	128,00	134,00	133,00	126,00	131,00	138,00
Efficiency energy class	°		A+	A+	A+	A+	A+	A+	A+	A+	A+	A++	A++
	A,P		A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+
	N		-	-	-	-	-	-	-	-	A+	A+	A+
	Q		-	-	-	-	A+	A+	A+	A+	A+	A+	A+

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			021	026	031	041	051	071	081	091	103	153	203
Electric data													
Maximum current (FLA)	°	A	7,0	7,0	7,7	9,7	11,3	13,5	16,3	17,3	22,0	26,0	32,0
	A	A	7,7	7,7	8,4	10,4	12,6	14,8	17,6	18,6	23,9	29,1	35,1
	N	A	-	-	-	-	-	-	-	-	26,2	30,2	36,2
	P	A	69,0	67,0	65,0	63,0	12,6	14,8	17,6	18,6	83,0	194,0	182,0
	Q	A	-	-	-	-	12,8	15,1	17,8	18,8	26,2	30,2	36,2
Peak current (LRA)	°	A	27,5	33,5	36,7	49,7	65,3	75,3	102,3	96,3	76,0	87,0	117,0
	A,P	A	28,2	34,2	37,4	50,4	66,6	76,6	103,6	97,6	77,9	90,1	120,1
	N	A	-	-	-	-	-	-	-	-	80,2	91,2	121,2
	Q	A	-	-	-	-	66,8	76,8	103,8	97,8	80,2	91,2	121,2

GENERAL TECHNICAL DATA

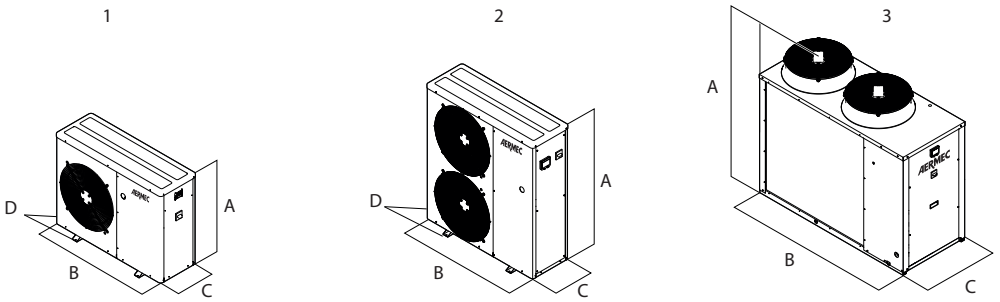
Size		021	026	031	041	051	071	081	091	103	153	203
Compressor												
Type	type						Scroll					
Compressor regulation	Type						On-Off					
Number	no.	1	1	1	1	1	1	1	1	2	2	2
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type						R410A					
Refrigerant charge (1)	kg	1,8	1,8	2,0	2,0	2,9	2,9	3,1	3,9	4,6	5,4	5,7

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size		021	026	031	041	051	071	081	091	103	153	203
System side heat exchanger												
Type	type						Brazed plate					
Number	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	Type						Gas - F					
Sizes (in/out)	Ø						1"1/4					
Fan												
Type	type						Axial					
Fan motor	type	Asynchronous	Asynchronous	Asynchronous	Inverter	Inverter	Inverter	Inverter	Inverter	Asynchronous	Asynchronous	Asynchronous
Number	no.	1	1	1	1	1	2	2	2	2	2	2
Air flow rate	m^3/h	2500	2500	3500	3500	7200	7200	7300	7200	14000	13500	13500
Sound data calculated in cooling mode (2)												
Sound power level	dB(A)	61,0	61,0	68,0	68,0	69,0	69,0	69,0	68,0	76,0	77,0	78,0
Sound pressure level (10 m)	dB(A)	29,8	29,8	36,8	36,8	37,6	37,6	37,6	36,6	44,5	45,5	46,5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



1 ANL 021 - 041
2 ANL 051 - 091
3 ANL 103 - 203

Size			021	026	031	041	051	071	081	091	103	153	203
Dimensions and weights													
A	°,P	mm	1000	1000	1000	1000	1252	1252	1252	1252	1450	1450	1450
	A	mm	1015	1015	1015	1015	1281	1281	1281	1281	1450	1450	1450
	N	mm	-	-	-	-	-	-	-	-	1450	1450	1450
	Q	mm	-	-	-	-	1281	1281	1281	1281	1450	1450	1450
B	°,P	mm	900	900	900	900	1124	1124	1124	1124	1750	1750	1750
	A	mm	1124	1124	1124	1124	1165	1165	1165	1165	1750	1750	1750
	N	mm	-	-	-	-	-	-	-	-	1750	1750	1750
	Q	mm	-	-	-	-	1165	1165	1165	1165	1750	1750	1750
C	°,P	mm	310	310	310	310	384	384	384	384	750	750	750
	A	mm	384	384	384	384	550	550	550	550	750	750	750
	N	mm	-	-	-	-	-	-	-	-	750	750	750
	Q	mm	-	-	-	-	550	550	550	550	750	750	750
D	°,P	mm	354	354	354	354	428	428	428	428	-	-	-
	A	mm	428	428	428	428	-	-	-	-	-	-	-
	N	mm	-	-	-	-	-	-	-	-	-	-	-
	Q	mm	-	-	-	-	-	-	-	-	-	-	-
Empty weight	°	kg	86	86	86	86	120	120	120	156	270	293	329
	A	kg	103	103	103	103	147	147	183	183	338	364	400
	N	kg	-	-	-	-	-	-	-	-	338	364	400
	P	kg	91	91	91	91	127	127	163	163	288	314	350
	Q	kg	-	-	-	-	147	147	183	183	338	364	400

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www.aermec.com

NRK 0090-0150

Reversible air/water heat pump

Cooling capacity 18,4 ÷ 31,0 kW – Heating capacity 20,8 ÷ 34,4 kW

- **Cooling / heating / high-temperature water production even for DHW production.**
- **Water produced up to +65 °C**
- **Heating operations with external temperatures down to -20 °C**
- **Optimised for heating mode**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential, commercial complexes or industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° High efficiency

FEATURES

Operating field

Working at full load up to -20 °C outside air temperature in winter, and up to 48 °C in summer. Hot water production up to 65 °C.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one pumps or storage tank to obtain a solution that allows you to save money and to facilitate installation.

Components

Water filter,flow switch, low and high pressure transducers as standard supply on all units.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

DCPX as standard

Phase-cut device that regulates the fan speed to ensure optimum unit operation in all conditions.

CONTROL

MODUCONTROL control type.
The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating

system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring
VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

VT: Anti-vibration supports.
BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

Refer to the specific "SAF" datasheet for more information about correct system operation, and about the required or recommended accessories. Please consult the VMF system for the production of DHW with a thermal storage tank not supplied by Aermec.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0090	0100	0150
AERBAC-MODU	°	•	•	•
AERLINK	°	•	•	•
AERNET	°	•	•	•
BMConverter	°	•	•	•
MODU-485BL	°	•	•	•
MULTICONTROL	°	•	•	•
PR3	°	•	•	•
SAF (1)	°	•	•	•
SDHW (2)	°	•	•	•
SGD	°	•	•	•
SPLW (3)	°	•	•	•
VMF-CRP	°	•	•	•

(1) For more information about SAF refer to the dedicated documentation.
(2) Probe required for MULTICONTROL for managing the domestic hot water system.
(3) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	0090	0100	0150
PR4	°	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

BSKW: Electric heater kit

Model	Ver	0090	0100	0150
BS6KW400T	°	•	•	•
BS9KW400T	°	•	•	•

BS6KW400T (6kW, 400V 3); BS9KW400T (9kW, 400V 3)

VT: Antivibration

Ver	0090	0100	0150
Integrated hydronic kit: 00, 01, 03, P1, P3			
°	VT15	VT15	VT15

DRE: Device for peak current reduction

Ver	0090	0100	0150
°	DRE10 (1)	DRE10 (1)	DRE15 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRK**
4,5,6,7		**Size** 0090, 0100, 0150
8		**Operating field (1)**
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
11		**Version**
	°	High efficiency
12		**Coils**
	R	Copper pipes-copper fins

Field		Description
	S	Tinned copper
	V	Copper pieps-Coated aluminium fins
	°	Alluminium
13		**Fans**
	°	Standard
14		**Power supply**
	°	400V ~ 3N 50Hz
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
	01	Storage tank with low head pump
	03	Storage tank with high head pump
	P1	Single pump low head
	P3	Single pump high head

(1) Water produced up to +4 °C.
(2) The desuperheater can only be used with cold running.

PERFORMANCE SPECIFICATIONS

NRK - (°) / 12/7 °C - 40/45 °C

Size		0090	0100	0150
Cooling performance 12 °C / 7 °C (1)				
Cooling capacity	kW	18,4	26,4	31,0
Input power	kW	5,8	8,4	9,8
Cooling total input current	A	13,0	18,0	20,0
EER	W/W	3,19	3,15	3,15
Water flow rate system side	l/h	3172	4546	5338
Pressure drop system side	kPa	19	39	54
Heating performance 40 °C / 45 °C (2)				
Heating capacity	kW	20,8	28,7	34,4
Input power	kW	6,1	8,3	10,3
Heating total input current	A	14,0	17,0	21,0
COP	W/W	3,40	3,45	3,34
Water flow rate system side	l/h	3601	4965	5953
Pressure drop system side	kPa	24	45	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRK - (°) / 23/18 °C - 30/35 °C

Size		0090	0100	0150
Cooling performance 23 °C / 18 °C (1)				
Cooling capacity	kW	24,5	34,9	40,9
Input power	kW	6,1	9,0	10,6
Cooling total input current	A	14,0	18,0	22,0
EER	W/W	4,03	3,88	3,86
Water flow rate system side	l/h	4236	6040	7093
Pressure drop system side	kPa	34	69	95
Heating performance 30 °C / 35 °C (2)				
Heating capacity	kW	20,4	28,2	33,8
Input power	kW	5,0	6,7	8,3
Heating total input current	A	11,0	14,0	17,0
COP	W/W	4,11	4,22	4,09
Water flow rate system side	l/h	3521	4866	5833
Pressure drop system side	kPa	23	43	-

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			0090	0100	0150
Cooling capacity with low leaving water temp (UE n° 2016/2281)					
SEER	°	W/W	3,35	3,39	3,42
ηsc	°	%	131,10	132,60	133,80

Size			0090	0100	0150
Integrated hydronic kit: 00					
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (1)					
Efficiency energy class	°		A+	A+	A+
Pdesignh	°	kW	22,00	28,00	34,00
SCOP	°	W/W	3,03	2,98	2,90
ηsh	°	%	118,00	116,00	113,00
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)					
Efficiency energy class	°		A+	A+	A+
Pdesignh	°	kW	21,00	27,00	32,00
SCOP	°	W/W	3,70	3,68	3,60
ηsh	°	%	145,00	144,00	141,00

(1) Efficiencies for average temperature applications (55 °C)
(2) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

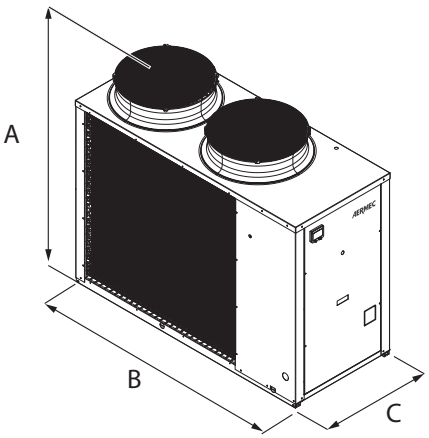
Size			0090	0100	0150
Electric data					
Maximum current (FLA)	°	A	19,1	24,6	29,5
Peak current (LRA)	°	A	104,2	121,2	143,2

GENERAL TECHNICAL DATA

Size			0090	0100	0150
Compressor					
Type	°	type		Scroll	
Compressor regulation	°	Type		On-Off	
Number	°	no.	1	1	1
Circuits	°	no.	1	1	1
Refrigerant	°	type		R410A	
Refrigerant charge (1)	°	kg	13,0	14,0	16,0
System side heat exchanger					
Type	°	type		Brazed plate	
Number	°	no.	1	1	1
Hydraulic connections					
Connections (in/out)	°	Type		Gas-F	
Size (in)	°	Ø		1½"	
Size (out)	°	Ø		1½"	
Fan					
Type	°	type		axials	
Fan motor	°	type		Asynchronous	
Number	°	no.	2	2	2
Air flow rate	°	m^3/h	14200	14200	13700
Sound data calculated in cooling mode (2)					
Sound power level	°	dB(A)	78,0	78,0	78,0
Sound pressure level (10 m)	°	dB(A)	46,5	46,5	46,5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0090	0100	0150
Dimensions and weights					
A	°	mm	1450	1450	1450
B	°	mm	1750	1750	1750
C	°	mm	750	750	750
Empty weight	°	kg	289	328	372

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NRK 0200-0700

Reversible air/water heat pump

Cooling capacity 35,5 ÷ 148 kW
Heating capacity 42,31 ÷ 175 kW

- **Water produced up to +65 °C**
- **Heating operations with external temperatures down to -20 °C**
- **Optimized for operation in heating mode**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.
It's optimised for use in heating mode, and can be combined not only with low-temperature emission systems such as floor heating or fan coils, but also conventional radiators.
Equipped with scroll compressors, axial fans, external coil with aluminium louvers, plate heat exchanger on the side.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -20 °C outside air temperature in winter, and up to 48 °C in summer. Hot water production up to 65 °C.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to facilitate installation.

Components

Water filter,flow switch, low and high pressure transducers as standard supply on all units.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Adjustment includes complete management of the alarms and their log.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.
PRM1: It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.
AERCALM: The aim of the accessory installed in the electric box of the unit is to provide a clean contact for commanding - on the basis of the outside air temperature - a boiler to replace the heat pump. Aercalm must be requested at the time of ordering, as it is installed in the factory.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
AER485P1	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
AERBACP	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
AERLINK	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
AERNET	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
BMConverter	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
PGD1	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
SGD	A					•					
	E	•	•	•	•	•					

Remote panel

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
PR4	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

GP: anti-intrusion grid

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)
E	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

VT: Antivibration

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Integrated hydronic kit: 00, P1, P2, P3, P4										
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22
E	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT22	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08										
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT22	VT22

DRE: Device for peak current reduction

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	DRE351 (1)	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)
E	DRE201 (1)	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

RIF: Power factor correction

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	RIF65	RIF58	RIF59	RIF60	RIF61	RIF61
E	RIF55	RIF56	RIF54	RIF57	RIF65	RIF58	RIF59	RIF60	RIF61	RIF61

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	T6NRK1	T6NRK2	T6NRK3	T6NRK3	T6NRK3	T6NRK3
E	T6NRK1	T6NRK1	T6NRK1	T6NRK1	T6NRK1	T6NRK2	T6NRK3	T6NRK3	T6NRK3	T6NRK3

A grey background indicates the accessory must be assembled in the factory

PRM1: Manually reset pressure switch

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1
E	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1

A grey background indicates the accessory must be assembled in the factory

7", touch screen keyboard

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
C-TOUCH	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•

Clean contact for controlling a boiler.

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
AERCALM	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•

CONFIGURATOR

Field	Description
1,2,3	**NRK**
4,5,6,7	**Size** 0200, 0280, 0300, 0330, 0350, 0500, 0550, 0600, 0650, 0700
8	**Operating field (1)**
°	Standard mechanic thermostatic valve
9	**Model**
H	Heat pump
10	**Heat recovery**
D	With desuperheater (2)
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency
12	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
13	**Fans**
J	Inverter (3)
M	Oversized (4)
°	Standard (5)
14	**Power supply**

Field	Description
°	400V 3N ~ 50Hz
15,16	**Integrated hydronic kit**
00	Without hydronic kit
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
05	Storage tank with holes for heaters and single low head pump (6)
06	Storage tank with holes for heaters and pump low head + stand-by pump (6)
07	Storage tank with holes for heaters and single high head pump (6)
08	Storage tank with holes for heaters and pump high head + stand-by pump (6)
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump

(1) Water produced up to +4 °C
(2) The desuperheater must be isolated in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) Standard for size 0200÷0330, without useful static pressure. Option for size 0350÷0700 with useful static pressure.
(4) Option available only for size 0200÷0330.
(5) As standard in sizes fom 0350÷0700.
(6) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

NRK - A / 12/7 °C - 40/45 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	-	-	-	-	75,4	88,8	101,6	117,4	133,4	148,1
Input power	kW	-	-	-	-	25,4	29,5	34,4	41,0	45,0	52,6
Cooling total input current	A	-	-	-	-	55,0	61,0	66,0	72,0	87,0	107,0
EER	W/W	-	-	-	-	2,97	3,01	2,95	2,86	2,97	2,82
Water flow rate system side	l/h	-	-	-	-	12983	15278	17488	20211	22975	25516
Pressure drop system side	kPa	-	-	-	-	23	26	32	28	34	42
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	-	-	-	-	87,9	103,9	118,9	136,6	155,6	174,4
Input power	kW	-	-	-	-	25,5	30,2	34,7	39,9	45,6	51,7
Heating total input current	A	-	-	-	-	54,0	59,0	64,0	70,0	85,0	106,0
COP	W/W	-	-	-	-	3,45	3,44	3,42	3,42	3,41	3,37
Water flow rate system side	l/h	-	-	-	-	15236	18010	20602	23680	26988	30254
Pressure drop system side	kPa	-	-	-	-	32	36	44	37	45	57

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRK - E / 12/7 °C - 40/45 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	35,6	50,4	59,5	66,1	74,4	87,4	99,8	114,5	130,8	145,3
Input power	kW	11,7	17,4	19,5	22,3	27,6	32,4	38,1	45,8	49,5	58,1
Cooling total input current	A	28,0	38,0	42,0	49,0	60,0	67,0	73,0	72,0	95,0	119,0
EER	W/W	3,05	2,90	3,05	2,96	2,69	2,70	2,62	2,50	2,64	2,50
Water flow rate system side	l/h	6131	8670	10235	11379	12801	15035	17175	19713	22512	25033
Pressure drop system side	kPa	18	17	23	19	22	25	30	27	32	41
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	42,2	59,7	69,4	78,2	87,9	103,9	118,9	136,6	155,6	174,4
Input power	kW	12,0	17,0	19,9	22,4	25,5	30,2	34,7	39,9	45,6	51,7
COP	W/W	3,50	3,50	3,49	3,49	3,45	3,44	3,42	3,42	3,41	3,37
Heating total input current	A	24,0	34,0	38,0	44,0	54,0	59,0	64,0	70,0	85,0	106,0
Water flow rate system side	l/h	7318	10355	12032	13569	15236	18010	20602	23680	26988	30254
Pressure drop system side	kPa	24	22	30	25	32	36	44	37	45	57

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

NRK - A / 23/18 °C - 30/35 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	-	-	-	-	93,2	108,2	122,7	143,0	165,0	181,0
Input power	kW	-	-	-	-	26,4	30,7	35,9	43,3	47,0	55,1
Cooling total input current	A	-	-	-	-	57,0	63,0	69,0	75,0	90,0	112,0
EER	W/W	-	-	-	-	3,54	3,53	3,42	3,30	3,51	3,28
Water flow rate system side	l/h	-	-	-	-	16111	18705	21231	24719	28513	31266
Pressure drop system side	kPa	-	-	-	-	35	39	47	42	52	63
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	-	-	-	-	86,4	101,5	114,6	132,6	150,2	170,5
Input power	kW	-	-	-	-	20,6	24,5	27,8	31,7	37,0	41,9
Heating total input current	A	-	-	-	-	44,0	48,0	51,0	55,0	68,0	85,0
COP	W/W	-	-	-	-	4,19	4,15	4,13	4,19	4,06	4,06
Water flow rate system side	l/h	-	-	-	-	14931	17533	19787	22919	25938	29467
Pressure drop system side	kPa	-	-	-	-	31	34	41	35	42	54

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

NRK - E / 23/18 °C - 30/35 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	44,2	61,5	72,1	80,9	91,9	106,5	120,6	139,5	161,7	177,5
Input power	kW	12,2	18,2	20,4	23,5	28,7	33,6	39,7	48,3	51,7	60,8
Cooling total input current	A	29,0	40,0	44,0	51,0	62,0	69,0	76,0	75,0	99,0	124,0
EER	W/W	3,64	3,37	3,53	3,44	3,20	3,16	3,04	2,89	3,13	2,92
Water flow rate system side	l/h	7643	10631	12470	13977	15886	18408	20850	24110	27939	30673
Pressure drop system side	kPa	28	26	34	29	34	37	44	40	49	62
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	41,4	57,2	67,2	75,7	86,4	101,5	114,6	132,6	150,2	170,5
Input power	kW	9,4	13,3	15,8	18,1	20,6	24,5	27,8	31,7	37,0	41,9
Heating total input current	A	19,0	26,0	30,0	35,0	44,0	48,0	51,0	55,0	68,0	85,0
COP	W/W	4,41	4,31	4,26	4,18	4,19	4,15	4,13	4,19	4,06	4,06
Water flow rate system side	l/h	7156	9895	11628	13083	14931	17533	19787	22919	25938	29467
Pressure drop system side	kPa	23	20	28	23	31	34	41	35	42	54

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ELECTRIC DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Electric data												
Maximum current (FLA)	A	A	-	-	-	-	75,0	85,0	94,0	114,0	144,0	147,0
	E	A	40,0	49,0	61,0	74,0	75,0	85,0	94,0	114,0	144,0	147,0
Peak current (LRA)	A	A	-	-	-	-	216,0	226,0	191,0	228,0	285,0	288,0
	E	A	124,0	146,0	175,0	215,0	216,0	226,0	191,0	228,0	285,0	288,0

ENERGY DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling capacity with low leaving water temp (UE n° 2016/2281)												
SEER	A	W/W	-	-	-	-	3,45	3,52	3,46	3,42	3,44	3,33
	E	W/W	3,40	3,30	3,48	3,39	3,35	3,42	3,34	3,29	3,35	3,27
ηsc	A	%	-	-	-	-	134,80	137,60	135,20	133,70	134,60	130,00
	E	%	133,00	128,80	136,10	132,50	130,90	133,70	130,60	128,70	130,90	127,90

Size			0200	0280	0300
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)					
Efficiency energy class	A		-	-	-
	E		A++	A+	A+
Pdesignh	A	kW	-	-	-
	E	kW	42,00	58,00	67,00
SCOP	A	W/W	-	-	-
	E	W/W	3,88	3,75	3,70
ηsh	A	%	-	-	-
	E	%	152,00	147,00	145,00
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)					
Efficiency energy class	A		-	-	-
	E		A+	A+	A+
Pdesignh	A	kW	-	-	-
	E	kW	44,00	62,00	70,00
SCOP	A	W/W	-	-	-
	E	W/W	3,08	3,03	3,00
ηsh	A	%	-	-	-
	E	%	120,00	118,00	117,00

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Size			0330	0350	0500	0550	0600	0650	0700
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)									
Pdesignh	A	kW	-	89,00	106,00	121,00	137,00	157,00	178,00
	E	kW	80,00	89,00	106,00	121,00	137,00	157,00	178,00
SCOP	A	W/W	-	2,88	2,90	3,03	3,03	2,93	2,90
	E	W/W	3,03	2,88	2,90	3,03	3,03	2,93	2,90
ηsh	A	%	-	112,00	113,00	118,00	118,00	114,00	113,00
	E	%	118,00	112,00	113,00	118,00	118,00	114,00	113,00
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (2)									
Pdesignh	A	kW	-	84,00	99,00	113,00	131,00	149,00	168,00
	E	kW	75,00	84,00	99,00	113,00	131,00	149,00	168,00
SCOP	A	W/W	-	3,43	3,40	3,70	3,70	3,38	3,33
	E	W/W	3,68	3,43	3,40	3,70	3,70	3,38	3,33
ηsh	A	%	-	134,00	133,00	145,00	145,00	132,00	130,00
	E	%	144,00	134,00	133,00	145,00	145,00	132,00	130,00

(1) Efficiencies for average temperature applications (55 °C)
(2) Efficiencies for low temperature applications (35 °C)

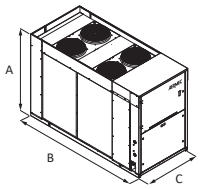
GENERAL TECHNICAL DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Compressor												
Type	A,E	type					Scroll					
Compressor regulation	A,E	Type					On-Off					
Number	A,E	no.	2	2	2	2	2	3	4	4	4	4
Circuits	A,E	no.	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type					R410A					
Refrigerant charge (1)	A	kg	-	-	-	-	23,0	28,0	29,0	29,0	39,0	40,0
	E	kg	14,0	16,0	16,0	16,0	23,0	28,0	29,0	29,0	39,0	40,0
System side heat exchanger												
Type	A,E	type					Brazed plate					
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E	Type					Grooved joints					
Sizes (in/out)	A,E	Ø					2½"					
Fan												
Type	A,E	type					axials					
Number	A	no.	-	-	-	-	2	2	2	2	3	3
	E	no.	4	6	8	8	2	2	2	2	3	3
Air flow rate	A	m^3/h	-	-	-	-	37000	36500	36500	36500	58000	58000
	E	m^3/h	14000	20000	26000	26000	21100	21400	22400	22400	31900	31900
Sound data calculated in cooling mode (2)												
Sound power level	A	dB(A)	-	-	-	-	82,0	82,0	82,0	83,0	85,0	85,0
	E	dB(A)	74,0	74,0	75,0	75,0	74,0	74,0	74,0	75,0	77,0	77,0
Sound pressure level (10 m)	A	dB(A)	-	-	-	-	50,1	50,1	50,1	51,1	53,0	53,0
	E	dB(A)	42,3	42,3	43,2	43,2	42,1	42,1	42,1	43,1	45,0	45,0

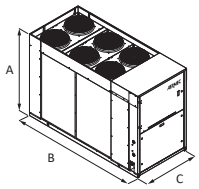
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

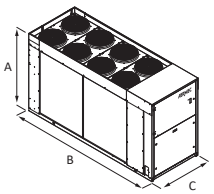
NRK 0200



NRK 0280



NRK 0300-0330



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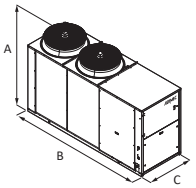

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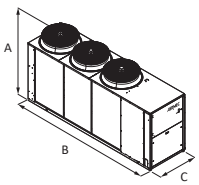

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Dimensions and weights												
A	A	mm	-	-	-	-	1875	1875	1875	1875	1875	1875
	E	mm	1606	1606	1606	1606	1875	1875	1875	1875	1875	1875
B	A	mm	-	-	-	-	3330	3330	3330	3330	4330	4330
	E	mm	2700	2700	3200	3200	3330	3330	3330	3330	4330	4330
C	A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100
	E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Dimensions and weights for transport												
A	A	mm	-	-	-	-	2027	2027	2027	2027	2039	2039
	E	mm	1735	1735	1758	1758	2027	2027	2027	2027	2039	2039
B	A	mm	-	-	-	-	3395	3395	3395	3395	4387	4387
	E	mm	2760	2760	3260	3260	3395	3395	3395	3395	4387	4387
C	A	mm	-	-	-	-	1170	1170	1170	1170	1170	1170
	E	mm	1160	1160	1160	1160	1170	1170	1170	1170	1170	1170

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Integrated hydronic kit: 00												
Weights												
Empty weight	A	kg	-	-	-	-	1067	1213	1274	1316	1495	1530
	E	kg	761	833	913	920	1067	1213	1274	1316	1495	1530

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Tel. 0442633111 - Telefax 044293577
www.aermec.com

NRV 0550

Air-water chiller

Cooling capacity 108,3 kW

- **Easy and quick to install compact**
- **Reliability and modularity**
- **Microchannel coils**

DESCRIPTION

NRV is made up of independent 108kW modules that can be connected to each other up to a power of 970kW. Every single module is an outdoor chiller to produce chilled water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 47°C external air temperature. Unit can produce chilled water up to 4 °C.
Maximum yield at full load but even partial load, thanks to the partialisation steps that increase as the number of connected modules increases this ensures continuous adaptation to the actual system requirements.

Modularity

It is possible to couple up to 9 chillers designed to reduce the overall unit dimensions to a minimum.
The combination of the various chillers allows all the strengths of the individual module to be maintained.
Modularity allows you to adapt installation to the actual development needs of the system. This way the cooling capacity can be increased over time simply and affordably.
Modularity is essential when component redundancy is required, as it allows for a safer system design and increased reliability.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

Microchannel coils

Microchannel heat exchanger that guarantees higher thermal exchange yield. Circuit that optimises the liquid distribution in the coil, which is arranged with V beam geometry with open angle.

Components

Unit is already equipped with a water filter, differential pressure switch and butterfly check valves, useful to cut off the hydraulic circuit for maintenance; for instance, to clean the filter.
In the event of variable flow rate, the motorised hydronic valves can intercept one or more modules to reduce the flow rate in low heat load conditions.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

- Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
GPNYB_SIDE: kit with 2 anti-intrusion grids for the long side of the unit.
GPNY_BACK: kit with 1 anti-intrusion grid for the short side of the unit.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
KNYB: Pair of caps with grooved joints assembled on the unit manifold.
KREC: Accessory kit to remote the electric power supply input to the back
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0550
AER485P1	A,E	•
AERBACP	A,E	•
AERLINK	A,E	•
GPNYB_SIDE	A,E	•
GPNY_BACK	A,E	•
MULTICHILLER-EVO	A,E	•
PGD1	A,E	•

Condensation control temperature

Ver	0550
Fans: M	
A	DCPXNRV0550
E	As standard

DRE: electronic device for peak current reduction

Ver	0550
A, E	DRE (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

KNYB: Pair of caps with grooved joints assembled on the unit manifold

Ver	0550
A, E	KNYB

A grey background indicates the accessory must be assembled in the factory

KREC: kit to remote the electric power supply input to the back

Ver	0550
A, E	KREC

A grey background indicates the accessory must be assembled in the factory

RIF: Power factor correction

Ver	0550
A, E	RIF (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**NRV**
4,5,6,7	**Size** 0550
8	**Operating field**
X	Electronic thermostatic expansion valve
°	Standard mechanic thermostatic valve (1)
9	**Model**
°	Cooling only
10	**Heat recovery**
D	With desuperheater
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency
12	**Coils**
I	Copper-aluminium
O	Coated aluminium microchannel
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Aluminium microchannel
13	**Fans**
J	Inverter (2)
M	Oversized
14	**Power supply (3)**
°	400V 3 ~ 50Hz
15,16	**Integrated hydronic kit**
00	Without hydronic kit

(1) Water produced up to +4 °C
(2) With "J" fan is unnecessary DCPX accessory
(3) With magnet circuit breakers

PERFORMANCE SPECIFICATIONS

Size			0550
Fans: J, M			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	A	kW	108,3
	E	kW	103,8
Input power	A	kW	34,8
	E	kW	36,2
Cooling total input current	A,E	A	62,0
EER	A	W/W	3,11
	E	W/W	2,86
Water flow rate system side	A	l/h	18646
	E	l/h	17862
Pressure drop system side	A	kPa	32
	E	kPa	30

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0550
Fans: J			
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	4,51
	E	W/W	4,45
Seasonal efficiency	A	%	177,20
	E	%	174,80
SEPR - (EN 14825: 2018) (2)			
SEPR	A,E	W/W	5,60

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0550
Fans: M			
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	4,39
	E	W/W	4,33
Seasonal efficiency	A	%	172,60
	E	%	170,30
SEPR - (EN 14825: 2018) (2)			
SEPR	A,E	W/W	5,62

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0550
Electric data			
Maximum current (FLA)	A,E	A	95,6
Peak current (LRA)	A,E	A	280,6

GENERAL TECHNICAL DATA

Size			0550
Compressor			
Type	A,E	type	Scroll
Number	A,E	no.	2
Circuits	A,E	no.	1
Refrigerant	A,E	type	R410A
System side heat exchanger			
Type	A,E	type	Brazed plate
Number	A,E	no.	1
System side hydraulic connections			
Connections (in/out)	A,E	Type	Grooved joints
Sizes (in/out)	A,E	Ø	6"

Fan

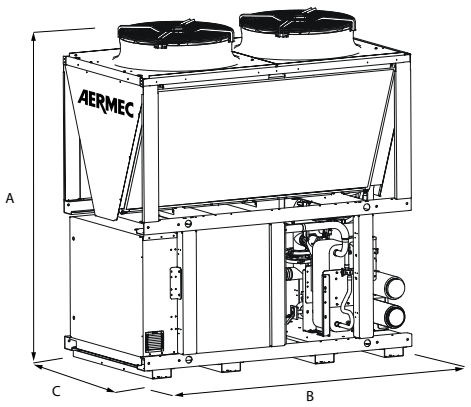
Size			0550
Fans: J			
Fan			
Type	A,E	type	axials
Fan motor	A,E	type	On-Off
Number	A,E	no.	2
Air flow rate	A	m^3/h	32000
	E	m^3/h	24000
High static pressure	A,E	Pa	0
Sound data calculated in cooling mode (1)			
Sound power level	A	dB(A)	85,0
	E	dB(A)	81,8

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			0550
Fans: M			
Fan			
Type	A,E	type	axials
Fan motor	A,E	type	Asynchronous
Number	A,E	no.	2
Air flow rate	A	m^3/h	36000
	E	m^3/h	24000
High static pressure	A,E	Pa	0
Sound data calculated in cooling mode (1)			
Sound power level	A	dB(A)	86,9
	E	dB(A)	81,8

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0550
Dimensions and weights			
A	A,E	mm	2480
B	A,E	mm	2200
C	A,E	mm	1190
Empty weight	A,E	kg	1105

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www.aermec.com

PRM

Air-cooled reversible modular heat pump

Cooling capacity 95,6 kW
Heating capacity 101,7 kW

- **R290 natural refrigerant gas**
- **Low refrigerant charge**
- **Production of hot water up to 75 °C**
- **High efficiency also at partial loads**
- **Reliable and modular**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -20 °C outside air temperature in winter, and up to 48 °C in summer. Hot water production up to 75 °C.

Modularity

It is possible to couple up to 9 units designed to reduce the overall unit dimensions to a minimum.
Modularity is essential when component redundancy is required, as it allows for a safer system design and increased reliability.

Flexibility

Modularity allows you to adapt installation to the actual development needs of the system. This way the capacity can be increased over time simply and affordably.

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.
Two scroll compressors are installed in each circuit in a tandem configuration.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Refrigerant HC R290

Using the natural R290 refrigerant, classified A3 to ISO 817 (non-toxic, odourless and flammable refrigerant), the unit's environmental impact drops significantly.
Combining low refrigerant load (less than 5 kg per circuit) with ultra-low Global Warming Potential (GWP), these units boast practically negligible direct equivalent CO2 emissions.

■ *The refrigerant gas detector, the double pressure relief valve (with exchange isolation valve) and the battery protection grilles are standard.*

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The use of the electronic expansion valve offers significant benefits (especially when the unit is working with partial loads), increasing the seasonal energy efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It's available in various configurations, with storage tank or pumps.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Swing HP and LP controls:** available for all models with inverter fan or with DCPX. By continuously modulating the fans, they streamline operation of the unit at any work point both in cooling and heating mode. This results in enhanced energy efficiency of the unit at partial loads.

— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

— **"Noise Demand Limit" function**: only in non-quiet versions, this function limits the compressors within a time band to set a quiet operation profile, useful for example at night for greater acoustic comfort.
— Possibility to control two units in Master - Slave parallel mode. In this case, it is possible to use only one accessory PGD1 for both units.

CONFIGURATOR

Field		Description
1,2,3		**PRM**
4,5,6,7		**Size** 0504
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter (4)
	°	Standard with DCPX
14		**System type**
	N	Version without modular pipes
	°	Modular version
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
	09	Storage tank with double loop and intermediate heat exchanger
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump

(1) Water produced up to +4 °C
(2) Processed water temperature -10 °C
(3) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) Standard from the E version.

ACCESSORIES

■ *The units PRM must be controlled remotely through an appropriate accessory (remote control panelPGD1,,AERNET MULTICHILLER-EVO, AERLINK orPR4) to be obligatorily and separately. Only in this way is it possible to modify some basic operating parameters or view the presence of any alarms, which avoids accessing risk and restricted access areas.*

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.
VT: Anti-vibration supports.
KTUBES: Pipe kits required to connect more than one unit. Available only for modular units (unit type °).

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
KNYB: Pair of caps with grooved joints assembled on the unit manifold.
BRC1R_PRM: Condensate drip with resistance
BRC1_PRM: Condensate drip.

COMPATIBILITY WITH VMF SYSTEM

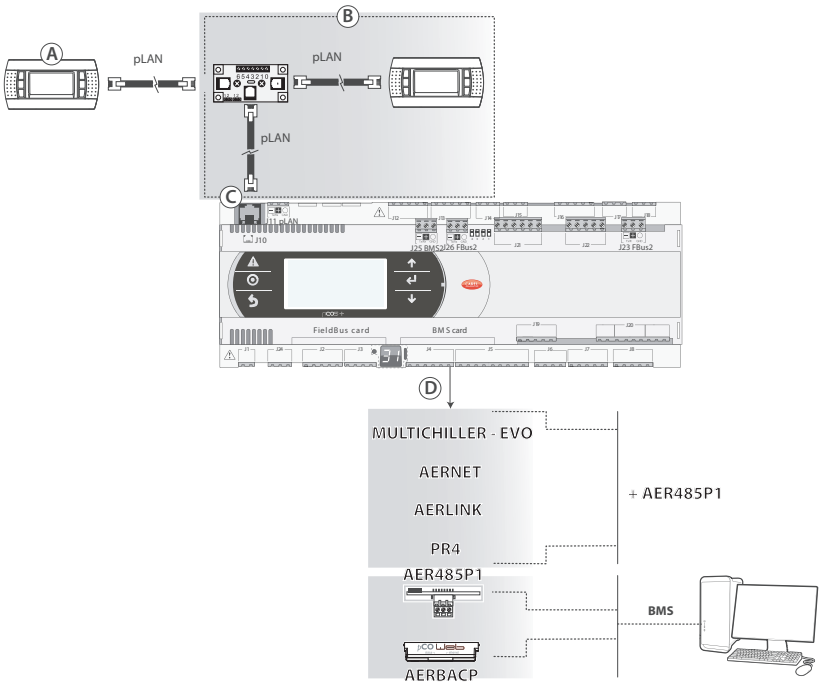
For more information about VMF system, refer to the dedicated documentation.

COMPATIBILITY BETWEEN CONTROL ACCESSORIES

Model	Ver	0504
AER485P1	A,E	•
AERBACP	A,E	•
AERLINK	A,E	•
AERNET	A,E	•
MULTICHILLER-EVO	A,E	•
PGD1	A,E	•

Remote panel

Model	Ver	0504
PR4	A,E	•



Key:

A Display on the unit.

B Control panel accessory "PGD1".

C Control panel connection port "PGD1".

D **BMS Card serial port:** where to connect 1 among the accessories "MULTICHILLER-EVO AERNET, ,AERLINK, PR4 but to be connected also must also have "AER485P1"; in the case of BMS communication with the accessories "AER485P1 or AERBACP" the only mandatory compatible accessory is the control panel "PGD1".

ACCESSORIES COMPATIBILITY

Antivibration

Ver	0504
Integrated hydronic kit: 00, 01, 02, 03, 04, 09, P1, P2, P3, P4	
A, E	VT11

Pipe kits required to connect more than one unit

Ver	0504
System type: °	
A, E	KTUBES

Pair of caps with grooved joints assembled on the unit manifold

Ver	0504
System type: °	
A, E	KNYB

A grey background indicates the accessory must be assembled in the factory

Condensate drip with resistance

Ver	0504
A, E	BRC1R_PRM

A grey background indicates the accessory must be assembled in the factory

Condensate drip

Ver	0504
A, E	BRC1_PRM

A grey background indicates the accessory must be assembled in the factory

Device for peak current reduction

Ver	0504
A, E	DREPRM504

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0504
A, E	RIFPRM504

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

PRM - A

Size		0504
Fans: °		
Cooling performance 12 °C / 7 °C (1)		
Cooling capacity	kW	95,6
Input power	kW	35,5
Cooling total input current	A	69,6
EER	W/W	2,69
Water flow rate system side	l/h	16444
Pressure drop system side	kPa	22
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	101,8
Input power	kW	31,9
Heating total input current	A	65,9
COP	W/W	3,19
Water flow rate system side	l/h	17655
Pressure drop system side	kPa	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

■ *With the J fan option, the data are equivalent*

PRM - E

Size		0504
Fans: J		
Cooling performance 12 °C / 7 °C (1)		
Cooling capacity	kW	92,8
Input power	kW	35,8
Cooling total input current	A	67,5
EER	W/W	2,59
Water flow rate system side	l/h	15965
Pressure drop system side	kPa	21
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	101,8
Input power	kW	31,9
Heating total input current	A	64,2
COP	W/W	3,19
Water flow rate system side	l/h	17655
Pressure drop system side	kPa	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA - STANDARD/INVERTER FANS

Size			0504
Fans: J			
SEER - 12/7 (EN 14825: 2018) (1)			
SEER	A	W/W	4,08
	E	W/W	4,03
Seasonal efficiency	A	%	160,00
	E	%	158,10
SEER - 23/18 (EN 14825: 2018) (1)			
SEER	A	W/W	4,93
	E	W/W	4,82
Seasonal efficiency	A	%	194,26
	E	%	189,80

(1) Calculation performed with VARIABLE water flow rate

Size			0504
Fans: °			
SEER - 12/7 (EN 14825: 2018) (1)			
SEER	A	W/W	3,96
	E	W/W	-
Seasonal efficiency	A	%	155,55
	E	%	-
SEER - 23/18 (EN 14825: 2018) (1)			
SEER	A	W/W	4,85
	E	W/W	-
Seasonal efficiency	A	%	190,96
	E	%	-

(1) Calculation performed with VARIABLE water flow rate

ENERGY DATA - STANDARD/INVERTER FANS (35°C)

Size			0504
Fans: J			
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)			
SCOP	A,E	W/W	4,10
ηsh	A,E	%	161,00
Pdesignh	A,E	kW	82,81

(1) Efficiencies for low temperature applications (35 °C)

Size			0504
Fans: °			
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)			
SCOP	A	W/W	3,86
	E	W/W	-
ηsh	A	%	151,41
	E	%	-
Pdesignh	A	kW	82,81
	E	kW	-

(1) Efficiencies for low temperature applications (35 °C)

ENERGY DATA - STANDARD/INVERTER FANS (55°C)

Size			0504
Fans: J			
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)			
SCOP	A,E	W/W	3,30
ηsh	A,E	%	128,91
Pdesignh	A,E	kW	80,58

(1) Efficiencies for average temperature applications (55 °C)

Size			0504
Fans: °			
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)			
SCOP	A	W/W	3,14
	E	W/W	-
ηsh	A	%	122,74
	E	%	-
Pdesignh	A	kW	80,58
	E	kW	-

(1) Efficiencies for average temperature applications (55 °C)

GENERAL TECHNICAL DATA

Size			0504
Fans: °			
Compressor			
Type	A,E	type	Scroll
Compressor regulation	A,E	Type	On-Off
Number	A,E	no.	4
Circuits	A,E	no.	2
Refrigerant	A,E	type	R290
Refrigerant load circuit 1 (1)	A,E	kg	3,8
Refrigerant load circuit 2 (1)	A,E	kg	3,8
Potential global heating	A,E	GWP	3kgCO_2eq

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

■ *With the J fan option, the data are equivalent*

Size			0504
System side heat exchanger			
Type	A,E	type	Brazed plate
Number	A,E	no.	1

Size			0504
System type: N			
Hydraulic connections without hydronic kit			
Sizes (in/out)	A,E	Ø	2"1/2
Connections (in/out)	A,E	Type	Grooved joints

Size			0504
System type: °			
Hydraulic connections without hydronic kit			
Sizes (in/out)	A,E	Ø	6"
Connections (in/out)	A,E	Type	Grooved joints

SOUND DATA

Size			0504
Fans: J			
Sound data calculated in cooling mode (1)			
Sound power level	A	dB(A)	87,8
	E	dB(A)	84,8
Sound data calculated in heating mode (1)			
Sound power level	A,E	dB(A)	87,8

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0504
Fans: °			
Sound data calculated in cooling mode (1)			
Sound power level	A	dB(A)	87,8
	E	dB(A)	-
Sound data calculated in heating mode (1)			
Sound power level	A	dB(A)	87,8
	E	dB(A)	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

ELECTRIC DATA

Size			0504
Electric data			
Maximum current (FLA)	A,E	A	115,2
Peak current (LRA)	A,E	A	235,2

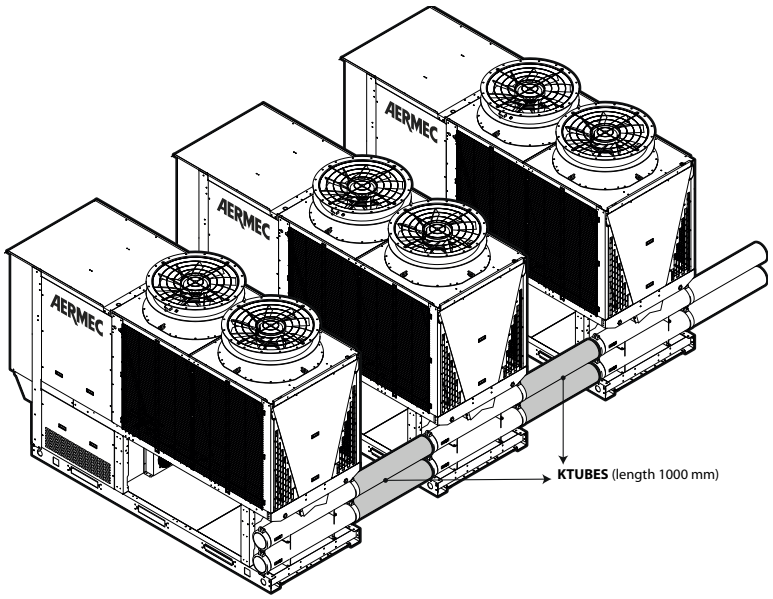
Data calculated without hydronic kit and accessories.

FANS DATA

Size			0504
Fans: J			
Fan			
Type	A,E	type	Axial
Fan motor	A,E	type	Inverter
Number	A,E	no.	2
Air flow rate	A	m^3/h	38500
	E	m^3/h	27500

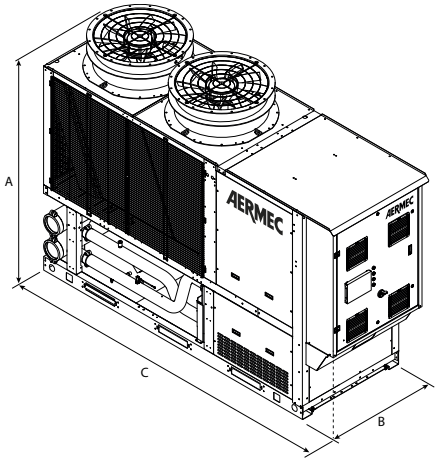
Size			0504
Fans: °			
Fan			
Type	A	type	Axial
	E	type	-
Fan motor	A	type	Asynchronous + DCPX
	E	type	-
Number	A	no.	2
	E	no.	-
Air flow rate	A	m^3/h	38500
	E	m^3/h	-

MODULAR INSTALLATION

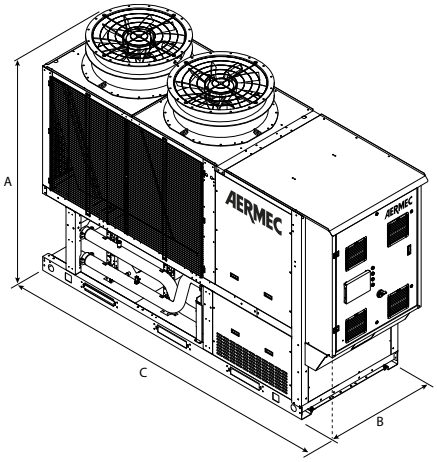


It is possible to couple up to 9 units designed to reduce the overall unit dimensions to a minimum.

DIMENSIONS



Modular version (°)



Version without modular pipes (N)

Size			0504
Integrated hydronic kit: 00			
Dimensions and weights			
A	A,E	mm	2520
B	A,E	mm	1198
C	A,E	mm	3583

Size			0504
Integrated hydronic kit: 00			
Modular version (°)			
Empty weight	A,E	kg	1502
Weight functioning	A,E	kg	1567
Version without modular pipes (N)			
Empty weight	A,E	kg	1441
Weight functioning	A,E	kg	1451

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

PRG-0282H-0654H

Reversible air/water heat pump

Cooling capacity 49 ÷ 143 kW
Heating capacity 51 ÷ 143 kW

- **R290 natural refrigerant gas**
- **Low refrigerant charge**
- **Production of hot water up to 75 °C**
- **High efficiency also at partial loads**
- **Compact dimensions**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -20°C outside air temperature in winter, and up to 48°C in summer. Hot water production up to 75°C.

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.
Two scroll compressors are installed in each circuit in a tandem configuration.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Refrigerant HC R290

Using the natural R290 refrigerant, classified A3 to ISO 817 (non-toxic, odourless and flammable refrigerant), the unit's environmental impact drops significantly.
Combining low refrigerant load (less than 5 kg per circuit) with ultra-low Global Warming Potential (GWP), these units boast practically negligible direct equivalent CO2 emissions.

■ *The refrigerant gas detector, the double pressure relief valve (with exchange isolation valve) and the battery protection grilles are standard.*

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The use of the electronic expansion valve offers significant benefits (especially when the unit is working with partial loads), increasing the seasonal energy efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.*

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Swing HP and LP controls:** available for all models with inverter fan or with DCPX. By continuously modulating the fans, they streamline operation of the unit at any work point both in cooling and heating mode. This results in enhanced energy efficiency of the unit at partial loads.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.
— **"Noise Demand Limit" function**: only in non-quiet versions, this function limits the compressors within a time band to set a quiet operation profile, useful for example at night for greater acoustic comfort.

— Possibility to control two units in Master - Slave parallel mode. In this case, it is possible to use only one accessory PGD1 for both units.

ACCESSORIES

The units PRG-0282H-0654H must be controlled remotely through an appropriate accessory (remote control panelPGD1,,AERNET MULTICHILLER-EVO, AERLINK orPR4) to be obligatorily and separately. Only in this way is it possible to modify some basic operating parameters or view the presence of any alarms, which avoids accessing risk and restricted access areas.

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
RXBAS: Heater for finned coil heat exchanger.

COMPATIBILITY WITH VMF SYSTEM

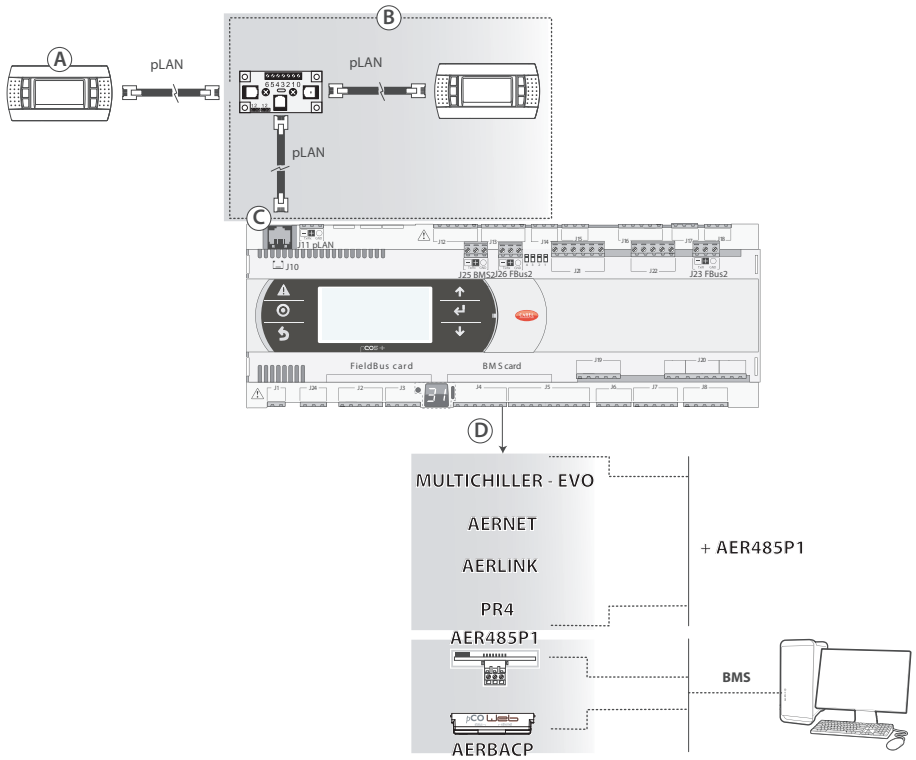
For more information about VMF system, refer to the dedicated documentation.

COMPATIBILITY BETWEEN CONTROL ACCESSORIES

Model	Ver	0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
PR4	A,E	•	•	•	•	•	•	•	•	•	•



Key:

A Display on the unit.

B Control panel accessory "PGD1".

C Control panel connection port "PGD1".

D **BMS Card serial port:** where to connect 1 among the accessories "MULTICHILLER-EVO AERNET, ,AERLINK, PR4 but to be connected also must also have "AER485P1"; in the case of BMS communication with the accessories "AER485P1 or AERBACP" the only mandatory compatible accessory is the control panel "PGD1".

ACCESSORIES COMPATIBILITY

Antivibration

Ver	0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4										
A, E	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11
Integrated hydronic kit: 01, 02, 03, 04, 09, K1, K2, K3, K4, W1, W2, W3, W4										
A, E	VT10	VT10	VT10	VT10	VT10	VT11	VT11	VT11	VT11	VT11

Device for peak current reduction

Ver	0282	0292	0302	0322	0332
A, E	DREPRG282	DREPRG292	DREPRG302	DREPRG322	DREPRG332

A grey background indicates the accessory must be assembled in the factory

Ver	0504	0554	0604	0634	0654
A, E	DREPRG504	DREPRG554	DREPRG604	DREPRG634	DREPRG654

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0292	0302	0322	0332
A, E	RIFPRG282	RIFPRG292	RIFPRG302	RIFPRG322	RIFPRG332

A grey background indicates the accessory must be assembled in the factory

Ver	0504	0554	0604	0634	0654
A, E	RIFPRG504	RIFPRG554	RIFPRG604	RIFPRG634	RIFPRG654

A grey background indicates the accessory must be assembled in the factory

Heater for finned coil heat exchanger

Ver	0282	0292	0302	0322	0332
A, E	RXBAS10	RXBAS10	RXBAS10	RXBAS10	RXBAS10

A grey background indicates the accessory must be assembled in the factory

Ver	0504	0554	0604	0634	0654
A, E	RXBAS11	RXBAS11	RXBAS12	RXBAS12	RXBAS12

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**PRG**
4,5,6,7	**Size** 0282, 0292, 0302, 0322, 0332, 0504, 0554, 0604, 0634, 0654
8	**Operating field**
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	**Model**
H	Heat pump
10	**Heat recovery**
D	With desuperheater (3)
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency (4)
12	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
13	**Fans**
J	Inverter
°	Standard with DCPX (5)
14	**Power supply**
°	400V ~ 3N 50Hz with magnet circuit breakers
15,16	**Integrated hydronic kit**
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (6)
06	Storage tank with holes for heaters and pump low head + stand-by pump (6)
07	Storage tank with holes for heaters and single high head pump (6)
08	Storage tank with holes for heaters and pump high head + stand-by pump (6)
	Double loop
09	Storage tank with double loop and intermediate heat exchanger
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
I1	Single low head pump + fixed speed inverter
I2	Single low head pump with fixed speed inverter + stand-by pump
I3	Single high head pump + fixed speed inverter
I4	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K1	Single low head pump + storage tank + fixed speed inverter
K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
K3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and variable speed inverter pump/s
W1	Single low head pump + Storage tank + variable speed inverter (7)
W2	Double low head pump + Storage tank + variable speed inverter (7)
W3	Single high head pump + Storage tank + variable speed inverter (7)
W4	Double high head pump + Storage tank + variable speed inverter (7)

(1) Water produced from 4 °C ÷ 20 °C
(2) Processed water temperature 8 °C ÷ -10 °C. The option is not compatible with hydronic kits W1-W2-W3-W4. Not compatible with a desuperheater.
(3) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) Sizes 0282-0292-0302-0322-0332 are only available in low noise version (E).
(5) Option not available only for size 0504-0554-0604-0634-0654 version E
(6) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.
(7) Not available with Low temperature electronic thermostatic valve "Z"

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

PRG - A

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J, °											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	-	-	-	-	-	94,5	103,9	123,7	133,6	143,1
Input power	kW	-	-	-	-	-	35,8	40,5	40,8	45,1	49,5
Cooling total input current	A	-	-	-	-	-	67,6	81,8	92,2	105,8	119,4
EER	W/W	-	-	-	-	-	2,64	2,56	3,04	2,96	2,89
Water flow rate system side	l/h	-	-	-	-	-	16267	17888	21319	23015	24641
Pressure drop system side	kPa	-	-	-	-	-	30	36	47	54	62
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	-	-	-	-	-	102,3	113,2	124,7	134,1	143,1
Input power	kW	-	-	-	-	-	32,0	35,5	39,6	43,4	47,0
Heating total input current	A	-	-	-	-	-	63,8	77,0	91,2	104,8	117,8
COP	W/W	-	-	-	-	-	3,20	3,19	3,15	3,09	3,04
Water flow rate system side	l/h	-	-	-	-	-	17738	19623	21615	23253	24809
Pressure drop system side	kPa	-	-	-	-	-	31	37	48	55	63

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PRG - E

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	49,3	54,3	60,5	65,2	70,3	91,8	101,6	119,1	128,3	137,0
Input power	kW	16,5	18,6	20,3	22,6	25,0	35,7	40,6	40,1	44,8	49,6
Cooling total input current	A	35,3	42,2	50,1	56,9	63,8	67,5	82,0	91,0	104,8	118,8
EER	W/W	2,99	2,92	2,98	2,88	2,81	2,57	2,50	2,97	2,87	2,76
Water flow rate system side	l/h	8486	9361	10417	11227	12117	15797	17489	20523	22099	23601
Pressure drop system side	kPa	30	37	37	42	49	28	35	43	50	56
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	51,2	55,9	61,9	66,3	70,7	102,3	113,2	124,7	134,1	143,1
Input power	kW	15,4	17,1	18,8	20,4	22,2	32,1	35,6	39,6	43,4	47,0
Heating total input current	A	34,6	41,1	49,2	55,5	62,0	64,1	77,3	91,8	105,4	118,5
COP	W/W	3,33	3,27	3,28	3,25	3,19	3,19	3,18	3,15	3,09	3,04
Water flow rate system side	l/h	8872	9688	10728	11490	12242	17738	19623	21616	23254	24810
Pressure drop system side	kPa	33	39	39	44	50	36	44	48	55	62

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	49,3	54,3	60,5	65,2	70,3	-	-	-	-	-
Input power	kW	16,5	18,6	20,3	22,6	25,0	-	-	-	-	-
Cooling total input current	A	35,3	42,2	50,1	56,9	63,8	-	-	-	-	-
EER	W/W	2,99	2,92	2,98	2,88	2,81	-	-	-	-	-
Water flow rate system side	l/h	8486	9361	10417	11227	12117	-	-	-	-	-
Pressure drop system side	kPa	30	37	37	42	49	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	51,2	55,9	61,9	66,3	70,7	-	-	-	-	-
Input power	kW	15,4	17,1	18,8	20,4	22,2	-	-	-	-	-
Heating total input current	A	34,6	41,1	49,2	55,5	62,0	-	-	-	-	-
COP	W/W	3,33	3,27	3,28	3,25	3,19	-	-	-	-	-
Water flow rate system side	l/h	8872	9688	10728	11490	12242	-	-	-	-	-
Pressure drop system side	kPa	33	39	39	44	50	-	-	-	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

PRG - A

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J, °											
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	-	-	-	-	-	130,8	144,0	173,7	185,8	197,2
Input power	kW	-	-	-	-	-	39,8	45,0	44,4	49,4	54,5
Cooling total input current	A	-	-	-	-	-	74,4	90,0	98,9	114,0	129,2
EER	W/W	-	-	-	-	-	3,29	3,20	3,91	3,76	3,62
Water flow rate system side	l/h	-	-	-	-	-	22619	24890	30031	32116	34090
Pressure drop system side	kPa	-	-	-	-	-	58	70	93	105	118
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	-	-	-	-	-	104,9	115,3	127,0	135,5	144,1
Input power	kW	-	-	-	-	-	27,3	30,0	33,7	37,0	40,1
Heating total input current	A	-	-	-	-	-	54,2	64,9	77,2	89,0	100,1
COP	W/W	-	-	-	-	-	3,85	3,84	3,77	3,66	3,60
Water flow rate system side	l/h	-	-	-	-	-	18135	19911	21938	23418	24903
Pressure drop system side	kPa	-	-	-	-	-	32	38	49	56	63

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

PRG - E

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J											
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	68,5	75,4	84,3	90,1	97,0	126,2	139,9	166,0	176,9	187,2
Input power	kW	18,3	20,8	22,5	25,1	27,6	40,3	45,7	44,3	49,7	55,3
Cooling total input current	A	38,5	46,4	54,4	62,1	69,2	75,6	91,4	99,1	114,8	130,6
EER	W/W	3,75	3,62	3,75	3,59	3,51	3,13	3,06	3,75	3,56	3,38
Water flow rate system side	l/h	11856	13054	14611	15584	16779	21823	24180	28702	30587	32356
Pressure drop system side	kPa	59	72	72	81	94	54	66	85	95	106
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	52,5	56,8	63,0	66,9	72,0	104,8	115,1	126,9	135,5	144,0
Input power	kW	13,0	14,4	15,9	17,2	18,7	27,2	30,3	33,5	36,7	39,7
Heating total input current	A	29,1	34,5	41,3	46,6	52,1	54,2	65,5	77,2	88,7	99,8
COP	W/W	4,04	3,94	3,97	3,88	3,85	3,86	3,80	3,79	3,69	3,63
Water flow rate system side	l/h	9062	9817	10889	11546	12426	18110	19882	21926	23404	24884
Pressure drop system side	kPa	34	40	40	45	52	37	45	50	56	63

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °											
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	68,5	75,4	84,3	90,1	97,0	-	-	-	-	-
Input power	kW	18,3	20,8	22,5	25,1	27,6	-	-	-	-	-
Cooling total input current	A	38,5	46,4	54,4	62,1	69,2	-	-	-	-	-
EER	W/W	3,75	3,62	3,75	3,59	3,51	-	-	-	-	-
Water flow rate system side	l/h	11856	13054	14611	15584	16779	-	-	-	-	-
Pressure drop system side	kPa	59	72	72	81	94	-	-	-	-	-
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	52,5	56,8	63,0	66,9	72,0	-	-	-	-	-
Input power	kW	13,0	14,4	15,9	17,2	18,7	-	-	-	-	-
Heating total input current	A	29,1	34,5	41,3	46,6	52,1	-	-	-	-	-
COP	W/W	4,04	3,94	3,97	3,88	3,85	-	-	-	-	-
Water flow rate system side	l/h	9062	9817	10889	11546	12426	-	-	-	-	-
Pressure drop system side	kPa	34	40	40	45	52	-	-	-	-	-

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA - STANDARD/INVERTER FANS

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
SEER - 12/7 (EN 14825: 2018) (1)												
SEER	A	W/W	-	-	-	-	-	4,11	4,01	4,61	4,55	4,43
	E	W/W	4,36	4,38	4,37	4,34	4,35	4,06	3,97	4,54	4,49	4,37
Seasonal efficiency	A	%	-	-	-	-	-	161,47	157,50	181,28	179,15	174,34
	E	%	171,34	172,18	171,98	170,59	171,01	159,56	155,60	178,73	176,80	171,92
SEER - 23/18 (EN 14825: 2018) (1)												
SEER	A	W/W	-	-	-	-	-	5,06	4,93	5,62	5,52	5,31
	E	W/W	5,45	5,45	5,31	5,26	5,24	4,06	3,97	4,54	4,49	4,37

(1) Calculation performed with VARIABLE water flow rate

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Seasonal efficiency	A	%	-	-	-	-	-	199,20	194,04	221,76	217,92	209,47
	E	%	214,82	215,18	209,56	207,44	206,66	159,56	155,60	178,73	176,80	171,92

(1) Calculation performed with VARIABLE water flow rate

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °												
SEER - 12/7 (EN 14825: 2018) (1)												
SEER	A	W/W	-	-	-	-	-	3,96	3,86	4,49	4,43	4,32
	E	W/W	4,29	4,31	4,31	4,27	4,28	-	-	-	-	-
Seasonal efficiency	A	%	-	-	-	-	-	155,35	151,49	176,41	174,29	169,62
	E	%	168,62	169,41	169,27	167,75	168,28	-	-	-	-	-
SEER - 23/18 (EN 14825: 2018) (1)												
SEER	A	W/W	-	-	-	-	-	4,85	4,73	5,49	5,40	5,21
	E	W/W	5,38	5,39	5,26	5,20	5,17	-	-	-	-	-
Seasonal efficiency	A	%	-	-	-	-	-	191,06	186,20	216,59	212,83	205,36
	E	%	212,20	212,61	207,30	204,96	203,76	-	-	-	-	-

(1) Calculation performed with VARIABLE water flow rate

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)												
Efficiency energy class	A		-	-	-	-	-	-	-	-	-	-
	E		A++	A++	A++	A++	A++	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	-	-	-	-	-
	E	%	156,55	155,98	155,53	155,63	157,12	-	-	-	-	-
SCOP	A	W/W	-	-	-	-	-	-	-	-	-	-
	E	W/W	3,99	3,97	3,96	3,97	4,00	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	-	-	-	-	-
	E	kW	40,85	43,36	50,06	52,18	53,99	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)												
Efficiency energy class	A		-	-	-	-	-	-	-	-	-	-
	E		A+	A+	A+	A+	A++	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	-	-	-	-	-
	E	%	123,14	122,78	123,70	123,84	125,66	-	-	-	-	-
SCOP	A	W/W	-	-	-	-	-	-	-	-	-	-
	E	W/W	3,15	3,14	3,17	3,17	3,22	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	-	-	-	-	-
	E	kW	39,90	42,10	49,10	51,20	52,90	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
SCOP	A,E	W/W	-	-	-	-	-	4,08	3,87	4,04	3,95	4,02
ηsh	A,E	%	-	-	-	-	-	160,04	151,64	158,46	154,90	157,62
Pdesignh	A	kW	-	-	-	-	-	81,43	87,59	97,03	103,17	111,52
	E	kW	-	-	-	-	-	81,60	87,81	97,02	103,18	111,52
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)												
SCOP	A,E	W/W	-	-	-	-	-	3,30	3,14	3,31	3,30	3,34
ηsh	A,E	%	-	-	-	-	-	129,04	122,74	129,26	128,91	130,63
Pdesignh	A	kW	-	-	-	-	-	79,70	85,10	94,00	102,70	111,00
	E	kW	-	-	-	-	-	80,00	85,40	94,10	102,80	111,20

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °												
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)												
Efficiency energy class	A		-	-	-	-	-	-	-	-	-	-
	E		A++	A++	A++	A++	A++	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	-	-	-	-	-
	E	%	153,35	152,80	152,36	152,45	155,47	-	-	-	-	-
SCOP	A	W/W	-	-	-	-	-	-	-	-	-	-
	E	W/W	3,91	3,90	3,88	3,86	3,96	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	-	-	-	-	-
	E	kW	40,84	43,36	50,06	52,18	53,99	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)												
Efficiency energy class	A		-	-	-	-	-	-	-	-	-	-
	E		A+	A+	A+	A+	A+	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	-	-	-	-	-
	E	%	120,95	120,95	121,68	122,25	124,65	-	-	-	-	-
SCOP	A	W/W	-	-	-	-	-	-	-	-	-	-
	E	W/W	3,10	3,09	3,12	3,13	3,19	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	-	-	-	-	-
	E	kW	39,90	42,10	49,10	51,20	52,90	-	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
SCOP	A	W/W	-	-	-	-	-	3,95	3,75	3,92	3,83	3,90
	E	W/W	-	-	-	-	-	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	155,15	147,00	153,61	150,17	152,80
	E	%	-	-	-	-	-	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	81,43	87,59	97,03	103,17	111,52
	E	kW	-	-	-	-	-	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)												
SCOP	A	W/W	-	-	-	-	-	3,22	3,06	3,23	3,20	3,30
	E	W/W	-	-	-	-	-	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	125,67	119,30	126,09	125,15	128,88
	E	%	-	-	-	-	-	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	79,70	85,10	94,00	102,70	111,00
	E	kW	-	-	-	-	-	-	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Electric data												
Maximum current (FLA)	A	A	-	-	-	-	-	115,8	123,8	135,7	147,7	159,7
	E	A	57,3	61,3	66,4	72,4	78,4	115,8	123,8	135,7	147,7	159,7
Peak current (LRA)	A	A	-	-	-	-	-	235,8	250,8	262,7	307,7	319,7
	E	A	177,3	188,3	193,4	232,4	238,4	235,8	250,8	262,7	307,7	319,7

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Compressor												
Type	A,E	type	Scroll									
Compressor regulation	A,E	Type	On-Off									
Number	A	no.	-	-	-	-	-	4	4	4	4	4
	E	no.	2	2	2	2	2	4	4	4	4	4
Circuits	A	no.	-	-	-	-	-	2	2	2	2	2
	E	no.	1	1	1	1	1	2	2	2	2	2
Refrigerant	A,E	type	R290									
Refrigerant load circuit 1 (1)	A	kg	-	-	-	-	-	4,2	4,2	4,9	4,9	4,9
	E	kg	4,2	4,2	4,9	4,9	4,9	4,2	4,2	4,9	4,9	4,9
Refrigerant load circuit 2 (1)	A,E	kg	-	-	-	-	-	4,2	4,2	4,9	4,9	4,9
Potential global heating	A,E	GWP	3kgCO_2eq									
System side heat exchanger												
Type	A,E	type	Brazed plate									
Number	A	no.	-	-	-	-	-	1	1	1	1	1
	E	no.	1	1	1	1	1	1	1	1	1	1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
System side heat exchanger												
Type	A,E	type	Brazed plate									
Number	A	no.	-	-	-	-	-	1	1	1	1	1
	E	no.	1	1	1	1	1	1	1	1	1	1

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Integrated hydronic kit: 00												
System side hydraulic connections												
Connections (in/out)	A,E	Type	Grooved joints									
Sizes (in/out)	A	Ø	-	-	-	-	-	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
	E	Ø	2 1/2"									

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	82,0	82,0	82,2	84,0	84,0	84,6	84,6	84,7	85,3	85,3
Sound data calculated in heating mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	82,0	82,0	82,2	84,0	84,0	86,0	86,0	86,6	87,2	87,2

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °												
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	82,0	82,0	82,2	84,0	84,0	-	-	-	-	-
Sound data calculated in heating mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	82,0	82,0	82,2	84,0	84,0	-	-	-	-	-

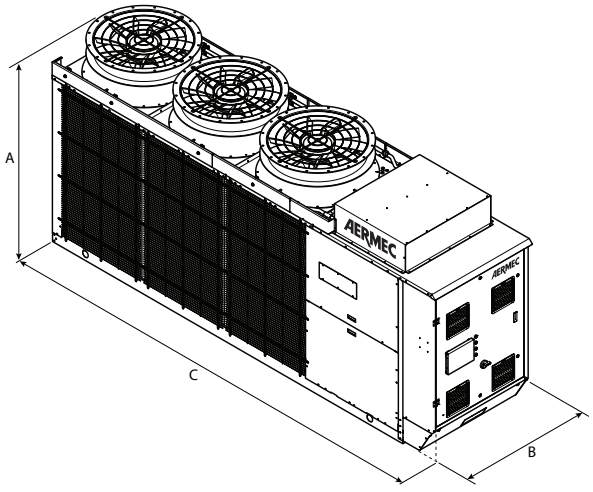
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
Fan												
Type	A	type	-	-	-	-	-	Axial	Axial	Axial	Axial	Axial
	E	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Fan motor	A	type	-	-	-	-	-	Inverter	Inverter	Inverter	Inverter	Inverter
	E	type	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
Number	A	no.	-	-	-	-	-	2	2	3	3	3
	E	no.	6	6	8	8	8	2	2	3	3	3
Air flow rate	A	m^3/h	-	-	-	-	-	38211	38211	58970	58970	58970
	E	m^3/h	22937	22937	28830	28830	28830	31935	31935	42553	42553	42553

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °												
Fan												
Type	A	type	-	-	-	-	-	Axial	Axial	Axial	Axial	Axial
	E	type	Axial	Axial	Axial	Axial	Axial	-	-	-	-	-
Fan motor	A	type	-	-	-	-	-	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX
	E	type	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX	-	-	-	-	-
Number	A	no.	-	-	-	-	-	2	2	3	3	3
	E	no.	6	6	8	8	8	-	-	-	-	-
Air flow rate	A	m^3/h	-	-	-	-	-	38211	38211	58970	58970	58970
	E	m^3/h	22937	22937	28830	28830	28830	-	-	-	-	-

DIMENSIONS



Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Integrated hydronic kit: 00												
Dimensions and weights												
A	A	mm	-	-	-	-	-	1980	1980	1980	1980	1980
	E	mm	1920	1920	1920	1920	1920	1980	1980	1980	1980	1980
B	A	mm	-	-	-	-	-	1108	1108	1108	1108	1108
	E	mm	1108	1108	1108	1108	1108	1108	1108	1108	1108	1108
C	A	mm	-	-	-	-	-	3635	3635	4423	4423	4423
	E	mm	3375	3375	3375	3375	3375	3635	3635	4423	4423	4423

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www.aermec.com

NRB 0282-0754

Air-water chiller

Cooling capacity 56 ÷ 202 kW

- **High seasonal efficiency**
- **Night mode**
- **Low refrigerant charge**
- **Compact dimensions**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 51°C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** available for all models with inverter fans or with DCPX. Allows, with continuous fan modulation, to optimize the operation of the unit in any operating point, ensuring an increase in the energy efficiency at partial load.
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
AER485P1	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
SGD	E,L,N	•	•	•	•											
	U				•											

Remote panel

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
PR4	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0602	0604
Fans: M								
°, A	-	-	-	-	DCPX142	DCPX142	DCPX142	DCPX142
E, L	DCPX141	DCPX141	DCPX141	DCPX141	As standard	As standard	As standard	As standard
N	DCPX141	DCPX141	DCPX141	As standard	As standard	As standard	As standard	As standard
U	-	-	-	DCPX142	DCPX142	DCPX142	DCPX143	DCPX143
Fans: °								
E, L	DCPX140	DCPX140	DCPX140	DCPX140	-	-	-	-
N	DCPX140	DCPX140	DCPX140	-	-	-	-	-

Ver	0652	0654	0682	0702	0704	0752	0754
Fans: M							
°	DCPX142	DCPX142	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143
A	DCPX142	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4															
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
N	VT17	VT17	VT17	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
U	-	-	-	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09, K1, K2, K3, K4															
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
N	VT13	VT13	VT13	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23
U	-	-	-	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
E	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
L	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
N	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP14 x 4 (1)	GP14 x 4 (1)	GP14 x 4 (1)	GP14 x 4 (1)
U	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP14 x 4 (1)	GP14 x 4 (1)	GP14 x 4 (1)	GP14 x 4 (1)

(1) x _ indicates the quantity to buy
The accessory cannot be fitted on the configurations indicated with -

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0602	0604
°, A	-	-	-	-	RIF0502	RIF0552	RIF0602	RIF0604
E, L, N	RIF0282	RIF0302	RIF0332	RIF0352	RIF0502	RIF0552	RIF0602	RIF0604
U	-	-	-	RIF0352	RIF0502	RIF0552	RIF0602	RIF0604

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754
°, A, E, L, N, U	RIF0652	RIF0654	RIF0682	RIF0702	RIF0704	RIF0752	RIF0754

A grey background indicates the accessory must be assembled in the factory

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0602	0604
°, A	-	-	-	-	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)
E, L, N	DRENRB282 (1)	DRENRB302 (1)	DRENRB332 (1)	DRENRB352 (1)	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)
U	-	-	-	DRENRB352 (1)	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754
°, A, E, L, N, U	DRENRB652 (1)	DRENRB654 (1)	DRENRB682 (1)	DRENRB702 (1)	DRENRB704 (1)	DRENRB752 (1)	DRENRB754 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°, A	-	-	-	-	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12
E, L	T6NRB6	T6NRB6	T6NRB6	T6NRB6	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12
N	T6NRB6	T6NRB6	T6NRB6	T6NRB8	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12
U	-	-	-	T6NRB8	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Touch screen keyboard

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°, A, E, L, N, U	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0282, 0302, 0332, 0352, 0502, 0552, 0602, 0604, 0652, 0654, 0682, 0702, 0704, 0752, 0754
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Double mechanical thermostat for low temperature (2)
	Z	Low temperature electronic thermostatic valve (3)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	C	Motocondensing unit
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (4)
	T	With total recovery (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	M	Oversized (5)
	°	Standard (6)
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (7)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (7)
	07	Storage tank with holes for heaters and single high head pump (7)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (7)
		Double loop
	09	Double loop
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with inverter pump/s to fixed speed
	I1	Single low head pump + fixed speed inverter
	I2	Single low head pump with fixed speed inverter + stand-by pump
	I3	Single high head pump + fixed speed inverter
	I4	Single high head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and inverter pump/s to fixed speed
	K1	Single low head pump + storage tank + fixed speed inverter
	K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
	K3	Single high head pump + storage tank + fixed speed inverter
	K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and variable speed inverter pump/s
	W1	Single low head pump + Storage tank + variable speed inverter (8)
	W2	Double low head pump + Storage tank + variable speed inverter (8)
	W3	Single high head pump + Storage tank + variable speed inverter (8)
	W4	Double high head pump + Storage tank + variable speed inverter (8)

(1) Water produced from 4 °C ÷ 18 °C
(2) Water produced from -10 °C ÷ 18 °C
(3) Water produced from 4 °C ÷ 18 °C for ° version; -10 °C for the others versions
(4) For "YT" - "ZT" - "YD" and "ZD" recovery versions, contact the headquarters; Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
(5) As standard in sizes fom 0502 to 0754 version ° - A - E - L, in sizes from 0352 to 0754 version N - U
(6) As standard in sizes from 0282 to 0352 versions E - L and in size from 0282 to 0332 version N
(7) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.
(8) Options Y and Z are not compatible with W1/W2/W3/W4

PERFORMANCE SPECIFICATIONS

Included units with '°' fans.

NRB - L

Size		0282	0302	0332	0352
Fans: °					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	56,5	64,3	73,9	85,5
Input power	kW	19,8	22,2	24,8	29,6
Cooling total input current	A	35,0	41,0	46,0	54,0
EER	W/W	2,85	2,90	2,98	2,89
Water flow rate system side	l/h	9734	11090	12722	14734
Pressure drop system side	kPa	37	48	39	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0282	0302	0332	0352
Fans: °					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	60,6	68,4	77,0	89,2
Input power	kW	18,6	21,1	23,8	28,3
Cooling total input current	A	32,0	36,0	41,0	46,0
EER	W/W	3,26	3,24	3,23	3,16
Water flow rate system side	l/h	10429	11774	13258	15372
Pressure drop system side	kPa	26	33	30	40

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0282	0302	0332
Fans: °				
Cooling performance 12 °C / 7 °C (1)				
Cooling capacity	kW	60,8	69,0	76,9
Input power	kW	17,8	20,5	22,9
Cooling total input current	A	33,0	39,0	44,0
EER	W/W	3,42	3,37	3,36
Water flow rate system side	l/h	10460	11884	13249
Pressure drop system side	kPa	27	25	31

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Included units with 'M' fans.

NRB - °

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	98,4	107,0	125,9	125,5	135,1	141,0	159,7	178,9	170,7	195,7	193,5
Input power	kW	-	-	-	-	33,2	37,5	41,6	45,6	47,4	52,2	54,8	60,8	58,3	71,8	67,2
Cooling total input current	A	-	-	-	-	59,0	65,0	71,0	80,0	81,0	92,0	93,0	102,0	104,0	117,0	117,0
EER	W/W	-	-	-	-	2,96	2,85	3,03	2,75	2,85	2,70	2,92	2,95	2,93	2,73	2,88
Water flow rate system side	l/h	-	-	-	-	16941	18444	21694	21620	23270	24282	27502	30805	29385	33700	33309
Pressure drop system side	kPa	-	-	-	-	39	46	42	50	49	48	52	66	71	78	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - L

Size		0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	96,3	104,5	122,6	121,5	131,1	134,8	156,1	174,3	166,4	189,9	187,4
Input power	kW	34,0	38,6	42,9	47,6	49,2	55,0	56,0	62,5	60,0	74,7	69,5
Cooling total input current	A	59,0	65,0	72,0	82,0	82,0	95,0	93,0	102,0	105,0	119,0	119,0
EER	W/W	2,83	2,71	2,86	2,55	2,67	2,45	2,79	2,79	2,78	2,54	2,70
Water flow rate system side	l/h	16583	18007	21114	20937	22592	23230	26870	30010	28645	32685	32255
Pressure drop system side	kPa	37	43	40	46	45	44	50	62	66	73	61

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - A

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	103,9	114,8	130,1	129,7	140,0	150,2	167,9	186,9	176,8	207,6	198,8
Input power	kW	-	-	-	-	31,4	35,4	40,3	43,5	45,0	47,6	51,9	59,2	56,6	69,6	63,8
Cooling total input current	A	-	-	-	-	55,0	59,0	68,0	73,0	74,0	77,0	86,0	94,0	98,0	103,0	107,0
EER	W/W	-	-	-	-	3,31	3,24	3,23	2,98	3,11	3,16	3,24	3,16	3,12	2,98	3,11
Water flow rate system side	l/h	-	-	-	-	17889	19764	22404	22344	24116	25867	28897	32172	30430	35736	34210
Pressure drop system side	kPa	-	-	-	-	30	36	35	42	40	57	46	56	55	60	58

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	100,4	110,5	123,9	122,2	132,4	144,8	161,4	178,0	168,2	195,9	187,7
Input power	kW	32,5	36,9	42,7	46,6	48,2	49,4	54,0	62,6	59,7	74,7	68,0
Cooling total input current	A	54,0	59,0	69,0	75,0	77,0	77,0	86,0	95,0	100,0	107,0	110,0
EER	W/W	3,09	3,00	2,90	2,62	2,75	2,93	2,99	2,84	2,82	2,62	2,76
Water flow rate system side	l/h	17275	19020	21329	21052	22807	24939	27779	30648	28950	33719	32307
Pressure drop system side	kPa	27	33	32	36	36	52	42	51	49	53	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - U

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	92,7	104,5	117,2	132,1	137,9	146,8	152,9	171,6	191,4	180,5	209,6	202,9
Input power	kW	-	-	-	27,1	30,8	34,5	38,8	41,3	44,2	45,5	50,7	59,3	56,2	67,2	63,1
Cooling total input current	A	-	-	-	51,0	56,0	61,0	68,0	76,0	76,0	86,0	88,0	101,0	104,0	116,0	115,0
EER	W/W	-	-	-	3,42	3,39	3,40	3,40	3,34	3,32	3,36	3,39	3,23	3,21	3,12	3,21
Water flow rate system side	l/h	-	-	-	15945	17984	20172	22745	23741	25275	26327	29532	32945	31067	36076	34915
Pressure drop system side	kPa	-	-	-	24	30	29	38	34	36	42	41	51	48	61	56

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M													
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	89,7	100,8	112,4	128,6	133,5	142,2	147,1	164,5	185,1	174,5	201,1	195,1
Input power	kW	27,8	31,9	36,1	39,4	42,4	45,3	47,2	52,9	60,9	57,5	70,2	65,3
Cooling total input current	A	50,0	55,0	62,0	66,0	74,0	75,0	85,0	88,0	100,0	102,0	116,0	114,0
EER	W/W	3,23	3,16	3,12	3,26	3,15	3,14	3,11	3,11	3,04	3,03	2,87	2,99
Water flow rate system side	l/h	15444	17352	19347	22150	22978	24481	25334	28325	31856	30031	34611	33586
Pressure drop system side	kPa	22	28	27	36	32	34	39	38	48	45	56	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: J																	
SEER - 12/7 (EN14825: 2018) (1)																	
SEER	°	W/W	-	-	-	-	4,34	4,23	4,39	4,12	4,26	4,11	4,28	4,26	4,13	4,24	4,12
	A	W/W	-	-	-	-	4,48	4,48	4,59	4,20	4,48	4,13	4,49	4,40	4,34	4,44	4,16
	E	W/W	4,59	4,69	4,60	4,52	4,48	4,46	4,53	4,16	4,34	4,18	4,51	4,32	4,13	4,33	4,11
	L	W/W	4,38	4,37	4,46	4,35	4,36	4,24	4,38	4,11	4,18	4,12	4,32	4,23	4,13	4,19	4,11
	N	W/W	4,79	4,84	4,73	4,81	4,68	4,76	4,84	4,53	4,72	4,39	4,77	4,60	4,35	4,56	4,31
	U	W/W	-	-	-	4,74	4,71	4,82	4,65	4,33	4,66	4,31	4,76	4,53	4,22	4,52	4,29
Seasonal efficiency	°	%	-	-	-	-	170,60	166,20	172,60	161,80	167,30	161,40	168,20	167,40	162,20	166,60	161,80
	A	%	-	-	-	-	176,20	176,20	180,60	165,00	176,20	162,20	176,60	173,00	170,60	174,60	163,40
	E	%	180,60	184,60	181,00	177,80	176,20	175,40	178,20	163,40	170,60	164,20	177,40	169,80	162,20	170,20	161,40
	L	%	172,20	171,80	175,40	171,00	171,40	166,60	172,20	161,40	164,20	161,80	169,80	166,20	162,20	164,60	161,40
	N	%	188,60	190,60	186,20	189,40	184,20	187,40	190,60	178,20	185,80	172,60	187,80	181,00	171,00	179,40	169,40
	U	%	-	-	-	186,80	185,40	189,80	183,00	170,20	183,40	169,40	187,40	178,20	165,80	177,80	168,60
SEER - 23/18 (EN14825: 2018) (2)																	
SEER	°	W/W	-	-	-	-	5,31	5,07	5,29	4,89	5,04	4,93	5,13	5,12	5,01	4,99	4,95
	A	W/W	-	-	-	-	5,55	5,42	5,54	5,06	5,36	5,11	5,43	5,23	5,30	5,24	5,03
	E	W/W	5,50	5,62	5,55	5,58	5,47	5,41	5,37	4,88	5,10	5,05	5,37	5,06	4,93	5,02	4,88
	L	W/W	5,17	5,22	5,34	5,22	5,27	5,00	5,12	4,81	4,89	4,82	5,13	4,92	4,91	4,83	4,84
	N	W/W	5,75	5,82	5,73	5,91	5,72	5,68	5,88	5,49	5,67	5,29	5,71	5,46	5,27	5,38	5,21
	U	W/W	-	-	-	5,92	5,86	5,85	5,72	5,32	5,68	5,30	5,79	5,45	5,22	5,41	5,21

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
	°	%	-	-	-	-	209,30	199,60	208,40	192,70	198,50	194,20	202,20	201,60	197,50	196,50	194,80
	A	%	-	-	-	-	219,00	213,90	218,60	199,50	211,30	201,30	214,10	206,30	208,80	206,60	198,20
	E	%	216,80	221,60	218,80	220,00	215,70	213,30	211,80	192,00	200,80	199,10	211,60	199,30	194,00	197,90	192,20
Seasonal efficiency	L	%	203,80	205,90	210,60	205,60	207,70	197,10	201,70	189,40	192,70	189,70	202,00	193,60	193,20	190,00	190,40
	N	%	227,00	229,80	226,30	233,30	225,80	224,10	232,30	216,40	223,70	208,50	225,30	215,30	207,60	212,10	205,20
	U	%	-	-	-	233,80	231,40	231,10	225,80	209,60	224,00	209,00	228,70	214,90	205,70	213,40	205,40
SEPR - (EN 14825: 2018) (2)																	
	°	W/W	-	-	-	-	5,79	5,61	5,74	5,62	5,66	5,57	5,59	5,84	5,94	5,45	5,76
	A	W/W	-	-	-	-	6,10	5,97	6,00	5,73	5,97	5,74	5,92	5,79	5,89	5,75	5,78
	E	W/W	6,46	6,42	6,13	6,36	5,98	5,95	5,79	5,41	5,72	5,68	5,83	5,67	5,69	5,51	5,47
SEPR	L	W/W	6,15	6,00	5,97	6,07	5,79	5,65	5,61	5,31	5,55	5,28	5,58	5,60	5,77	5,37	5,53
	N	W/W	6,71	6,53	6,23	6,54	6,22	6,21	6,16	6,12	6,14	5,93	6,09	5,97	6,08	5,83	5,90
	U	W/W	-	-	-	6,43	6,30	6,31	6,01	6,15	6,09	5,88	6,19	5,88	6,05	5,85	6,07

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																	
SEER - 12/7 (EN14825: 2018) (1)																	
	°	W/W	-	-	-	-	4,23	4,13	4,29	- (2)	4,16	- (2)	4,18	4,16	- (2)	4,14	- (2)
	A	W/W	-	-	-	-	4,37	4,37	4,48	- (2)	4,37	- (2)	4,38	4,29	- (2)	4,33	- (2)
	E	W/W	4,48	4,58	4,49	4,42	4,37	4,35	4,42	- (2)	4,24	- (2)	4,40	4,21	- (2)	4,23	- (2)
SEER	L	W/W	4,28	4,27	4,35	4,27	4,25	4,14	4,27	- (2)	4,11	- (2)	4,22	4,13	- (2)	4,11	- (2)
	N	W/W	4,68	4,72	4,62	4,69	4,56	4,65	4,72	4,42	4,61	4,28	4,65	4,49	4,24	4,45	4,20
	U	W/W	-	-	-	4,62	4,59	4,71	4,54	4,22	4,54	4,20	4,64	4,42	4,11	4,41	4,18
	°	%	-	-	-	-	166,20	162,20	168,40	- (2)	163,40	- (2)	164,10	163,40	- (2)	162,50	- (2)
	A	%	-	-	-	-	171,90	171,60	176,10	- (2)	171,70	- (2)	172,20	168,70	- (2)	170,20	- (2)
	E	%	176,20	180,20	176,40	173,60	171,70	171,00	173,80	- (2)	166,50	- (2)	172,80	165,50	- (2)	166,00	- (2)
Seasonal efficiency	L	%	168,10	167,80	171,10	167,00	167,00	162,50	167,80	- (2)	161,20	- (2)	165,70	162,10	- (2)	161,30	- (2)
	N	%	184,00	185,70	181,70	184,70	179,50	182,90	185,90	173,70	181,20	168,20	182,90	176,40	166,70	174,90	165,10
	U	%	-	-	-	181,70	180,60	185,20	178,50	165,60	178,70	165,10	182,50	173,80	161,40	173,30	164,30
SEER - 23/18 (EN14825: 2018) (3)																	
	°	W/W	-	-	-	-	5,17	4,95	5,16	4,77	4,95	4,80	5,01	4,99	4,86	4,82	4,90
	A	W/W	-	-	-	-	5,42	5,28	5,40	4,91	5,22	4,94	5,29	5,10	4,95	5,11	4,99
	E	W/W	5,36	5,48	5,40	5,44	5,33	5,27	5,24	4,68	4,97	4,93	5,23	4,93	4,81	4,90	4,74
SEER	L	W/W	5,05	5,10	5,21	5,09	5,13	4,88	4,99	4,65	4,77	4,52	5,00	4,79	4,78	4,67	4,74
	N	W/W	5,61	5,67	5,59	5,76	5,58	5,54	5,74	5,35	5,53	5,12	5,56	5,32	5,13	5,24	5,07
	U	W/W	-	-	-	5,77	5,71	5,71	5,58	5,18	5,53	5,17	5,64	5,32	5,08	5,27	5,07
	°	%	-	-	-	-	203,90	194,80	203,30	187,70	195,10	189,00	197,30	196,70	191,50	189,90	193,00
	A	%	-	-	-	-	213,60	208,30	213,10	193,50	205,80	194,60	208,70	201,10	194,90	201,30	196,70
	E	%	211,40	216,30	213,10	214,70	210,20	207,90	206,50	184,00	195,90	194,00	206,10	194,20	189,20	193,00	186,50
Seasonal efficiency	L	%	199,00	201,10	205,30	200,70	202,30	192,30	196,60	183,10	187,90	177,60	197,10	188,70	188,10	183,80	186,40
	N	%	221,40	223,80	220,60	227,50	220,00	218,70	226,60	210,90	218,20	203,00	219,50	209,70	202,20	206,70	199,90
	U	%	-	-	-	227,60	225,50	225,40	220,30	204,00	218,30	203,60	222,70	209,60	200,00	207,90	199,90
SEPR - (EN 14825: 2018) (3)																	
	°	W/W	-	-	-	-	5,79	5,61	5,74	5,62	5,66	5,57	5,59	5,84	5,94	5,45	5,76
	A	W/W	-	-	-	-	6,10	5,97	6,00	5,73	5,97	5,74	5,92	5,79	5,89	5,75	5,78
	E	W/W	6,46	6,42	6,13	6,36	5,98	5,95	5,79	5,41	5,72	5,68	5,83	5,67	5,69	5,51	5,47
SEPR	L	W/W	6,15	6,00	5,97	6,07	5,79	5,65	5,61	5,31	5,55	5,28	5,58	5,60	5,77	5,37	5,53
	N	W/W	6,71	6,53	6,23	6,54	6,22	6,12	6,16	6,12	6,14	5,93	6,09	5,97	6,08	5,83	5,90
	U	W/W	-	-	-	6,43	6,30	6,31	6,01	6,15	6,09	5,88	6,19	5,88	6,05	5,85	6,07

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: °																	
SEER - 12/7 (EN14825: 2018) (1)																	
	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	4,48	4,58	4,49	4,42	-	-	-	-	-	-	-	-	-	-	-
SEER	L	W/W	4,28	4,27	4,35	4,25	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	4,68	4,72	4,62	-	-	-	-	-	-	-	-	-	-	-	-
	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	%	176,20	180,20	176,40	173,60	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	L	%	168,10	167,80	171,10	167,00	-	-	-	-	-	-	-	-	-	-	-
	N	%	184,00	185,70	181,70	-	-	-	-	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																	
	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	5,36	5,48	5,40	5,44	-	-	-	-	-	-	-	-	-	-	-
SEER	L	W/W	5,05	5,10	5,21	5,09	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	5,61	5,67	5,59	-	-	-	-	-	-	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Seasonal efficiency	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	%	211,40	216,30	213,10	214,70	-	-	-	-	-	-	-	-	-	-	-
	L	%	199,00	201,10	205,30	200,70	-	-	-	-	-	-	-	-	-	-	-
	N	%	221,40	223,80	220,60	-	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN 14825: 2018) (2)																	
SEPR	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	6,46	6,42	6,13	6,36	-	-	-	-	-	-	-	-	-	-	-
	L	W/W	6,15	6,00	5,97	6,07	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	6,71	6,53	6,23	-	-	-	-	-	-	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Electric data																	
Maximum current (FLA)	°	A	-	-	-	-	72,2	77,1	86,0	98,2	94,9	111,3	112,7	127,3	131,4	144,0	141,2
	A	A	-	-	-	-	72,2	77,1	86,0	98,2	94,9	114,5	112,7	127,3	131,4	144,0	141,2
	E	A	42,6	49,2	56,9	65,3	72,2	77,1	86,0	98,2	94,9	114,5	112,7	127,3	131,4	144,0	141,2
	L	A	41,5	49,2	55,8	65,3	72,2	77,1	86,0	98,2	94,9	111,3	112,7	127,3	131,4	144,0	141,2
	N	A	42,6	50,3	56,9	67,3	72,2	77,1	89,2	101,3	98,1	114,5	112,7	130,5	134,6	147,2	144,4
	U	A	-	-	-	67,3	72,2	77,1	89,2	101,3	98,1	114,5	112,7	130,5	134,6	147,2	144,4
Peak current (LRA)	°	A	-	-	-	-	277,6	282,5	329,2	211,9	338,1	225,1	363,8	378,4	274,9	476,4	346,6
	A	A	-	-	-	-	277,6	282,5	329,2	211,9	338,1	228,3	363,8	378,4	274,9	476,4	346,6
	E	A	148,0	163,0	170,6	208,9	277,6	282,5	329,2	211,9	338,1	228,3	363,8	378,4	274,9	476,4	346,6
	L	A	146,9	163,0	169,5	208,9	277,6	282,5	329,2	211,9	338,1	225,1	363,8	378,4	274,9	476,4	346,6
	N	A	148,0	164,1	170,6	210,8	277,6	282,5	332,4	215,1	341,3	228,3	363,8	381,6	278,1	479,6	349,8
	U	A	-	-	-	210,8	277,6	282,5	332,4	215,1	341,3	228,3	363,8	381,6	278,1	479,6	349,8

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Compressor																	
Type	°,A,E,L,N,U	type								Scroll							
Number	°,A	no.	-	-	-	-	2	2	2	4	2	4	2	2	4	2	4
	E,L,N	no.	2	2	2	2	2	2	2	4	2	4	2	2	4	2	4
	U	no.	-	-	-	2	2	2	2	4	2	4	2	2	4	2	4
Circuits	°,A	no.	-	-	-	-	1	1	1	2	1	2	1	1	2	1	2
	E,L,N	no.	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2
	U	no.	-	-	-	1	1	1	1	2	1	2	1	1	2	1	2
Refrigerant	°,A,E,L,N,U	type								R410A							
System side heat exchanger																	
Type	°,A,E,L,N,U	type								Brazed plate							
Number	°,A	no.	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1
	E,L,N	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	U	no.	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																	
Sizes (in/out)	°,A	Ø	-	-	-	-	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2
	E,L,N	Ø								2" 1/2							
	U	Ø	-	-	-	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2

G.s. = Grooved joints

Fans

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fan																	
Type	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	°	no.	-	-	-	-	2	2	2	2	3	3	3	2	2	3	3
	A	no.	-	-	-	-	2	2	2	2	3	3	3	2	3	3	3
	E	no.	6	6	8	8	2	2	2	2	3	3	3	2	3	3	3
	L	no.	4	6	6	8	2	2	2	2	3	3	3	2	2	3	3
	N	no.	6	8	8	2	2	2	3	3	3	4	4	3	3	4	4
	U	no.	-	-	-	2	2	2	3	3	3	4	4	3	3	4	4

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: °																	
Fan																	
Fan motor	°,A,U	type	Asynchronous														
	E,L,N	type	Asynchronous with phase cut														
Air flow rate	°,A,U	m³/h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	m³/h	20700	22200	27500	24800	-	-	-	-	-	-	-	-	-	-	-
	L	m³/h	15200	20700	22200	27500	-	-	-	-	-	-	-	-	-	-	-
	N	m³/h	22200	27500	24800	-	-	-	-	-	-	-	-	-	-	-	-
Sound data calculated in cooling mode (1)																	
Sound power level	°,A,U	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	dB(A)	72,4	72,9	73,7	73,9	-	-	-	-	-	-	-	-	-	-	-
	L	dB(A)	71,8	72,9	73,3	73,9	-	-	-	-	-	-	-	-	-	-	-
	N	dB(A)	72,4	73,3	73,7	-	-	-	-	-	-	-	-	-	-	-	-

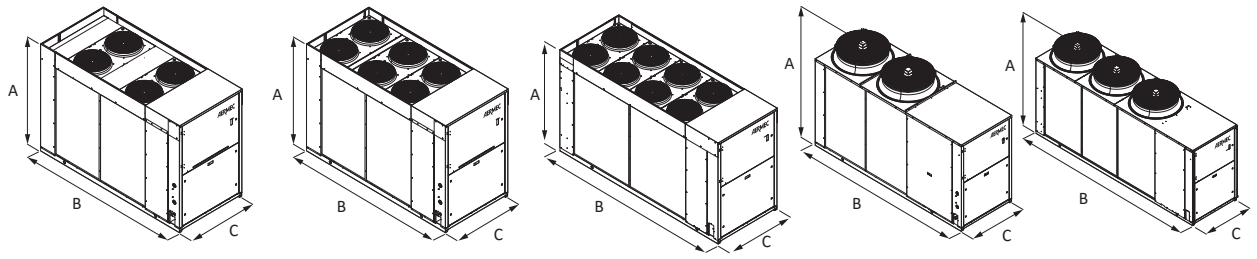
(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																	
Increased fan																	
Fan motor	°,A,U	type	Asynchronous														
	E,L,N	type	Asynchronous with phase cut														
With static pressure																	
Air flow rate	°	m³/h	-	-	-	-	36600	36600	35100	35100	35100	33700	55200	53100	53100	53100	53100
	A	m³/h	-	-	-	-	35100	35100	33800	33800	33700	53100	53100	51100	51100	51100	51100
	E	m³/h	20700	22200	27500	24800	26800	26800	25600	25600	25600	40500	40500	38800	38800	38800	38800
	L	m³/h	15200	20700	22200	27500	30900	30900	29500	29500	46500	44600	44600	29500	28300	44600	44600
	N	m³/h	22200	27500	24800	26800	25600	25600	40500	40500	40500	38800	38800	54600	54600	54600	54600
	U	m³/h	-	-	-	35100	33700	33700	53100	53100	53100	51100	51100	71200	71200	71200	71200
High static pressure	°,A,U	Pa	-	-	-	-	50	50	50	50	50	50	50	50	50	50	50
	E,L	Pa	80	80	80	80	50	50	50	50	50	50	50	50	50	50	50
	N	Pa	80	80	80	50	50	50	50	50	50	50	50	50	50	50	50
Sound power level	°	dB(A)	-	-	-	-	84,5	85,0	85,3	84,2	85,5	84,3	86,9	87,0	85,9	87,7	87,5
	A	dB(A)	-	-	-	-	84,5	85,0	85,3	84,2	85,5	85,9	86,9	87,0	85,9	87,7	87,5
	E	dB(A)	72,4	72,9	73,7	73,9	80,7	81,5	82,1	76,1	82,5	77,2	83,6	83,8	77,4	85,0	83,0
	L	dB(A)	71,8	72,9	73,3	73,9	80,7	81,5	82,1	76,1	82,5	76,5	83,6	83,8	77,4	85,0	83,5
	N	dB(A)	72,4	73,3	73,7	79,7	80,7	81,5	83,0	76,9	83,4	77,2	83,6	84,5	77,9	85,5	83,3
	U	dB(A)	-	-	-	84,0	84,5	85,0	86,6	85,8	86,8	85,9	86,9	87,9	87,0	88,5	88,5
Without Static pressure																	
Air flow rate	°	m³/h	-	-	-	-	42300	42300	40400	40400	40400	38700	63700	61000	61000	61000	61000
	A	m³/h	-	-	-	-	40400	40400	38600	38600	38600	61100	61000	58500	58500	58500	58500
	E	m³/h	-	-	-	-	26800	26800	25600	25600	25600	40500	40500	38800	38800	38800	38800
	L	m³/h	-	-	-	-	30900	30900	29500	29500	29500	28300	46500	44600	44600	44600	44600
	N	m³/h	-	-	-	26800	25600	25600	40500	40500	40500	38800	38800	54600	54600	54600	54600
	U	m³/h	-	-	-	45700	44000	44000	69000	69000	69000	66500	69000	66500	66500	66500	66500
High static pressure	°,A,E,L	Pa	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0
	N,U	Pa	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
Sound power level	°	dB(A)	-	-	-	-	86,6	86,8	87,0	86,0	87,1	86,0	88,2	88,3	87,7	88,6	88,5
	A	dB(A)	-	-	-	-	86,6	86,8	87,0	86,0	87,1	87,7	88,2	88,3	87,7	88,6	88,5
	E	dB(A)	-	-	-	-	80,7	81,5	82,1	76,1	82,5	77,2	83,6	83,8	77,4	85,0	83,0
	L	dB(A)	-	-	-	-	80,7	81,5	82,1	76,1	82,5	76,5	83,6	83,8	77,4	85,0	83,5
	N	dB(A)	-	-	-	79,7	80,7	81,5	83,0	76,9	83,4	77,2	83,6	84,5	77,9	85,5	83,3
	U	dB(A)	-	-	-	86,4	86,6	86,8	88,5	87,7	88,6	87,7	88,2	89,3	88,9	89,6	89,6

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: J																	
Inverter fan																	
Fan motor	°,A,E,L,N,U	type								Inverter							
Air flow rate	°	m^3/h	-	-	-	-	36600	36600	35100	35100	35100	33700	55200	53100	53100	53100	53100
	A	m^3/h	-	-	-	-	35100	35100	33800	33800	33700	53100	53100	51100	51100	51100	51100
	E	m^3/h	20700	22200	27500	24800	26800	26800	25600	25600	25600	40500	40500	38800	38800	38800	38800
	L	m^3/h	15200	20700	22200	27500	30900	30900	29500	29500	29500	28300	46500	44600	44600	44600	44600
	N	m^3/h	22200	27500	24800	26800	25600	25600	40500	40500	40500	38800	38800	54600	54600	54600	54600
	U	m^3/h	-	-	-	35100	33700	33700	53100	53100	51100	71200	71200	53100	51100	71200	71200
High static pressure	°,A	Pa	-	-	-	-	120	120	120	120	120	120	120	120	120	120	120
	E,L	Pa	20	20	20	20	120	120	120	120	120	120	120	120	120	120	120
	N	Pa	20	20	20	120	120	120	120	120	120	120	120	120	120	120	120
	U	Pa	-	-	-	120	120	120	120	120	120	120	120	120	120	120	120
Sound data calculated in cooling mode (1)																	
Sound power level	°	dB(A)	-	-	-	-	84,5	85,0	85,3	85,5	86,9	87,0	87,7	84,2	84,3	85,9	87,5
	A	dB(A)	-	-	-	-	84,5	85,0	85,3	85,5	86,9	87,0	87,7	84,2	85,9	85,9	87,5
	E	dB(A)	72,4	72,9	73,7	73,9	80,7	81,5	82,1	82,5	83,6	83,8	85,0	76,1	77,2	77,4	83,0
	L	dB(A)	71,8	72,9	73,3	73,9	80,7	81,5	82,1	82,5	83,6	83,8	85,0	76,1	76,5	77,4	83,5
	N	dB(A)	72,4	73,3	73,7	79,7	80,7	81,5	83,0	83,4	83,6	84,5	85,5	76,9	77,2	77,9	83,3
	U	dB(A)	-	-	-	84,0	84,5	85,0	86,6	86,8	86,9	87,9	88,5	85,8	85,9	87,0	88,5

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Dimensions and weights																	
A	°,A	mm	-	-	-	-	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	E,L	mm	1680	1680	1680	1680	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	N	mm	1680	1680	1680	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	U	mm	-	-	-	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
B	°	mm	-	-	-	-	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
	A	mm	-	-	-	-	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	E	mm	2450	2950	2950	2950	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	L	mm	2450	2450	2950	2950	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
	N	mm	2950	2950	2950	3200	3200	3200	4010	4010	4010	4010	4010	5200	5200	5200	5200
	U	mm	-	-	-	3200	3200	3200	4010	4010	4010	4010	4010	5200	5200	5200	5200
C	°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	E,L,N	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	U	mm	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Weights																	
Without hydronic kit	°	kg	-	-	-	-	993	1018	1075	1160	1075	1210	1267	1427	1331	1440	1392
	A	kg	-	-	-	-	1046	1072	1116	1200	1116	1325	1347	1507	1410	1531	1471
	E	kg	828	889	912	962	1046	1072	1116	1116	1347	1507	1531	1200	1325	1410	1471
	L	kg	810	828	894	907	993	1018	1075	1160	1075	1210	1267	1427	1331	1440	1392
	N	kg	884	907	957	1020	1076	1109	1232	1243	1426	1647	1660	1327	1415	1549	1607
	U	kg	-	-	-	1020	1076	1109	1232	1243	1426	1647	1660	1327	1415	1549	1607

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www.aermec.com

NRB 0282H-0754H

Reversible air/water heat pump

Cooling capacity 52 ÷ 261 kW
Heating capacity 57 ÷ 193 kW

- **High efficiency also at partial loads**
- **Components redundancy for greater safety**
- **Low refrigerant charge**
- **Compact dimensions**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -15°C outside air temperature in winter, and up to 48°C in summer. Hot water production up to 55°C (for more information see the technical documentation).

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.*

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud con-

nection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.
AERCALM: The aim of the accessory installed in the electric box of the unit is to provide a clean contact for commanding - on the basis of the outside air temperature - a boiler to replace the heat pump. Aercalm must be requested at the time of ordering, as it is installed in the factory.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
AER485P1	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	E,L	•	•	•	•											

Remote panel

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
PR4	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M															
E, L	DCPX141	DCPX141	DCPX141	DCPX141	-	-	-	-	-	-	-	-	-	-	-
Fans: °															
°	-	-	-	-	DCPX142	DCPX142	DCPX142	DCPX142	DCPX142	DCPX142	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143
A	-	-	-	-	DCPX142	DCPX142	DCPX142	DCPX142	DCPX142	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143
E, L	DCPX140	DCPX140	DCPX140	DCPX140	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4															
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, K1, K2, K3, K4, W1, W2, W3, W4															
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
E	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
L	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy
The accessory cannot be fitted on the configurations indicated with -

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0602	0604
°, A	-	-	-	-	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)
E, L	DRENRB282 (1)	DRENRB302 (1)	DRENRB332 (1)	DRENRB352 (1)	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754
°, A, E, L	DRENRB652 (1)	DRENRB654 (1)	DRENRB682 (1)	DRENRB702 (1)	DRENRB704 (1)	DRENRB752 (1)	DRENRB754 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°, A	-	-	-	-	RIF0502	RIF0552	RIF0602	RIF0604	RIF0652	RIF0654	RIF0682	RIF0702	RIF0704	RIF0752	RIF0754
E, L	RIF0282	RIF0302	RIF0332	RIF0352	RIF0502	RIF0552	RIF0602	RIF0604	RIF0652	RIF0654	RIF0682	RIF0702	RIF0704	RIF0752	RIF0754

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Touch screen keyboard

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°, A, E, L	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH

A grey background indicates the accessory must be assembled in the factory

Clean contact for controlling a boiler.

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
AERCALM	°,A,E,L								•		•			•		•

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0282, 0302, 0332, 0352, 0502, 0552, 0602, 0604, 0652, 0654, 0682, 0702, 0704, 0752, 0754
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Double mechanical thermostat for low temperature (2)
	Z	Low temperature electronic thermostatic valve (3)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency (5)
	L	Standard silenced (5)
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	M	Oversized (6)
	°	Standard
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (7)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (7)
	07	Storage tank with holes for heaters and single high head pump (7)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (7)
		Double loop
	09	Double loop
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with inverter pump/s to fixed speed
	I1	Single low head pump + fixed speed inverter
	I2	Single low head pump with fixed speed inverter + stand-by pump
	I3	Single high head pump + fixed speed inverter
	I4	Single high head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and inverter pump/s to fixed speed
	K1	Single low head pump + storage tank + fixed speed inverter
	K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
	K3	Single high head pump + storage tank + fixed speed inverter
	K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and variable speed inverter pump/s
	W1	Single low head pump + Storage tank + variable speed inverter
	W2	Double low head pump + Storage tank + variable speed inverter
	W3	Single high head pump + Storage tank + variable speed inverter
	W4	Double high head pump + Storage tank + variable speed inverter

(1) Water produced from 4 °C ÷ 18 °C
(2) Water produced from -10 °C ÷ 18 °C
(3) Water produced from 4 °C ÷ 18 °C for ° version; -10 °C for the others versions
(4) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(5) The size 0282-0302-0332-0352 are only available in the silenced versions "HL/HE"
(6) Only for 0282 ÷ 0352 sizes
(7) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

NRB H°

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	91,2	99,7	116,0	115,4	124,7	133,4	151,0	169,9	159,9	187,2	180,8
Input power	kW	-	-	-	-	33,5	37,5	42,6	46,2	47,8	51,2	51,7	60,0	58,0	69,8	65,7
Cooling total input current	A	-	-	-	-	61,0	67,0	74,0	83,0	83,0	92,0	90,0	102,0	105,0	116,0	116,0
EER	W/W	-	-	-	-	2,72	2,66	2,72	2,50	2,61	2,60	2,92	2,83	2,76	2,68	2,75
Water flow rate system side	l/h	-	-	-	-	15705	17177	19972	19876	21484	22988	25997	29247	27534	32236	31116
Pressure drop system side	kPa	-	-	-	-	35	42	37	44	43	44	50	61	65	74	59
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	-	-	-	-	96,8	105,8	123,7	129,0	136,1	143,4	158,7	178,4	171,8	198,7	188,6
Input power	kW	-	-	-	-	31,0	33,8	38,7	42,7	43,3	47,7	51,2	58,2	57,3	66,0	61,8
Heating total input current	A	-	-	-	-	56,0	60,0	68,0	77,0	76,0	87,0	89,0	99,0	104,0	110,0	111,0
COP	W/W	-	-	-	-	3,12	3,13	3,20	3,03	3,15	3,01	3,10	3,07	3,00	3,01	3,05
Water flow rate system side	l/h	-	-	-	-	16773	18334	21443	22371	23594	24863	27527	30948	29797	34460	32710
Pressure drop system side	kPa	-	-	-	-	40	48	43	56	52	52	56	69	76	84	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HL

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	52,1	59,2	67,3	78,1	88,5	96,5	111,5	110,4	119,3	126,4	147,0	164,5	154,9	180,5	174,0
Input power	kW	19,5	22,0	24,8	29,5	34,1	38,3	44,1	48,4	49,9	54,2	52,3	61,5	59,2	72,5	67,8
Cooling total input current	A	35,0	41,0	47,0	55,0	59,0	66,0	74,0	84,0	84,0	94,0	87,0	100,0	103,0	116,0	116,0
EER	W/W	2,67	2,69	2,71	2,65	2,60	2,52	2,53	2,28	2,39	2,33	2,81	2,68	2,62	2,49	2,57
Water flow rate system side	l/h	8974	10197	11584	13455	15234	16630	19200	19020	20540	21776	25312	28324	26677	31068	29958
Pressure drop system side	kPa	33	42	33	45	33	39	34	40	39	40	48	58	60	69	55
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	57,5	65,7	75,3	84,9	96,8	105,8	123,7	129,0	136,1	143,4	158,7	178,4	171,8	198,7	188,6
Input power	kW	17,6	20,7	23,1	26,9	31,0	33,8	38,7	42,6	43,3	47,7	51,2	58,2	57,3	66,0	61,8
Heating total input current	A	32,0	38,0	43,0	51,0	56,0	60,0	68,0	77,0	76,0	87,0	89,0	99,0	104,0	110,0	111,0
COP	W/W	3,27	3,17	3,26	3,16	3,12	3,13	3,20	3,03	3,15	3,01	3,10	3,07	3,00	3,01	3,05
Water flow rate system side	l/h	9973	11376	13056	14711	16773	18334	21443	22371	23594	24863	27527	30948	29797	34460	32710
Pressure drop system side	kPa	41	53	42	54	40	47	43	55	52	52	56	69	75	84	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HA

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	96,9	106,5	123,6	123,1	133,6	142,1	163,9	178,5	168,0	199,9	190,0
Input power	kW	-	-	-	-	32,3	36,1	39,5	43,3	45,0	47,2	50,7	57,0	55,4	66,5	62,8
Cooling total input current	A	-	-	-	-	57,0	61,0	68,0	73,0	74,0	79,0	85,0	94,0	99,0	102,0	106,0
EER	W/W	-	-	-	-	3,00	2,95	3,13	2,84	2,97	3,01	3,23	3,13	3,03	3,01	3,03
Water flow rate system side	l/h	-	-	-	-	16684	18331	21277	21205	23007	24462	28216	30726	28924	34406	32698
Pressure drop system side	kPa	-	-	-	-	26	31	32	38	38	50	44	52	50	56	54
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	-	-	-	-	100,3	110,9	124,3	129,7	138,2	149,4	164,1	179,7	172,3	200,6	190,0
Input power	kW	-	-	-	-	30,7	33,5	37,6	40,5	42,0	46,7	50,2	56,3	54,3	62,9	59,5
Heating total input current	A	-	-	-	-	56,0	60,0	67,0	73,0	74,0	86,0	87,0	96,0	99,0	106,0	107,0
COP	W/W	-	-	-	-	3,27	3,31	3,31	3,20	3,29	3,20	3,27	3,19	3,17	3,19	3,19
Water flow rate system side	l/h	-	-	-	-	17406	19230	21553	22489	23953	25914	28469	31171	29889	34800	32956
Pressure drop system side	kPa	-	-	-	-	28	34	33	42	41	56	45	54	54	57	55

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	55,4	62,1	70,0	81,2	94,0	103,0	119,1	117,6	128,0	138,3	159,4	172,5	162,3	191,7	182,6
Input power	kW	18,5	21,0	23,7	28,3	32,8	36,9	40,7	44,7	46,9	47,7	51,4	58,5	56,7	69,3	64,9
Cooling total input current	A	32,0	37,0	42,0	47,0	56,0	61,0	68,0	74,0	75,0	76,0	83,0	93,0	98,0	102,0	106,0
EER	W/W	3,00	2,96	2,95	2,86	2,86	2,79	2,92	2,63	2,73	2,90	3,10	2,95	2,87	2,77	2,81
Water flow rate system side	l/h	9530	10696	12052	13983	16181	17722	20498	20255	22037	23819	27431	29692	27947	33000	31425
Pressure drop system side	kPa	23	29	26	35	24	29	30	34	34	48	41	49	47	51	50
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	59,0	68,2	76,6	87,1	100,3	110,9	124,3	129,7	138,2	149,4	164,1	179,7	172,3	200,6	190,0
Input power	kW	17,5	20,3	22,9	26,4	30,7	33,5	37,6	40,5	42,0	46,7	50,2	56,3	54,3	62,9	59,5
Heating total input current	A	33,0	38,0	44,0	50,0	56,0	60,0	67,0	73,0	74,0	86,0	87,0	96,0	99,0	106,0	107,0
COP	W/W	3,37	3,36	3,35	3,30	3,27	3,31	3,31	3,20	3,29	3,20	3,27	3,19	3,17	3,19	3,19
Water flow rate system side	l/h	10227	11816	13289	15100	17406	19230	21553	22489	23953	25914	28469	31171	29889	34800	32956
Pressure drop system side	kPa	26	35	31	41	28	34	33	42	41	56	45	54	54	57	55

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

NRB H°

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	-	-	-	-	122,6	133,3	155,1	154,9	165,6	183,4	203,5	227,9	218,9	248,3	247,3
Input power	kW	-	-	-	-	36,3	41,0	46,5	50,2	52,2	55,9	55,8	65,6	62,6	77,0	72,2
Cooling total input current	A	-	-	-	-	65,0	72,0	80,0	89,0	90,0	99,0	96,0	110,0	112,0	126,0	126,0
EER	W/W	-	-	-	-	3,38	3,25	3,33	3,08	3,17	3,28	3,65	3,48	3,50	3,23	3,42
Water flow rate system side	l/h	-	-	-	-	21190	23054	26805	26775	28622	31700	35175	39395	37837	42931	42743
Pressure drop system side	kPa	-	-	-	-	63	75	67	81	76	84	92	111	123	131	112
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	-	-	-	-	98,8	107,2	127,4	132,8	139,6	146,7	163,5	182,9	176,8	201,7	192,4
Input power	kW	-	-	-	-	25,4	27,7	31,8	34,3	35,5	38,4	42,0	47,3	46,5	53,2	50,4
Heating total input current	A	-	-	-	-	46,0	49,0	56,0	61,0	62,0	70,0	72,0	80,0	84,0	88,0	90,0
COP	W/W	-	-	-	-	3,89	3,87	4,01	3,87	3,93	3,82	3,90	3,87	3,80	3,79	3,82
Water flow rate system side	l/h	-	-	-	-	17058	18508	21998	22936	24118	25357	28248	31616	30551	34851	33261
Pressure drop system side	kPa	-	-	-	-	41	49	45	59	54	54	59	72	80	86	68

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

NRB HL

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	69,6	79,3	92,2	105,6	118,1	128,2	147,6	146,8	156,6	170,9	196,8	218,8	210,1	237,3	235,3
Input power	kW	21,9	24,2	27,3	32,5	37,3	42,4	48,9	53,8	55,5	60,7	57,2	68,1	64,8	81,0	75,7
Cooling total input current	A	39,0	44,0	51,0	60,0	64,0	72,0	81,0	92,0	93,0	104,0	94,0	110,0	111,0	128,0	128,0
EER	W/W	3,18	3,27	3,37	3,25	3,17	3,02	3,02	2,73	2,82	2,82	3,44	3,22	3,24	2,93	3,11
Water flow rate system side	l/h	12041	13740	15960	18270	20427	22163	25508	25376	27064	29542	34006	37824	36327	41017	40668
Pressure drop system side	kPa	59	77	63	83	59	69	61	70	68	73	86	103	112	120	101
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	58,9	66,7	77,1	86,8	98,8	107,2	127,4	132,8	139,6	146,7	163,5	182,9	176,8	201,7	192,4
Input power	kW	13,9	16,5	18,4	21,5	25,4	27,7	31,8	34,3	35,5	38,4	42,0	47,3	46,5	53,2	50,4
Heating total input current	A	25,0	30,0	34,0	40,0	46,0	49,0	56,0	61,0	62,0	70,0	72,0	80,0	84,0	88,0	90,0
COP	W/W	4,25	4,06	4,19	4,03	3,89	3,87	4,01	3,87	3,93	3,82	3,90	3,87	3,80	3,79	3,82
Water flow rate system side	l/h	10168	11516	13317	14972	17058	18508	21998	22936	24118	25357	28248	31616	30551	34851	33261
Pressure drop system side	kPa	42	54	44	56	41	48	45	57	54	54	59	72	79	86	68

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

NRB HA

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	-	-	-	-	131,3	143,6	166,5	170,4	178,7	198,2	222,3	241,2	231,6	268,1	261,3
Input power	kW	-	-	-	-	34,9	39,4	42,9	47,2	49,0	50,3	54,8	62,4	59,6	73,6	68,8
Cooling total input current	A	-	-	-	-	61,0	66,0	74,0	79,0	80,0	82,0	91,0	101,0	105,0	112,0	115,0
EER	W/W	-	-	-	-	3,77	3,65	3,88	3,61	3,65	3,94	4,06	3,86	3,88	3,65	3,80
Water flow rate system side	l/h	-	-	-	-	22699	24821	28771	29452	30874	34255	38412	41683	40019	46336	45163
Pressure drop system side	kPa	-	-	-	-	48	57	59	73	68	98	81	97	96	102	103
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	-	-	-	-	104,2	114,6	128,1	133,6	141,8	154,4	169,0	184,0	177,3	203,5	193,6
Input power	kW	-	-	-	-	25,2	27,6	30,9	32,6	34,4	38,0	41,2	45,8	44,1	50,7	48,5
Heating total input current	A	-	-	-	-	46,0	49,0	54,0	59,0	60,0	69,0	71,0	78,0	80,0	85,0	87,0
COP	W/W	-	-	-	-	4,14	4,16	4,15	4,10	4,12	4,07	4,10	4,02	4,02	4,01	3,99
Water flow rate system side	l/h	-	-	-	-	18004	19795	22128	23077	24492	26674	29206	31801	30649	35173	33469
Pressure drop system side	kPa	-	-	-	-	30	36	35	45	43	60	47	56	56	58	57

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	76,4	85,7	96,8	111,4	126,2	137,5	158,5	160,4	168,9	191,5	214,3	230,5	221,2	253,2	247,4
Input power	kW	20,4	23,1	25,7	31,2	35,9	41,0	45,2	49,8	52,2	51,4	56,4	65,1	62,1	78,2	72,6
Cooling total input current	A	35,0	40,0	45,0	51,0	61,0	66,0	75,0	81,0	82,0	81,0	90,0	102,0	106,0	114,0	117,0
EER	W/W	3,74	3,72	3,77	3,57	3,51	3,36	3,51	3,22	3,24	3,72	3,80	3,54	3,56	3,24	3,41
Water flow rate system side	l/h	13219	14836	16740	19268	21829	23767	27392	27721	29185	33098	37025	39827	38232	43759	42750
Pressure drop system side	kPa	43	55	50	66	44	52	53	64	60	92	75	88	88	91	92
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	60,5	70,2	78,9	90,4	104,2	114,6	128,1	133,6	141,8	154,4	169,0	184,0	177,3	203,5	193,6
Input power	kW	13,8	16,1	18,2	21,1	25,2	27,6	30,9	32,6	34,4	38,0	41,2	45,8	44,1	50,7	48,5
Heating total input current	A	26,0	30,0	35,0	40,0	46,0	49,0	54,0	59,0	60,0	69,0	71,0	78,0	80,0	85,0	87,0
COP	W/W	4,38	4,36	4,34	4,28	4,14	4,16	4,15	4,10	4,12	4,07	4,10	4,02	4,02	4,01	3,99
Water flow rate system side	l/h	10456	12125	13636	15617	18004	19795	22128	23077	24492	26674	29206	31801	30649	35173	33469
Pressure drop system side	kPa	27	37	33	43	30	36	35	45	43	60	47	56	56	58	57

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling capacity with low leaving water temp (UE n° 2016/2281)																	
SEER	°	W/W	-	-	-	-	3,92	3,83	3,99	3,70	3,91	3,67	4,14	3,97	3,73	3,88	3,76
	A	W/W	-	-	-	-	4,21	4,14	4,39	3,93	4,20	3,92	4,38	4,27	3,99	4,24	4,06
	E	W/W	4,28	4,32	4,22	4,24	4,17	4,10	4,33	3,86	4,12	3,93	4,35	4,21	3,98	4,16	3,92
	L	W/W	4,10	4,11	4,11	4,00	3,88	3,83	3,93	3,68	3,89	3,64	4,08	3,89	3,70	3,81	3,71
ηsc	°	%	-	-	-	-	154,00	150,00	157,00	145,00	153,00	144,00	163,00	156,00	146,00	152,00	147,00
	A	%	-	-	-	-	165,00	163,00	173,00	154,00	165,00	154,00	172,00	168,00	157,00	167,00	160,00
	E	%	168,00	170,00	166,00	167,00	164,00	161,00	170,00	151,00	162,00	154,00	171,00	165,00	156,00	163,00	154,00
	L	%	161,00	161,00	161,00	157,00	152,00	150,00	154,00	144,00	153,00	143,00	160,00	153,00	145,00	149,00	145,00
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)																	
Pdesignh	°	kW	-	-	-	-	88,80	97,30	112,20	116,80	124,50	129,90	144,90	162,80	157,50	182,70	172,10
	A	kW	-	-	-	-	90,20	99,60	112,20	116,80	125,80	135,00	149,00	164,10	157,00	183,30	173,60
	E	kW	53,46	53,46	53,46	78,80	90,20	99,60	112,20	116,80	125,80	135,00	149,00	164,10	157,00	183,30	173,60
	L	kW	52,20	60,22	68,44	78,20	88,80	97,30	112,20	116,80	124,50	129,90	144,90	162,80	157,50	182,70	172,10
ηsh	°	%	-	-	-	-	135,90	139,50	140,40	130,40	140,30	129,50	134,00	137,30	126,30	138,40	128,50
	A	%	-	-	-	-	138,00	142,80	143,20	133,00	143,10	132,10	139,80	141,30	128,00	142,00	133,00
	E	%	158,26	158,26	158,26	152,70	138,50	142,80	143,20	133,00	143,10	132,10	139,80	141,30	128,40	142,00	133,00
	L	%	156,16	152,79	152,22	150,00	135,90	139,50	140,40	130,50	140,30	129,50	134,00	137,30	126,30	138,40	128,50
SCOP	°	W/W	-	-	-	-	3,47	3,56	3,58	3,34	3,58	3,31	3,43	3,51	3,23	3,54	3,29
	A	W/W	-	-	-	-	3,53	3,65	3,66	3,40	3,65	3,38	3,57	3,61	3,29	3,63	3,40
	E	W/W	4,03	4,04	4,03	3,89	3,54	3,65	3,65	3,40	3,66	3,38	3,57	3,61	3,29	3,62	3,40
	L	W/W	3,98	3,89	3,88	3,83	3,47	3,56	3,59	3,34	3,58	3,31	3,43	3,51	3,23	3,54	3,29

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

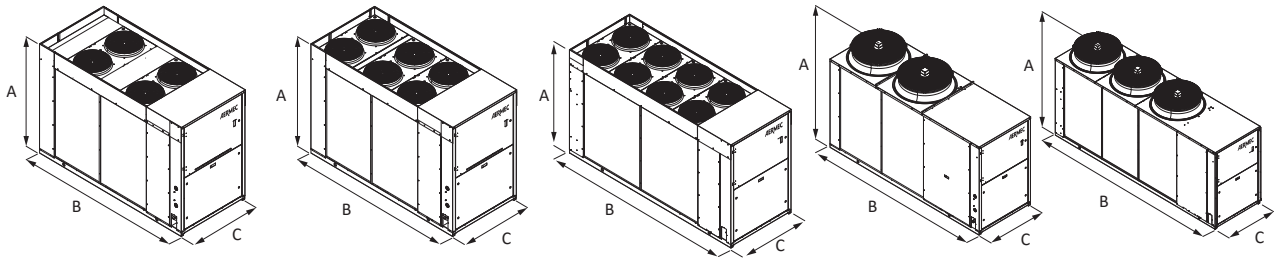
Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Electric data																	
Maximum current (FLA)	°	A	-	-	-	-	74,3	79,2	88,1	100,3	97,0	113,5	115,9	130,5	134,6	147,2	144,4
	A	A	-	-	-	-	74,3	79,2	88,1	100,3	97,0	117,7	115,9	130,5	134,6	147,2	144,4
	E	A	42,6	49,2	56,9	65,3	74,3	79,2	88,1	100,3	97,0	117,7	115,9	130,5	134,6	147,2	144,4
	L	A	41,5	49,2	55,8	65,3	74,3	79,2	88,1	100,3	97,0	113,5	115,9	130,5	134,6	147,2	144,4
Peak current (LRA)	°	A	-	-	-	-	279,8	284,7	331,4	214,1	340,3	227,2	367,0	381,6	278,1	479,6	349,8
	A	A	-	-	-	-	279,8	284,7	331,4	214,1	340,3	231,5	367,0	381,6	278,1	479,6	349,8
	E	A	148,0	163,0	170,6	208,9	279,8	284,7	331,4	214,1	340,3	231,5	367,0	381,6	278,1	479,6	349,8
	L	A	146,9	163,0	169,5	208,9	279,8	284,7	331,4	214,1	340,3	227,2	367,0	381,6	278,1	479,6	349,8

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Compressor																	
Type	°,A,E,L	type								Scroll							
Compressor regulation	°,A,E,L	Type								On-Off							
Number	°,A	no.	-	-	-	-	2	2	2	4	2	4	2	2	4	2	4
	E,L	no.	2	2	2	2	2	2	2	4	2	4	2	2	4	2	4
Circuits	°,A	no.	-	-	-	-	1	1	1	2	1	2	1	1	2	1	2
	E,L	no.	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2
Refrigerant	°,A,E,L	type								R410A							
Refrigerant charge (1)	°	kg	-	-	-	-	12,2	12,2	16,8	17,6	16,8	20,0	24,5	24,5	23,0	24,5	23,0
	A	kg	-	-	-	-	15,9	15,8	17,8	19,8	18,4	21,6	28,6	28,6	27,0	28,6	27,0
	E	kg	9,1	10,7	11,1	12,5	15,9	15,8	17,8	19,8	18,4	21,6	28,6	28,6	27,0	28,6	27,0
	L	kg	8,8	9,4	10,3	11,0	12,2	12,2	16,8	17,6	16,8	20,0	24,5	24,5	23,0	24,5	23,0
System side heat exchanger																	
Type	°,A,E,L	type								Brazed plate							
Number	°,A	no.	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1
	E,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																	
Connections (in/out)	°,A,E,L	Type								Grooved joints							
Sizes (in/out)	°,A,E,L	Ø								2"1/2							
Fan																	
Type	°,A,E,L	type								Axial							
Number	°	no.	-	-	-	-	2	2	2	2	2	2	3	3	3	3	3
	A	no.	-	-	-	-	2	2	2	2	2	3	3	3	3	3	3
	E	no.	6	6	8	8	2	2	2	2	2	3	3	3	3	3	3
	L	no.	4	6	6	8	2	2	2	2	2	2	3	3	3	3	3
Air flow rate	°	m^3/h	-	-	-	-	42785	42785	41094	41065	41094	39542	62015	61936	61936	61936	61936
	A	m^3/h	-	-	-	-	41080	41080	39461	39461	39461	59684	59701	59684	59684	59684	59684
	E	m^3/h	21230	22746	28176	25787	31149	31149	29855	29855	29855	47085	45202	45187	45187	45187	45187
	L	m^3/h	15574	21226	22732	28156	32650	32650	31613	31169	31161	29823	47087	47125	47125	47125	47125
Sound data calculated in cooling mode (2)																	
Sound power level	°	dB(A)	-	-	-	-	86,6	86,9	87,1	86,5	87,3	86,5	88,8	88,9	88,2	89,4	89,5
	A	dB(A)	-	-	-	-	86,6	86,9	87,1	86,5	87,3	88,2	88,8	88,9	88,2	89,4	89,5
	E	dB(A)	73,0	73,5	74,3	74,5	82,2	82,9	83,3	76,7	83,7	77,8	84,9	85,0	78,0	86,1	84,0
	L	dB(A)	72,4	73,5	73,9	74,5	82,2	82,9	83,3	76,7	83,7	77,1	84,9	85,0	78,0	86,1	84,0
Sound pressure level (10 m)	°	dB(A)	-	-	-	-	54,8	55,0	55,2	54,6	55,4	54,6	56,8	56,9	56,2	57,4	57,5
	A	dB(A)	-	-	-	-	54,8	55,0	55,2	54,6	55,4	56,2	56,8	56,9	56,2	57,4	57,5
	E	dB(A)	41,3	41,7	42,5	42,7	50,3	51,0	51,4	44,8	51,8	45,8	52,9	53,1	46,0	54,1	52,0
	L	dB(A)	40,7	41,7	42,1	42,7	50,3	51,0	51,4	44,8	51,8	45,3	52,9	53,1	46,0	54,1	52,0

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Dimensions and weights																	
A	°,A	mm	-	-	-	-	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	E,L	mm	1680	1680	1680	1680	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
B	°	mm	-	-	-	-	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
	A	mm	-	-	-	-	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	E	mm	2450	2950	2950	2950	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	L	mm	2450	2450	2950	2950	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
C	°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	E,L	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100

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NRG 0282-0804

Air-water chiller

Cooling capacity 55,8 ÷ 224,6 kW

- **High efficiency also at partial loads**
- **Low refrigerant charge**
- **Compact dimensions**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas (A2L).
Condensing coil with copper pipes and aluminium louvers, plate heat exchanger.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50°C external air temperature. Unit can produce chilled water up to -10 °C.
For more information refer to the selection program and to to the dedicated documentation.

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption and to guarantee operation of the unit even in critical conditions.*

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
AER485P1	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	E,L,N	•	•	•	•														
	U				•														

Remote panel

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
PR4	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
Fans: M									
°, A	-	-	-	-	DCPX146	DCPX146	DCPX147	DCPX146	DCPX147
E, L	-	-	-	-	As standard	As standard	As standard	As standard	As standard
N	-	-	-	As standard	As standard	As standard	As standard	As standard	As standard
U	-	-	-	DCPX146	DCPX146	DCPX146	DCPX147	DCPX147	DCPX147
Fans: °									
E, L	DCPX145	DCPX145	DCPX145	DCPX145	-	-	-	-	-
N	DCPX145	DCPX145	DCPX145	-	-	-	-	-	-

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: M									
°, A	DCPX146	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147
E	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	-	-
N	As standard	As standard	As standard	-	-	-	-	-	-
U	DCPX147	DCPX147	DCPX147	-	-	-	-	-	-

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4																		
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	-	-
N	VT13	VT13	VT13	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
U	-	-	-	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, K1, K2, K3, K4, W1, W2, W3, W4																		
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	-	-
N	VT13	VT13	VT13	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
U	-	-	-	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°, A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)
E	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)
L	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)
N	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)
U	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy
The accessory cannot be fitted on the configurations indicated with -

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
A, E	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
L	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	-	-
N, U	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652
°, A	-	-	DRENRG332N	-	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604	DRENRG652
E, L, N	DRENRG282	DRENRG302	DRENRG332N	DRENRG352	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604	DRENRG652
U	-	-	DRENRG332N	DRENRG352	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604	DRENRG652

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, N, U	DRENRG654N	DRENRG682	DRENRG702	DRENRG704	DRENRG752	DRENRG754	DRENRG802	DRENRG804
L	DRENRG654N	DRENRG682	DRENRG702	DRENRG704	DRENRG752	DRENRG754	-	-

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652
°, A	-	-	RIFNRG332N	-	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604	RIFNRG652
E, L, N	RIFNRG282	RIFNRG302	RIFNRG332N	RIFNRG352	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604	RIFNRG652
U	-	-	RIFNRG332N	RIFNRG352	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604	RIFNRG652

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, N, U	RIFNRG654N	RIFNRG682	RIFNRG702	RIFNRG704	RIFNRG752	RIFNRG754	RIFNRG802	RIFNRG804
L	RIFNRG654N	RIFNRG682	RIFNRG702	RIFNRG704	RIFNRG752	RIFNRG754	-	-

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, N, U	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2
L	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	-	-

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0282, 0302, 0332, 0352, 0502, 0552, 0554, 0602, 0604, 0652, 0654, 0682, 0702, 0704, 0752, 0754, 0802, 0804
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency (4)
	L	Standard silenced (4)
	N	Silenced very high efficiency (4)
	U	Very high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter (5)
	M	Oversized (6)
	°	Standard (7)
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (8)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (8)
	07	Storage tank with holes for heaters and single high head pump (8)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (8)
		Double loop
	09	Double loop
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with inverter pump/s to fixed speed
	I1	Single low head pump + fixed speed inverter
	I2	Single low head pump with fixed speed inverter + stand-by pump
	I3	Single high head pump + fixed speed inverter
	I4	Single high head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and inverter pump/s to fixed speed
	K1	Single low head pump + storage tank + fixed speed inverter
	K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
	K3	Single high head pump + storage tank + fixed speed inverter
	K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and variable speed inverter pump/s
	W1	Single low head pump + Storage tank + variable speed inverter
	W2	Double low head pump + Storage tank + variable speed inverter
	W3	Single high head pump + Storage tank + variable speed inverter
	W4	Double high head pump + Storage tank + variable speed inverter

(1) Water produced from 4 °C ÷ 20 °C
(2) Water produced from 8 °C to -10 °C. The option is not compatible with hydronic kits W1-W2-W3-W4.
(3) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
(4) The size 0282-0302-0332-0352 only available in low noise versions.
(5) As standard in size 0702-0704-0752-0754-0802-0804 in the version U and N.
(6) As standard in sizes fom 0502 to 0804 version ° - L - A - E and in sizes from 0352 to 0682 and in sizes from 0554 to 0654 version N - U.
(7) As standard in sizes from 0282 to 0352 versions E - L and in size from 0282 to 0332 version N
(8) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRG - °

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	100,8	110,6	117,6	127,1	130,0	138,5	143,5	161,9	182,0	171,7	203,9	194,0	222,4	212,3
Input power	kW	-	-	-	-	33,4	37,8	37,8	39,7	44,2	45,1	50,7	52,5	59,4	57,4	69,6	66,5	80,4	74,8
Cooling total input current	A	-	-	-	-	59,0	64,0	59,0	68,0	79,0	77,0	91,0	88,0	95,0	108,0	111,0	117,0	127,0	126,0
EER	W/W	-	-	-	-	3,02	2,92	3,11	3,20	2,94	3,07	2,83	3,08	3,06	2,99	2,93	2,92	2,77	2,84
Water flow rate system side	l/h	-	-	-	-	17363	19059	20268	21893	22383	23841	24712	27874	31338	29554	35100	33389	38287	36547
Pressure drop system side	kPa	-	-	-	-	40	49	46	44	56	53	50	54	69	71	68	67	81	80

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - L

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																	
Cooling capacity	kW	55,8	63,8	73,3	84,5	98,9	108,2	113,4	123,5	123,9	132,9	139,3	159,0	178,5	168,5	198,8	189,6
Input power	kW	19,7	22,1	24,4	28,6	33,9	38,6	38,5	40,9	45,2	46,7	53,6	53,5	60,3	59,0	71,8	68,2
Cooling total input current	A	32,0	41,0	45,0	55,0	58,0	63,0	59,0	68,0	79,0	77,0	92,0	88,0	96,0	107,0	112,0	117,0
EER	W/W	2,83	2,88	3,01	2,95	2,92	2,80	2,95	3,02	2,74	2,85	2,60	2,97	2,96	2,85	2,77	2,78
Water flow rate system side	l/h	9604	10989	12618	14572	17043	18647	19537	21269	21332	22880	23984	27367	30726	29004	34224	32640
Pressure drop system side	kPa	35	46	37	50	39	46	45	43	54	50	47	52	66	69	65	64

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - A

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	105,3	116,3	118,7	129,7	132,2	141,2	151,3	167,9	186,4	177,0	208,8	199,2	228,6	218,5
Input power	kW	-	-	-	-	31,0	34,9	37,7	40,1	43,8	45,6	47,8	51,1	57,3	56,2	67,0	64,9	77,2	73,6
Cooling total input current	A	-	-	-	-	56,0	60,0	60,0	69,0	80,0	78,0	88,0	85,0	93,0	106,0	108,0	115,0	124,0	123,0
EER	W/W	-	-	-	-	3,39	3,33	3,14	3,23	3,02	3,09	3,16	3,29	3,25	3,15	3,12	3,07	2,96	2,97
Water flow rate system side	l/h	-	-	-	-	18133	20029	20437	22332	22778	24316	26053	28900	32076	30475	35940	34279	39342	37605
Pressure drop system side	kPa	-	-	-	-	30	36	34	34	42	41	56	45	57	56	62	59	74	72

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - E

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	58,7	64,8	74,8	88,1	101,0	112,1	115,3	124,8	126,8	134,9	147,6	161,6	180,1	171,4	201,8	191,5	216,6	208,9
Input power	kW	18,7	21,5	23,3	27,6	31,6	35,8	38,6	40,7	45,6	46,8	49,3	52,1	59,4	58,0	70,9	67,4	81,8	77,1
Cooling total input current	A	31,0	41,0	45,0	54,0	55,0	60,0	61,0	70,0	81,0	79,0	87,0	85,0	95,0	106,0	111,0	116,0	129,0	126,0
EER	W/W	3,14	3,02	3,21	3,19	3,20	3,13	2,98	3,07	2,78	2,88	2,99	3,10	3,03	2,96	2,85	2,84	2,65	2,71
Water flow rate system side	l/h	10097	11156	12874	15166	17382	19311	19858	21482	21840	23238	25406	27822	31004	29499	34739	32965	37282	35953
Pressure drop system side	kPa	24	29	28	37	28	34	32	32	38	37	53	43	53	52	57	55	67	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - U

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	94,0	105,1	116,7	122,4	134,4	135,9	148,2	154,1	170,1	192,0	179,4	215,0	203,9	236,8	224,6
Input power	kW	-	-	-	26,8	30,6	34,4	36,1	38,2	41,9	42,9	46,5	49,5	57,5	56,2	66,4	63,6	75,7	72,1
Cooling total input current	A	-	-	-	53,0	57,0	61,0	58,0	68,0	78,0	76,0	87,0	83,0	92,0	106,0	106,0	114,0	120,0	121,0
EER	W/W	-	-	-	3,51	3,43	3,39	3,39	3,52	3,24	3,45	3,32	3,44	3,34	3,19	3,24	3,20	3,13	3,11
Water flow rate system side	l/h	-	-	-	16172	18095	20096	21081	23146	23408	25528	26524	29288	33054	30884	37012	35090	40762	38655
Pressure drop system side	kPa	-	-	-	24	30	28	37	38	46	36	43	47	53	58	66	59	80	72

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - N

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	59,7	66,0	76,0	92,0	103,0	114,9	120,1	131,5	132,9	144,6	148,5	163,6	188,0	175,9	209,5	199,0	227,4	218,5
Input power	kW	18,1	20,8	23,3	27,9	31,8	36,1	37,0	39,2	43,2	44,5	48,5	52,1	57,9	56,8	67,6	65,1	78,0	74,5
Cooling total input current	A	30,0	41,0	45,0	52,0	57,0	62,0	57,0	67,0	78,0	75,0	88,0	85,0	92,0	106,0	107,0	114,0	123,0	123,0
EER	W/W	3,29	3,17	3,26	3,30	3,24	3,18	3,25	3,35	3,07	3,25	3,06	3,14	3,25	3,10	3,10	3,06	2,92	2,93
Water flow rate system side	l/h	10270	11372	13087	15837	17726	19768	20680	22650	22893	24895	25579	28156	32351	30273	36062	34256	39138	37603
Pressure drop system side	kPa	25	31	29	23	28	26	36	36	44	34	41	44	50	56	63	57	75	68

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	°	W/W	-	-	-	-	4,30	4,30	4,36	4,44	4,33	4,32	4,31	4,37	4,38	4,28	4,32	4,29	4,23	4,26
	A	W/W	-	-	-	-	4,50	4,55	4,43	4,61	4,38	4,55	4,35	4,60	4,56	4,42	4,53	4,37	4,34	4,27
	E	W/W	4,56	4,40	4,56	4,48	4,54	4,46	4,44	4,53	4,40	4,33	4,37	4,55	4,38	4,40	4,37	4,39	4,25	4,27
	L	W/W	4,29	4,21	4,43	4,32	4,32	4,24	4,35	4,30	4,33	4,23	4,31	4,28	4,24	4,30	4,23	4,30	-	-
	N	W/W	4,74	4,66	4,70	4,78	4,71	4,59	4,54	4,77	4,46	4,69	4,49	4,75	4,63	4,48	4,59	4,48	4,37	4,33
	U	W/W	-	-	-	4,77	4,73	4,77	4,51	4,68	4,44	4,72	4,51	4,82	4,66	4,44	4,64	4,42	4,50	4,30
Seasonal efficiency	°	%	-	-	-	-	169,07	169,11	171,47	174,48	170,14	169,96	169,32	171,68	172,37	168,37	169,62	168,51	166,33	167,34
	A	%	-	-	-	-	176,81	179,08	174,25	181,27	172,29	179,03	170,93	181,13	179,44	173,98	178,17	171,94	170,64	167,83
	E	%	179,42	172,83	179,43	176,18	178,57	175,52	174,63	178,28	173,17	170,02	171,96	179,14	172,39	172,91	171,65	172,46	166,80	167,89
	L	%	168,77	165,30	174,27	169,95	169,78	166,72	171,12	168,86	170,11	166,28	169,22	168,35	166,67	169,00	166,22	169,06	-	-
	N	%	186,54	183,37	185,00	188,02	185,24	180,46	178,48	187,81	175,31	184,43	176,70	186,89	182,33	176,32	180,67	176,26	171,95	170,07
	U	%	-	-	-	187,91	186,30	188,00	177,39	184,10	174,64	185,66	177,42	189,79	183,53	174,64	182,68	173,97	177,05	169,03
SEER - 23/18 (EN14825: 2018) (2)																				
SEER	°	W/W	-	-	-	-	4,99	4,86	5,09	5,02	5,00	4,85	5,02	4,90	4,97	4,91	4,88	4,88	4,78	4,71
	A	W/W	-	-	-	-	5,27	5,18	5,28	5,27	5,23	4,92	5,10	5,22	5,20	5,15	5,12	5,02	4,90	4,74
	E	W/W	5,34	5,10	5,33	5,19	5,20	4,92	5,24	4,99	5,22	4,69	5,10	5,07	4,82	5,09	4,61	4,99	4,74	4,68
	L	W/W	4,90	4,77	5,09	4,99	4,85	4,59	5,09	4,73	5,03	4,56	5,05	4,81	4,61	4,89	4,58	4,86	-	-
	N	W/W	5,56	5,41	5,49	5,52	5,40	5,07	5,34	5,39	5,23	5,26	5,29	5,28	5,23	5,17	5,10	5,11	4,84	4,94
	U	W/W	-	-	-	5,64	5,56	5,44	5,39	5,33	5,29	5,12	5,37	5,47	5,35	5,16	5,24	5,08	5,07	4,80
Seasonal efficiency	°	%	-	-	-	-	196,60	191,50	200,50	197,80	197,10	190,80	197,70	193,00	195,90	193,20	192,10	192,30	188,00	185,20
	A	%	-	-	-	-	207,80	204,10	208,30	207,60	206,20	193,90	200,90	205,60	205,00	202,90	201,80	197,80	193,10	186,50
	E	%	210,70	200,80	210,00	204,60	204,90	193,60	206,70	196,40	205,70	184,70	201,00	199,60	189,90	200,40	181,20	196,50	186,70	184,10
	L	%	192,90	187,90	200,70	196,60	191,10	180,50	200,70	186,30	198,30	179,40	199,10	189,20	181,20	192,50	180,20	191,50	-	-
	N	%	219,30	213,20	216,50	217,80	212,90	199,70	210,60	212,40	206,20	207,30	208,70	208,10	206,00	203,70	201,10	201,30	190,40	194,50
	U	%	-	-	-	222,70	219,50	214,60	212,60	210,30	208,40	201,80	211,60	215,60	210,80	203,50	206,70	200,30	199,60	189,00
SEPR - (EN 14825: 2018) (2)																				
SEPR	°	W/W	-	-	-	-	5,78	5,60	6,35	5,79	6,38	5,73	6,34	5,66	6,07	6,34	5,81	6,03	5,78	5,94
	A	W/W	-	-	-	-	6,23	5,98	6,61	5,93	6,60	6,14	6,51	5,98	6,27	6,54	6,05	6,08	5,90	5,90
	E	W/W	6,66	6,39	6,59	6,52	6,30	6,03	6,47	5,93	6,55	5,79	6,41	6,01	6,13	6,44	5,85	6,06	5,21	5,87
	L	W/W	6,34	6,26	6,43	6,30	5,86	5,68	6,35	5,73	6,47	5,69	6,47	5,64	5,95	6,28	5,72	5,92	-	-
	N	W/W	6,87	6,70	6,81	6,88	6,47	6,14	6,58	6,20	6,54	6,21	6,57	6,17	6,54	6,56	6,25	6,19	5,93	6,35
	U	W/W	-	-	-	6,73	6,43	6,14	6,73	6,18	6,68	6,51	6,73	6,26	6,34	6,68	6,18	6,30	6,10	5,99

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: M																				
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	°	W/W	-	-	-	-	4,18	4,18	4,23	4,31	4,20	4,20	4,18	4,24	4,26	4,16	4,19	4,16	4,11	4,14
	A	W/W	-	-	-	-	4,36	4,42	4,30	4,47	4,26	4,42	4,22	4,47	4,43	4,30	4,40	4,25	4,22	4,15
	E	W/W	-	-	-	-	4,41	4,34	4,31	4,40	4,27	4,20	4,25	4,42	4,26	4,27	4,24	4,26	4,12	4,15
	L	W/W	-	-	-	-	4,19	4,12	4,22	4,17	4,20	4,11	4,18	4,16	4,12	4,18	4,11	4,18	-	-
	N	W/W	-	-	-	4,64	4,57	4,45	4,40	4,63	4,33	4,55	4,36	4,61	-	-	-	-	-	-
	U	W/W	-	-	-	4,63	4,60	4,64	4,38	4,54	4,31	4,58	4,38	4,68	-	-	-	-	-	-
Seasonal efficiency	°	%	-	-	-	-	164,19	164,24	166,29	169,41	164,99	165,02	164,13	166,59	167,36	163,42	164,59	163,49	161,43	162,48
	A	%	-	-	-	-	171,56	173,79	169,11	175,81	167,34	173,76	166,00	175,82	174,24	168,98	173,01	166,92	165,82	162,95
	E	%	-	-	-	-	173,34	170,47	169,31	173,05	167,98	165,00	166,82	173,83	167,44	167,75	166,62	167,42	161,90	163,00
	L	%	-	-	-	-	164,75	161,78	165,90	163,73	165,02	161,37	164,21	163,40	161,82	164,05	161,39	164,10	-	-
	N	%	-	-	-	182,41	179,82	175,17	173,00	182,25	170,09	178,97	171,51	181,37	-	-	-	-	-	-
	U	%	-	-	-	182,34	180,84	182,53	172,00	178,62	169,50	180,31	172,13	184,18	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																				
SEER	°	W/W	-	-	-	-	4,86	4,73	4,94	4,89	4,86	4,71	4,87	4,77	4,84	4,77	4,74	4,75	4,64	4,58
	A	W/W	-	-	-	-	5,13	5,04	5,13	5,12	5,09	4,79	4,96	5,08	5,06	5,01	4,98	4,88	4,78	4,61
	E	W/W	-	-	-	-	5,06	4,79	5,09	4,85	5,07	4,56	4,95	4,93	4,70	4,94	4,62	4,85	4,48	4,55
	L	W/W	-	-	-	-	4,72	4,46	4,94	4,60	4,89	4,44	4,91	4,68	4,48	4,75	4,45	4,73	-	-
	N	W/W	-	-	-	5,37	5,25	4,93	5,19	5,24	5,08	5,12	5,14	5,14	-	-	-	-	-	-
	U	W/W	-	-	-	5,49	5,41	5,29	5,23	5,19	5,14	4,98	5,21	5,31	-	-	-	-	-	-
Seasonal efficiency	°	%	-	-	-	-	191,30	186,20	194,50	192,40	191,20	185,50	191,70	187,60	190,40	187,70	186,60	186,80	182,70	180,00
	A	%	-	-	-	-	202,10	198,50	202,20	201,70	200,40	188,50	195,30	200,00	199,40	197,20	196,30	192,20	188,00	181,20
	E	%	-	-	-	-	199,30	188,40	200,50	191,00	199,60	179,50	195,10	194,00	184,80	194,60	181,60	190,90	176,30	178,80
	L	%	-	-	-	-	185,80	175,40	194,70	181,00	192,50	174,40	193,30	184,00	176,20	187,00	175,10	186,10	-	-
	N	%	-	-	-	211,70	207,10	194,20	204,40	206,50	200,30	201,60	202,70	202,40	-	-	-	-	-	-
	U	%	-	-	-	216,60	213,50	208,70	206,30	204,40	202,40	196,20	205,50	209,50	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
SEPR - (EN 14825: 2018) (2)																				
SEPR	°	W/W	-	-	-	-	5,78	5,60	6,35	5,79	6,38	5,73	6,34	5,66	6,07	6,34	5,81	6,03	5,78	5,94
	A	W/W	-	-	-	-	6,23	5,98	6,61	5,93	6,60	6,14	6,51	5,98	6,27	6,54	6,05	6,08	5,90	5,90
	E	W/W	-	-	-	-	6,30	6,03	6,47	5,93	6,55	5,79	6,41	6,01	6,13	6,44	5,85	6,06	5,21	5,87
	L	W/W	-	-	-	-	5,86	5,68	6,35	5,73	6,47	5,69	6,47	5,64	5,95	6,28	5,72	5,92	-	-
	N	W/W	-	-	-	6,88	6,47	6,14	6,58	6,20	6,54	6,21	6,57	6,17	-	-	-	-	-	-
	U	W/W	-	-	-	6,73	6,43	6,14	6,73	6,18	6,68	6,51	6,73	6,26	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	4,52	4,35	4,51	4,43	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	W/W	4,25	4,17	4,39	4,28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	4,69	4,62	4,65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	%	177,70	171,11	177,59	174,38	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	%	166,98	163,66	172,63	168,23	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	%	184,57	181,62	183,16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																				
SEER	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	5,30	5,05	5,28	5,14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	W/W	4,85	4,73	5,05	4,94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	5,50	5,36	5,44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	%	208,80	199,00	208,00	202,60	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	%	190,90	186,10	198,90	194,70	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	%	217,10	211,30	214,40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN 14825: 2018) (2)																				
SEPR	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	6,66	6,39	6,59	6,52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	W/W	6,34	6,26	6,43	6,30	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	6,87	6,70	6,81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Electric data																				
Maximum current (FLA)	°	A	-	-	-	-	73,5	79,1	80,5	88,3	97,2	97,4	113,5	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	A	A	-	-	-	-	73,5	79,1	80,5	88,3	97,2	97,4	116,4	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	E	A	41,6	49,9	59,5	67,6	73,5	79,1	80,5	88,3	97,2	97,4	116,4	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	L	A	40,2	49,9	58,1	67,6	73,5	79,1	80,5	88,3	97,2	97,4	113,5	111,5	122,6	132,7	139,4	144,0	-	-
	N	A	41,6	49,9	59,5	67,8	73,5	79,1	83,4	91,2	100,1	100,3	116,4	111,5	125,6	135,7	142,4	147,0	159,1	158,3
	U	A	-	-	-	67,8	73,5	79,1	83,4	91,2	100,1	100,3	116,4	111,5	125,6	135,7	142,4	147,0	159,1	158,3
Peak current (LRA)	°	A	-	-	-	-	276,8	282,5	200,8	329,5	221,3	338,6	268,5	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	A	A	-	-	-	-	276,8	282,5	200,8	329,5	221,3	338,6	271,4	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	E	A	161,9	174,0	214,4	222,6	276,8	282,5	200,8	329,5	221,3	338,6	271,4	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	L	A	160,5	174,0	213,0	222,6	276,8	282,5	200,8	329,5	221,3	338,6	268,5	396,5	407,7	287,7	601,7	347,4	-	-
	N	A	161,9	174,0	214,4	222,8	276,8	282,5	203,7	332,4	224,2	341,5	271,4	396,5	410,7	290,7	604,7	350,4	621,4	361,7
	U	A	-	-	-	222,8	276,8	282,5	203,7	332,4	224,2	341,5	271,4	396,5	410,7	290,7	604,7	350,4	621,4	361,7

■ *Data calculated without hydronic kit and accessories.*

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Compressor																				
Type	°,A,E,N,U	type	Scroll																	
	L	type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	-	-
Compressor regulation	°,A,E,N,U	Type	On-Off																	
	L	Type	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	-	-
Number	°,A,E,N,U	no.	2	2	2	2	2	2	4	2	4	2	4	2	2	4	2	4	2	4
	L	no.	2	2	2	2	2	2	4	2	4	2	4	2	2	4	2	4	-	-
Circuits	°,A,E,N,U	no.	1	1	1	1	1	1	2	1	2	1	2	1	1	2	1	2	1	2
	L	no.	1	1	1	1	1	1	2	1	2	1	2	1	1	2	1	2	-	-
Refrigerant	°,A,E,N,U	type	R32																	
	L	type	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	-	-

Size				0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
System side heat exchanger																					
Type	°,A,E,N,U	type		Brazed plate																	
	L	type		Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	-	-
Number	°,A,E,N,U	no.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	L	no.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-
System side hydraulic connections																					
Sizes (in/out)	°,A,E,N,U	Ø		2" 1/2																	
	L	Ø		2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	-	-

Fans

Size				0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fan																					
Type	°,A,E,N,U	type		Axial																	
	L	type		Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	-	-
Number	°	no.		-	-	-	-	2	2	2	2	2	2	2	3	3	3	3	3	3	3
	A	no.		-	-	-	-	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	E	no.		6	6	8	8	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	L	no.		4	6	6	8	2	2	2	2	2	2	2	3	3	3	3	3	-	-
	N	no.		6	6	8	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3
	U	no.		-	-	-	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
Fan																				
Air flow rate	°,A,U	m³/h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	m³/h	20469	20469	27112	24667	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	m³/h	15291	20474	22212	27150	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	m³/h	22189	22189	24655	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sound data calculated in cooling mode (1)																				
Sound power level	°,A,U	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	dB(A)	73,0	73,5	74,3	74,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	dB(A)	72,4	73,5	73,9	74,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	dB(A)	73,0	73,9	74,3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

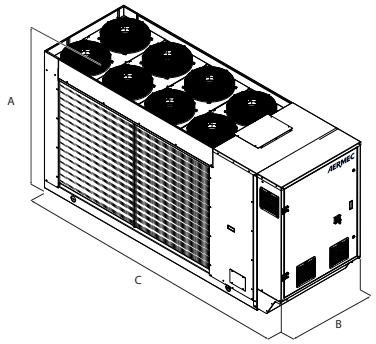
(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: M																				
Without Static pressure																				
Air flow rate	°	m³/h	-	-	-	-	40400	40400	40400	40400	40400	40400	40400	60600	60600	60600	60600	60600	60600	60600
	A	m³/h	-	-	-	-	40400	40400	40400	40400	40400	40400	60600	60600	60600	60600	60600	60600	60600	60600
	E	m³/h	-	-	-	-	26625	26625	25488	25497	25488	25497	40270	40267	38638	38640	38638	38640	38638	38640
	L	m³/h	-	-	-	-	30672	30672	29318	29318	29318	29318	28069	46243	44312	44307	44312	44307	-	-
	N	m³/h	-	-	-	26623	25495	25495	40269	40274	40269	40274	38640	38634	-	-	-	-	-	-
	U	m³/h	-	-	-	40400	40400	40400	60600	60600	60600	60600	60600	60600	-	-	-	-	-	-
Sound power level	°	dB(A)	-	-	-	-	86,8	87,1	86,2	87,3	86,6	87,5	86,7	89,0	89,1	88,3	89,6	89,5	91,0	90,4
	A	dB(A)	-	-	-	-	86,8	87,1	86,2	87,3	86,6	87,5	88,3	89,0	89,1	88,3	89,6	89,5	91,0	90,4
	E	dB(A)	-	-	-	-	81,3	82,1	76,1	82,7	76,7	83,1	77,8	84,2	84,4	78,0	85,6	83,6	87,3	86,7
	L	dB(A)	-	-	-	-	81,3	82,1	76,1	82,7	76,7	83,1	77,1	84,2	84,4	78,0	85,6	84,1	-	-
	N	dB(A)	-	-	-	80,3	81,3	82,1	76,9	83,6	77,5	84,0	77,8	84,2	-	-	-	-	-	-
	U	dB(A)	-	-	-	86,5	86,8	87,1	88,4	88,8	88,3	88,9	88,3	89,0	-	-	-	-	-	-

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
Inverter fan																				
Air flow rate	°	m³/h	-	-	-	-	36600	36600	35100	35100	35100	35100	33700	55200	53100	53100	53100	53100	53100	53100
	A	m³/h	-	-	-	-	35100	35100	33800	33800	33800	33700	53100	53100	51100	51100	51100	51100	51100	51100
	E	m³/h	20700	22200	27500	24800	26800	26800	25600	25600	25600	25600	40500	40500	38800	38800	38800	38800	38800	38800
	L	m³/h	15200	20700	22200	27500	30900	30900	29500	29500	29500	29500	28300	46500	44600	44600	44600	44600	-	-
	N	m³/h	22200	27500	24800	26800	25600	25600	40500	40500	40500	40500	38800	38800	52317	52324	52317	52324	52317	52324
	U	m³/h	-	-	-	35100	33700	33700	53100	53100	53100	53100	51100	51100	66361	66361	66361	66361	66361	66361
Sound data calculated in cooling mode (1)																				
Sound power level	°	dB(A)	-	-	-	-	85,1	85,6	84,2	85,9	84,8	86,1	84,9	87,5	87,6	86,5	88,3	88,1	90,1	89,4
	A	dB(A)	-	-	-	-	85,1	85,6	84,2	85,9	84,8	86,1	86,5	87,5	87,6	86,5	88,3	88,1	90,1	89,4
	E	dB(A)	73,0	73,5	74,3	74,5	81,3	82,1	76,1	82,7	76,7	83,1	77,8	84,2	84,4	78,0	85,6	83,6	87,3	86,7
	L	dB(A)	72,4	73,5	73,9	74,5	81,3	82,1	76,1	82,7	76,7	83,1	77,1	84,2	84,4	78,0	85,6	84,1	-	-
	N	dB(A)	73,0	73,9	74,3	80,3	81,3	82,1	76,9	83,6	77,5	84,0	77,8	84,2	89,3	87,4	89,7	88,5	90,1	89,8
	U	dB(A)	-	-	-	84,6	85,1	85,6	85,8	87,2	86,4	87,4	86,5	87,5	92,3	91,1	92,5	91,7	92,7	92,3

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Dimensions and weights																				
A	°	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900
	A	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
	E	mm	1652	1658	1658	1658	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
	L	mm	1652	1652	1658	1658	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	-	-
	N	mm	1658	1658	1658	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
	U	mm	-	-	-	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
B	°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	E,N	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	L	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	-	-
	U	mm	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	°	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368
	A	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	E	mm	2818	3317	3317	3317	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	L	mm	2818	2818	3317	3317	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	-	-
	N	mm	3317	3317	3317	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368
	U	mm	-	-	-	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

NRG 0282H-0804H

Reversible air/water heat pump

Cooling capacity 52,5 ÷ 212,0 kW – Heating capacity 56,6 ÷ 214,4 kW

- **High efficiency also at partial loads**
- **Low refrigerant charge**
- **Compact dimensions**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -15°C outside air temperature in winter, and up to 48 °C in summer. Hot water production up to 60°C (for more details refer to the technical documentation).

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.*

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Swing HP and LP controls:** available for all models with inverter fan or with DCPX. By continuously modulating the fans, they streamline operation of the unit at any work point both in cooling and heating mode. This results in enhanced energy efficiency of the unit at partial loads.
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

INTEGRATED SOLUTION

The **"integrated solution" concept has been implemented in the system architecture**, consisting in an integrated and streamlined control of compressors and electronic valve.
This solution allowed a variety of new features to be introduced, such as:

— **Low Superheat Control**: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
— **DLT control**: Control of electronic valve at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range, especially in heating mode.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
AER485P1	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	E,L	•	•	•															

Remote panel

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
PR4	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Integrated hydronic kit: 00																		
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, K1, K2, K3, K4, W1, W2, W3, W4																		
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
Integrated hydronic kit: I1, I2, I3, I4, P1, P2, P3, P4																		
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°, A	-	-	-	-	DCPX146	DCPX146	DCPX146	DCPX146	DCPX146
E, L	DCPX145	DCPX145	DCPX145	DCPX145	As standard	As standard	As standard	As standard	As standard

The accessory cannot be fitted on the configurations indicated with -

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°	DCPX146	DCPX146	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147
A	DCPX146	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147
E, L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°, A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)
E	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)
L	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)

(1) x _ indicates the quantity to buy
The accessory cannot be fitted on the configurations indicated with -

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°, L	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
A, E	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°, A	-	-	DRENRG332N	-	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604
E, L	DRENRG282	DRENRG302	DRENRG332N	DRENRG352	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, L	DRENRG652	DRENRG654N	DRENRG682	DRENRG702	DRENRG704	DRENRG752	DRENRG754	DRENRG802	DRENRG804

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°, A	-	-	RIFNRG332N	-	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604
E, L	RIFNRG282	RIFNRG302	RIFNRG332N	RIFNRG352	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, L	RIFNRG652	RIFNRG654N	RIFNRG682	RIFNRG702	RIFNRG704	RIFNRG752	RIFNRG754	RIFNRG802	RIFNRG804

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, L	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0282, 0302, 0332, 0352, 0502, 0552, 0554, 0602, 0604, 0652, 0654, 0682, 0702, 0704, 0752, 0754, 0802, 0804
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency (4)
	L	Standard silenced (4)
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit

Field	Description
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (5)
06	Storage tank with holes for heaters and pump low head + stand-by pump (5)
07	Storage tank with holes for heaters and single high head pump (5)
08	Storage tank with holes for heaters and pump high head + stand-by pump (5)
	Double loop
09	Double loop
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
I1	Single low head pump + fixed speed inverter
I2	Single low head pump with fixed speed inverter + stand-by pump
I3	Single high head pump + fixed speed inverter
I4	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K1	Single low head pump + storage tank + fixed speed inverter
K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
K3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and variable speed inverter pump/s
W1	Single low head pump + Storage tank + variable speed inverter (6)

Field	Description
W2	Double low head pump + Storage tank + variable speed inverter (6)
W3	Single high head pump + Storage tank + variable speed inverter (6)
W4	Double high head pump + Storage tank + variable speed inverter (6)

(1) Water produced from 4 °C ÷ 20 °C
(2) Water produced from 18 °C to -10 °C. The option is not compatible with hydronic kits W1-W2-W3-W4. Not available with desuperheater.
(3) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) The size 0282-0302-0332-0352 are only available in the silenced versions "HL/HE"
(5) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.
(6) Not available with Low temperature electronic thermostatic valve "Z"

PERFORMANCE SPECIFICATIONS

NRG H°

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	93,7	103,4	114,4	117,5	127,3	127,8	141,4	156,4	175,2	169,8	196,0	190,4	215,2	209,1
Input power	kW	-	-	-	-	34,7	39,1	37,8	43,0	43,9	48,9	50,8	51,6	59,6	58,0	69,0	66,0	79,1	74,5
Cooling total input current	A	-	-	-	-	62,0	66,0	60,0	73,0	80,0	82,0	91,0	87,0	97,0	109,0	111,0	117,0	126,0	126,0
EER	W/W	-	-	-	-	2,70	2,65	3,03	2,73	2,90	2,61	2,78	3,03	2,94	2,93	2,84	2,89	2,72	2,81
Water flow rate system side	l/h	-	-	-	-	16141	17808	19683	20225	21912	22017	24335	26922	30168	29239	33727	32773	37044	35991
Pressure drop system side	kPa	-	-	-	-	31	38	20	34	24	40	25	48	60	36	60	40	72	49
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	-	-	-	-	99,6	108,8	118,2	125,6	132,1	137,6	146,9	162,6	183,1	176,7	203,0	195,8	222,4	214,4
Input power	kW	-	-	-	-	31,5	34,4	35,9	38,0	40,7	42,2	45,2	50,3	57,4	54,5	62,7	59,0	69,8	64,1
Heating total input current	A	-	-	-	-	59,0	62,0	59,0	68,0	79,0	75,0	88,0	87,0	96,0	109,0	105,0	112,0	117,0	116,0
COP	W/W	-	-	-	-	3,16	3,17	3,30	3,31	3,24	3,26	3,25	3,23	3,19	3,24	3,24	3,32	3,19	3,35
Water flow rate system side	l/h	-	-	-	-	17265	18855	20522	21779	22925	23855	25482	28203	31767	30659	35221	33974	38576	37206
Pressure drop system side	kPa	-	-	-	-	36	43	22	40	27	48	28	54	67	41	67	45	80	53

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HL

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	52,5	60,5	69,3	80,7	91,0	100,0	110,8	113,2	122,9	122,4	135,2	152,6	170,4	165,0	189,1	184,2	205,8	202,2
Input power	kW	20,2	23,0	25,4	30,1	35,2	39,6	38,4	44,3	45,0	50,9	53,2	52,2	61,2	59,1	71,5	67,9	82,7	77,3
Cooling total input current	A	33,0	42,0	47,0	57,0	60,0	65,0	59,0	72,0	79,0	82,0	92,0	84,0	95,0	107,0	111,0	116,0	128,0	126,0
EER	W/W	2,60	2,63	2,73	2,68	2,59	2,53	2,88	2,55	2,73	2,40	2,54	2,92	2,79	2,79	2,64	2,71	2,49	2,62
Water flow rate system side	l/h	9048	10428	11932	13896	15671	17215	19059	19485	21152	21086	23262	26277	29331	28417	32540	31692	35428	34793
Pressure drop system side	kPa	30	41	31	43	30	36	19	32	23	37	23	46	56	34	56	37	66	45
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	56,6	65,4	74,6	87,5	99,6	108,8	118,2	125,6	132,1	137,6	146,9	162,6	183,1	176,7	203,0	195,8	222,4	214,4
Input power	kW	17,4	20,2	22,3	26,5	31,5	34,4	35,9	38,0	40,7	42,2	45,2	50,3	57,4	54,5	62,7	59,0	69,8	64,1
Heating total input current	A	29,0	40,0	44,0	54,0	59,0	62,0	59,0	68,0	79,0	75,0	88,0	87,0	96,0	109,0	105,0	112,0	117,0	116,0
COP	W/W	3,26	3,24	3,35	3,30	3,16	3,17	3,30	3,31	3,24	3,26	3,25	3,23	3,19	3,24	3,24	3,32	3,19	3,35
Water flow rate system side	l/h	9816	11328	12928	15158	17265	18855	20522	21779	22925	23855	25482	28203	31767	30659	35221	33974	38576	37206
Pressure drop system side	kPa	37	48	38	51	36	43	22	40	27	48	28	54	67	41	67	45	80	53

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HA

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	96,4	106,6	115,8	122,0	128,8	133,3	146,8	160,1	178,0	170,7	199,5	191,8	219,8	212,0
Input power	kW	-	-	-	-	32,6	36,6	37,2	39,7	43,3	45,5	48,6	49,8	57,4	56,7	66,3	64,4	75,9	72,5
Cooling total input current	A	-	-	-	-	60,0	64,0	60,0	70,0	80,0	78,0	90,0	85,0	94,0	108,0	108,0	116,0	123,0	124,0
EER	W/W	-	-	-	-	2,95	2,91	3,11	3,07	2,97	2,93	3,02	3,21	3,10	3,01	3,01	2,98	2,90	2,93
Water flow rate system side	l/h	-	-	-	-	16583	18342	19918	21002	22155	22958	25273	27557	30631	29392	34336	33010	37829	36487
Pressure drop system side	kPa	-	-	-	-	23	28	17	29	21	35	28	40	49	33	54	39	66	48
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	-	-	-	-	103,0	113,7	119,7	126,6	133,9	138,9	155,5	162,3	181,1	175,3	200,6	195,0	219,9	213,7
Input power	kW	-	-	-	-	31,0	33,8	35,6	37,4	40,4	41,5	47,0	49,1	55,3	53,3	60,9	57,8	67,5	62,7
Heating total input current	A	-	-	-	-	59,0	61,0	58,0	68,0	79,0	75,0	91,0	86,0	93,0	107,0	103,0	110,0	114,0	114,0
COP	W/W	-	-	-	-	3,32	3,36	3,36	3,39	3,31	3,35	3,31	3,30	3,27	3,29	3,29	3,37	3,26	3,41
Water flow rate system side	l/h	-	-	-	-	17866	19723	20784	21964	23234	24088	26976	28153	31410	30409	34811	33832	38148	37079
Pressure drop system side	kPa	-	-	-	-	27	32	19	32	23	39	31	42	52	35	57	41	68	49

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HE

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	55,1	61,1	71,0	82,7	93,8	103,3	111,9	118,0	124,0	128,3	144,2	154,7	173,0	166,6	192,6	186,2	210,5	202,8
Input power	kW	19,3	22,3	24,4	28,6	33,0	37,4	38,2	40,8	44,9	46,7	48,9	50,9	58,9	57,3	68,8	65,7	79,3	75,4
Cooling total input current	A	32,0	42,0	47,0	56,0	58,0	62,0	60,0	69,0	80,0	78,0	87,0	82,0	93,0	106,0	109,0	114,0	125,0	123,0
EER	W/W	2,85	2,75	2,91	2,89	2,84	2,76	2,93	2,89	2,76	2,75	2,95	3,04	2,94	2,91	2,80	2,83	2,65	2,69
Water flow rate system side	l/h	9484	10522	12223	14246	16136	17773	19250	20314	21332	22097	24814	26647	29783	28680	33149	32040	36227	34901
Pressure drop system side	kPa	20	24	24	33	22	26	16	27	19	32	26	38	47	31	51	36	60	44
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	58,8	65,4	76,6	88,8	103,0	113,7	119,7	126,6	133,9	138,9	155,5	162,3	181,1	175,3	200,6	195,0	219,9	213,7
Input power	kW	17,2	19,7	22,5	26,5	31,0	33,8	35,6	37,4	40,4	41,5	47,0	49,1	55,3	53,3	60,9	57,8	67,5	62,7
Heating total input current	A	30,0	39,0	45,0	54,0	59,0	61,0	58,0	68,0	79,0	75,0	91,0	86,0	93,0	107,0	103,0	110,0	114,0	114,0
COP	W/W	3,42	3,32	3,40	3,35	3,32	3,36	3,36	3,39	3,31	3,35	3,31	3,30	3,27	3,29	3,29	3,37	3,26	3,41
Water flow rate system side	l/h	10207	11335	13280	15399	17866	19723	20784	21964	23234	24088	26976	28153	31410	30409	34811	33832	38148	37079
Pressure drop system side	kPa	23	28	29	39	27	32	19	32	23	39	31	42	52	35	57	41	68	49

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA - STANDARD/INVERTER FANS

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
Cooling capacity with low leaving water temp (UE n° 2016/2281)																				
SEER	°	W/W	-	-	-	-	3,92	3,84	3,97	4,00	3,83	3,94	3,88	4,17	4,06	3,87	3,95	3,92	3,82	3,80
	A	W/W	-	-	-	-	4,21	4,14	4,07	4,34	4,01	4,24	4,10	4,40	4,32	4,14	4,31	4,17	4,12	4,04
	E	W/W	4,40	4,32	4,37	4,33	4,26	4,13	4,03	4,29	3,97	4,10	4,06	4,36	4,21	4,10	4,20	4,13	4,07	4,00
	L	W/W	4,14	4,03	4,22	4,07	3,98	3,89	3,94	4,01	3,80	3,89	3,84	4,12	4,00	3,84	3,91	3,88	3,77	3,77
ηsc	°	%	-	-	-	-	154%	151%	156%	157%	150%	155%	152%	164%	160%	152%	155%	154%	150%	149%
	A	%	-	-	-	-	165%	163%	160%	171%	157%	167%	161%	173%	170%	162%	169%	164%	162%	159%
	E	%	173%	170%	172%	170%	167%	162%	158%	169%	156%	161%	160%	172%	166%	161%	165%	162%	160%	157%
	L	%	163%	158%	166%	160%	156%	153%	155%	157%	149%	153%	151%	162%	157%	150%	153%	152%	148%	148%

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
Cooling capacity with low leaving water temp (UE n° 2016/2281)																				
SEER	°	W/W	-	-	-	-	4,04	3,96	4,10	4,12	3,96	4,06	4,00	4,30	4,19	3,99	4,07	4,04	3,94	3,91
	A	W/W	-	-	-	-	4,33	4,26	4,20	4,47	4,13	4,37	4,23	4,54	4,45	4,26	4,43	4,29	4,25	4,17
	E	W/W	4,45	4,36	4,41	4,37	4,38	4,25	4,16	4,42	4,09	4,22	4,19	4,49	4,34	4,22	4,33	4,25	4,20	4,13
	L	W/W	4,18	4,07	4,26	4,10	4,10	4,01	4,06	4,12	3,92	4,01	3,96	4,25	4,13	3,95	4,03	4,00	3,89	3,88
ηsc	°	%	-	-	-	-	159%	155%	161%	162%	155%	159%	157%	169%	164%	157%	160%	158%	155%	154%
	A	%	-	-	-	-	170%	168%	165%	176%	162%	172%	166%	178%	175%	167%	174%	169%	167%	164%
	E	%	175%	171%	174%	172%	172%	167%	163%	174%	161%	166%	164%	177%	171%	166%	170%	167%	165%	162%
	L	%	164%	160%	167%	161%	161%	157%	159%	162%	154%	157%	155%	167%	162%	155%	158%	157%	153%	152%

ENERGY DATA - STANDARD/INVERTER FANS (35°C)

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
Performance in average ambient conditions (average) - 35 °C (1)																				
Pdesignh	°	kW	-	-	-	-	88	97	103	109	115	119	128	141	159	154	178	171	193	188
	A	kW	-	-	-	-	91	101	105	110	117	121	136	141	158	153	176	170	191	187
	E	kW	52	58	68	78	91	101	105	110	117	121	136	141	158	153	176	170	191	187
	L	kW	50	58	66	77	88	97	103	109	115	119	128	141	159	154	178	171	193	188
SCOP	°	W/W	-	-	-	-	3,61	3,66	3,53	3,66	3,49	3,71	3,49	3,57	3,68	3,42	3,65	3,52	3,52	3,56
	A	W/W	-	-	-	-	3,70	3,80	3,60	3,80	3,59	3,81	3,59	3,70	3,76	3,53	3,77	3,63	3,67	3,64
	E	W/W	4,10	4,04	4,06	3,99	3,70	3,80	3,60	3,80	3,59	3,81	3,59	3,70	3,76	3,53	3,77	3,63	3,67	3,64
	L	W/W	3,95	3,90	3,91	3,91	3,61	3,66	3,53	3,66	3,49	3,71	3,49	3,57	3,68	3,42	3,65	3,52	3,52	3,56
ηsh	°	%	-	-	-	-	141%	143%	138%	143%	137%	146%	136%	140%	144%	134%	143%	138%	138%	139%
	A	%	-	-	-	-	145%	149%	141%	149%	141%	149%	141%	145%	147%	138%	148%	142%	144%	143%
	E	%	161%	159%	159%	157%	145%	149%	141%	149%	141%	149%	141%	145%	147%	138%	148%	142%	144%	143%
	L	%	155%	153%	153%	153%	141%	143%	138%	143%	137%	146%	136%	140%	144%	134%	143%	138%	138%	139%
Efficiency energy class	°,A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E,L		A+	A+	A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
Performance in average ambient conditions (average) - 35 °C (1)																				
Pdesignh	°	kW	-	-	-	-	88	97	103	109	115	119	128	141	159	154	178	171	193	188
	A	kW	-	-	-	-	91	101	105	110	117	121	136	141	158	153	176	170	191	187
	E	kW	52	58	68	78	91	101	105	110	117	121	136	141	158	153	176	170	191	187
	L	kW	50	58	66	77	88	97	103	109	115	119	128	141	159	154	178	171	193	188
SCOP	°	W/W	-	-	-	-	3,50	3,55	3,36	3,55	3,33	3,61	3,32	3,47	3,57	3,23	3,54	3,32	3,41	3,36
	A	W/W	-	-	-	-	3,59	3,69	3,43	3,69	3,42	3,70	3,38	3,59	3,65	3,33	3,66	3,42	3,56	3,44
	E	W/W	4,06	4,00	4,02	3,91	3,59	3,69	3,43	3,69	3,42	3,70	3,38	3,59	3,65	3,33	3,66	3,42	3,56	3,44
	L	W/W	3,91	3,86	3,87	3,83	3,50	3,55	3,36	3,55	3,33	3,61	3,32	3,47	3,57	3,23	3,54	3,32	3,41	3,36
ηsh	°	%	-	-	-	-	135%	139%	131%	139%	130%	141%	130%	135%	139%	126%	139%	130%	134%	131%
	A	%	-	-	-	-	141%	145%	134%	145%	134%	145%	132%	141%	143%	130%	143%	134%	140%	134%
	E	%	159%	157%	158%	154%	141%	145%	134%	145%	134%	145%	132%	141%	143%	130%	143%	134%	140%	134%
	L	%	153%	151%	152%	150%	135%	139%	131%	139%	130%	141%	130%	135%	139%	126%	139%	130%	134%	131%
Efficiency energy class	°,A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E,L		A+	A+	A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)

ENERGY DATA - STANDARD/INVERTER FANS (55°C)

Size			0282	0302	0332	0352	0502	0552	0602	0652	0682	0702	0752	0802
Fans: J														
Performance in average ambient conditions (average) - 55 °C (1)														
Pdesignh	°	kW	-	-	-	-	88	98	109	120	139	155	178	-
	A	kW	-	-	-	-	91	103	110	122	139	154	175	187
	E	kW	52	58	68	78	91	103	110	122	139	154	175	187
	L	kW	50	57	65	77	88	98	109	120	139	155	178	-
SCOP	°	W/W	-	-	-	-	2,92	3,02	3,02	3,09	2,93	2,93	2,93	-
	A	W/W	-	-	-	-	2,99	3,13	3,12	3,13	3,02	2,98	3,01	2,92
	E	W/W	3,16	3,12	3,14	3,12	2,99	3,13	3,12	3,13	3,02	2,98	3,01	2,92
	L	W/W	3,08	3,06	3,06	3,07	2,92	3,02	3,02	3,09	2,93	2,93	2,93	-
ηsh	°	%	-	-	-	-	114%	118%	118%	120%	114%	114%	114%	-
	A	%	-	-	-	-	117%	122%	122%	122%	118%	116%	117%	114%
	E	%	123%	122%	123%	122%	117%	122%	122%	122%	118%	116%	117%	114%
	L	%	120%	119%	119%	120%	114%	118%	118%	120%	114%	114%	114%	-
Efficiency energy class	°,A		-	-	-	-	-	-	-	-	-	-	-	-
	E,L		A++	A++	A++	-	-	-	-	-	-	-	-	-

(1) Efficiencies for average temperature applications (55 °C)

Size			0282	0302	0332	0352	0502	0552	0602	0652	0682	0702	0752	0802
Fans: °														
Performance in average ambient conditions (average) - 55 °C (1)														
Pdesignh	°	kW	-	-	-	-	88	98	109	120	139	155	178	-
	A	kW	-	-	-	-	91	103	110	122	139	154	175	187
	E	kW	52	58	68	78	91	103	110	122	139	154	175	187
	L	kW	50	57	65	77	88	98	109	120	139	155	178	-
SCOP	°	W/W	-	-	-	-	2,84	2,94	2,93	3,00	2,84	2,84	2,84	-
	A	W/W	-	-	-	-	2,91	3,05	3,03	3,04	2,93	2,89	2,92	2,84
	E	W/W	3,13	3,10	3,11	3,06	2,91	3,05	3,03	3,04	2,93	2,89	2,92	2,84
	L	W/W	3,05	3,03	3,03	3,01	2,84	2,94	2,93	3,00	2,84	2,84	2,84	-
ηsh	°	%	-	-	-	-	111%	115%	114%	117%	111%	111%	111%	-
	A	%	-	-	-	-	113%	119%	118%	119%	114%	113%	114%	110%
	E	%	122%	121%	122%	119%	113%	119%	118%	119%	114%	113%	114%	110%
	L	%	119%	118%	118%	117%	111%	115%	114%	117%	111%	111%	111%	-
Efficiency energy class	°,A		-	-	-	-	-	-	-	-	-	-	-	-
	E,L		A++	A++	A++	-	-	-	-	-	-	-	-	-

(1) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Electric data																				
Maximum current (FLA)	°	A	-	-	-	-	73,5	79,1	80,5	88,3	97,2	97,4	113,5	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	A	A	-	-	-	-	73,5	79,1	80,5	88,3	97,2	97,4	116,4	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	E	A	41,6	49,9	59,5	67,6	73,5	79,1	80,5	88,3	97,2	97,4	116,4	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	L	A	40,2	49,9	58,1	67,6	73,5	79,1	80,5	88,3	97,2	97,4	113,5	111,5	122,6	132,7	139,4	144,0	156,1	155,3
Peak current (LRA)	°	A	-	-	-	-	276,8	282,5	200,8	329,5	221,3	338,6	268,5	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	A	A	-	-	-	-	276,8	282,5	200,8	329,5	221,3	338,6	271,4	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	E	A	161,9	174,0	214,4	222,6	276,8	282,5	200,8	329,5	221,3	338,6	271,4	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	L	A	160,5	174,0	213,0	222,6	276,8	282,5	200,8	329,5	221,3	338,6	268,5	396,5	407,7	287,7	601,7	347,4	618,4	358,7

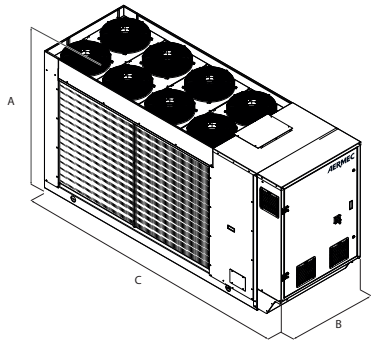
Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Compressor																				
Type	°,A,E,L	type										Scroll								
Compressor regulation	°,A,E,L	Type										On-Off								
Number	°,A,E,L	no.	2	2	2	2	2	2	4	2	4	2	4	2	2	4	2	4	2	4
Circuits	°,A,E,L	no.	1	1	1	1	1	1	2	1	2	1	2	1	1	2	1	2	1	2
Refrigerant	°,A,E,L	type										R32								
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	9,5	9,5	6,8	12,2	7,1	12,2	7,1	17,7	17,7	8,1	17,7	9,0	17,7	9,0
	A	kg	-	-	-	-	12,8	13,3	7,4	13,3	7,7	13,3	8,7	18,2	18,2	8,3	18,4	10,0	18,4	9,5
	E	kg	6,8	8,3	11,2	11,1	12,8	13,3	7,4	13,3	7,7	13,3	8,7	18,2	18,2	8,3	18,4	10,0	18,4	9,5
	L	kg	6,5	6,8	7,4	7,4	9,5	9,5	6,8	12,2	7,1	12,2	7,1	17,7	17,7	8,1	17,7	9,0	17,7	9,0
Refrigerant load circuit 2 (1)	°,L	kg	-	-	-	-	-	-	6,8	-	7,1	-	7,1	-	-	8,1	-	9,0	-	9,0
	A,E	kg	-	-	-	-	-	-	7,4	-	7,7	-	8,7	-	-	8,3	-	10,0	-	9,5
Potential global heating	°,A,E,L	GWP										675kgCO_2eq								
System side heat exchanger																				
Type	°,A,E,L	type										Brazed plate								
Number	°,A,E,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fan																				
Type	°,A,E,L	type										Axial								
Number	°	no.	-	-	-	-	2	2	2	2	2	2	2	3	3	3	3	3	3	3
	A	no.	-	-	-	-	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	E	no.	6	6	8	8	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	L	no.	4	6	6	8	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Air flow rate	°	m^3/h	-	-	-	-	42831	42819	40170	41067	40170	41067	38299	62024	62022	60681	62022	60681	62022	60681
	A	m^3/h	-	-	-	-	41097	41097	38299	39483	38299	39483	60681	59734	59721	57995	59721	57995	59721	57995
	E	m^3/h	21224	21224	28177	25805	31035	31035	28870	29848	28870	29848	45978	45211	45211	43804	45211	43804	45211	43804
	L	m^3/h	15552	21229	22716	28186	32592	32592	30388	31000	30388	31000	28869	47029	47029	45980	47029	45980	47029	45980
Sound data calculated in cooling mode (2)																				
Sound power level	°	dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	87,1	89,4	89,5	88,8	90,0	90,1	90,1	90,0
	A	dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	88,8	89,4	89,5	88,8	90,0	90,1	90,1	90,0
	E	dB(A)	73,6	74,1	74,9	75,1	82,8	83,5	76,6	83,9	77,3	84,3	78,4	85,5	85,6	78,6	86,7	84,6	87,3	86,2
	L	dB(A)	73,0	74,1	74,5	75,1	82,8	83,5	76,6	83,9	77,3	84,3	77,7	85,5	85,6	78,6	86,7	84,6	87,3	86,2
Sound data calculated in heating mode (2)																				
Sound power level	°	dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	87,1	89,4	89,5	88,8	90,0	90,1	90,1	90,0
	A	dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	88,8	89,4	89,5	88,8	90,0	90,1	90,1	90,0
	E	dB(A)	73,6	74,1	74,9	75,1	87,2	87,5	86,5	87,7	87,1	87,9	88,8	89,4	89,5	88,8	90,0	90,1	90,1	90,0
	L	dB(A)	73,0	74,1	74,5	75,1	87,2	87,5	86,5	87,7	87,1	87,9	87,1	89,4	89,5	88,8	90,0	90,1	90,1	90,0

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Dimensions and weights																				
A	°	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900
	A	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
	E	mm	1652	1658	1658	1658	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
	L	mm	1652	1652	1658	1658	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900
B	°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	E,L	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	°	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368
	A	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	E	mm	2818	3317	3317	3317	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	L	mm	2818	2818	3317	3317	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368

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NRGI 151-602

Air-water chiller

Cooling capacity 31.0 ÷ 132.2 kW

- **High efficiency also at partial loads**
- **High modulation capacity**
- **Continuous modulation of the cooling capacity**
- **Compressors and fans with Inverter**
- **Low refrigerant charge**
- **Stable temperature control of the outlet water**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas.
Condensing coil with copper pipes and aluminium louvers, plate heat exchanger and **standard electronic expansion valve.**
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 50°C external air temperature. Unit can produce chilled water up to -10 °C.
For more information refer to the selection program and to to the dedicated documentation.

High efficiency

These are flexible and reliable units which adapt to the most diverse load conditions thanks to the precise design and **the use of steady speed compressors together with inverter-controlled variable speed compressors** guaranteeing a high energy efficiency level both at full and partial load.

Inverter compressor + On-Off

They can be configured with a single variable speed compressor or two in tandem configuration, one steady and one variable speed. This pair guarantees high efficiency both with partial and full loads.
Sizes 151-281 have a single variable speed compressor. Sizes 302-602 have two compressors in tandem configuration.
This solution gets the best value out of the particularities and advantages of each compressor, enhancing the efficiency of each load condition and allowing for
— High seasonal efficiency
— steady and precise modulation of the chilling demand
— The stability of the outlet water temperature.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.
■ *The leak detector is supplied as per standard.*

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

Single-compressor units have a standard electronic expansion valve, while units with tandem compressors have two.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Fans

Inverter: standard from size 151 to size 352, available as an optional for the other sizes.
Boosted, asynchronous with phase cutting: standard from size 382 to size 602.
Both types of fan permit:
— Steady air flow rate adjustment
— Low consumption and reduced sound level at partial loads
— Operation with low outdoor air temperatures
— Precise condensation control for an extended operating range.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.*

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** this function can be activated in all the units, to optimise unit operation at any point by continuously modulating the fan speed. In addition, the use of inverter fans allows increased energy efficiency with partial loads.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

INTEGRATED SOLUTION

The **"integrated solution" concept has been implemented in the system architecture**, consisting in an integrated and streamlined control of compressors and electronic valves.
This solution allowed a variety of new features to be introduced, such as:

— **Low Superheat Control**: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
— **DLT control**: Control of electronic valves at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	151	201	281	302	332	352	382	502	552	602
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•	•	•	•	•
SGD	A,E	•	•	•	•	•	•	•			

Remote panel

Model	Ver	151	201	281	302	332	352	382	502	552	602
PR4	A,E	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4										
A, E	VT17	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09, K1, K2, K3, K4, W1, W2, W3, W4										
A, E	VT13	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22

Anti-intrusion grid

Ver	151	201	281	302	332	352	382	502	552	602
A, E	GP3	GP4	GP4	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

Device for peak current reduction

Ver	151	201	281	302	332	352	382	502	552	602
A, E	-	-	-	DRENRGI302	DRENRGI332	DRENRGI352	DRENRGI382	DRENRGI502	DRENRGI552	DRENRGI602

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	151	201	281	302	332	352	382	502	552	602
A, E	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3,4		**NRGI**
5,6,7		**Size** 151, 201, 281, 302, 332, 352, 382, 502, 552, 602
8		**Operating field (1)**
	X	Electronic thermostatic expansion valve
9		**Model**
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	M	Boosted with phase cutting (3)
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (4)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (4)
	07	Storage tank with holes for heaters and single high head pump (4)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (4)
		Double loop
	09	Double loop
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with inverter pump/s to fixed speed
	I1	Single low head pump + fixed speed inverter
	I2	Single low head pump with fixed speed inverter + stand-by pump
	I3	Single high head pump + fixed speed inverter
	I4	Single high head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and inverter pump/s to fixed speed
	K1	Single low head pump + storage tank + fixed speed inverter
	K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
	K3	Single high head pump + storage tank + fixed speed inverter
	K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and variable speed inverter pump/s
	W1	Single low head pump + Storage tank + variable speed inverter
	W2	Double low head pump + Storage tank + variable speed inverter
	W3	Single high head pump + Storage tank + variable speed inverter
	W4	Double high head pump + Storage tank + variable speed inverter

(1) Water produced from -10 °C ÷ 20 °C. Double electronic thermostatic valve from size 302 to 602.
(2) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
(3) Only for 382 - 502 - 552 - 602 sizes
(4) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRGI - A

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	39,2	52,6	58,2	69,4	77,7	83,2	93,2	103,3	114,0	132,2
Input power	kW	11,8	15,2	17,5	20,8	23,3	25,6	27,6	31,4	35,1	39,1
Cooling total input current	A	18,0	23,0	26,0	37,0	41,0	46,0	43,0	49,0	53,0	60,0
EER	W/W	3,31	3,47	3,32	3,33	3,34	3,25	3,37	3,29	3,24	3,38
Water flow rate system side	l/h	6746	9067	10028	11960	13388	14335	16031	17775	19616	22750
Pressure drop system side	kPa	18	33	40	35	44	50	24	23	28	29

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRGI - E

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	31,0	40,1	46,4	61,7	70,1	75,6	84,9	91,3	101,8	119,6
Input power	kW	8,9	11,0	13,1	17,9	20,2	22,5	24,6	26,9	30,8	34,2
Cooling total input current	A	13,0	17,0	19,0	32,0	36,0	41,0	39,0	43,0	47,0	53,0
EER	W/W	3,49	3,63	3,55	3,45	3,46	3,36	3,45	3,39	3,31	3,50
Water flow rate system side	l/h	5326	6900	7994	10624	12066	13021	14607	15705	17509	20576
Pressure drop system side	kPa	11	19	25	27	35	41	20	18	22	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY DATA

Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
SEER - 12/7 (EN14825: 2018) (1)												
SEER	A	W/W	5,19	5,32	5,37	5,04	5,07	5,22	5,33	5,36	5,18	5,33
	E	W/W	5,23	5,36	5,42	5,08	5,11	5,26	5,37	5,40	5,23	5,37
Seasonal efficiency	A	%	204,40	209,80	211,90	198,40	199,70	205,70	210,00	211,40	204,30	210,00
	E	%	206,00	211,50	213,60	200,00	201,30	207,30	211,80	213,10	206,00	211,70
SEER - 23/18 (EN14825: 2018) (2)												
SEER	A	W/W	6,35	6,45	6,33	5,81	5,79	5,89	6,21	6,21	5,94	6,11
	E	W/W	6,52	6,75	6,58	5,93	5,84	5,91	6,31	6,32	6,00	6,21
Seasonal efficiency	A	%	250,90	254,90	250,20	229,50	228,40	232,40	245,20	245,30	234,60	241,50
	E	%	257,90	266,80	260,30	234,20	230,40	233,40	249,40	249,80	237,10	245,40
SEPR - (EN 14825: 2018) (2)												
SEPR	A	W/W	7,10	7,60	7,50	7,10	7,30	7,40	7,10	7,10	6,50	6,50
	E	W/W	7,10	7,50	7,40	7,20	7,40	7,40	7,10	7,20	6,60	6,60

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			151	201	281	302	332	352	382	502	552	602
Fans: M												
SEER - 12/7 (EN14825: 2018) (1)												
SEER	A	W/W	-	-	-	-	-	-	5,33	5,36	5,18	5,33
	E	W/W	-	-	-	-	-	-	5,37	5,40	5,23	5,37
Seasonal efficiency	A	%	-	-	-	-	-	-	210,00	211,40	204,30	210,00
	E	%	-	-	-	-	-	-	211,80	213,10	206,00	211,70
SEER - 23/18 (EN14825: 2018) (2)												
SEER	A	W/W	-	-	-	-	-	-	6,21	6,21	5,94	6,11
	E	W/W	-	-	-	-	-	-	6,31	6,32	6,00	6,21
Seasonal efficiency	A	%	-	-	-	-	-	-	245,20	245,30	234,60	241,50
	E	%	-	-	-	-	-	-	249,40	249,80	237,10	245,40
SEPR - (EN 14825: 2018) (2)												
SEPR	A	W/W	-	-	-	-	-	-	7,10	7,10	6,50	6,50
	E	W/W	-	-	-	-	-	-	7,10	7,20	6,60	6,60

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			151	201	281	302	332	352	382	502	552	602
Electric data												
Maximum current (FLA)	A,E	A	23,8	31,6	34,9	47,6	52,8	58,1	60,1	68,8	74,4	87,5
Peak current (LRA)	A,E	A	30,3	43,0	43,0	142,8	167,1	201,1	174,4	211,8	278,6	329,2

■ *Data calculated without hydronic kit and accessories.*

GENERAL TECHNICAL DATA

Size			151	201	281	302	332	352	382	502	552	602
Compressor												
Type	A,E	type	Scroll									
Compressor regulation	A,E	Type	I	I	I	1+I	1+I	1+I	1+I	1+I	1+I	1+I
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	A,E	type	R32									
System side heat exchanger												
Type	A,E	type	Brazed plate									
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1

FANS DATA

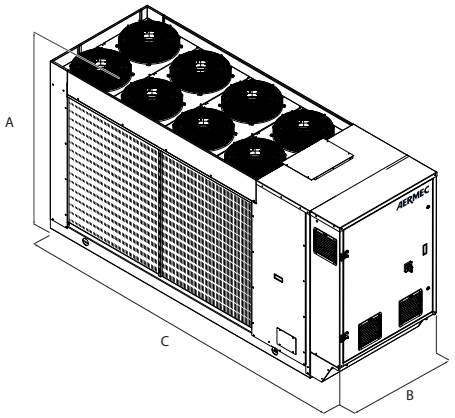
Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
Fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Inverter									
Number	A,E	no.	4	6	6	8	8	8	2	2	2	3
Air flow rate	A	m^3/h	16669	24469	24476	30793	28649	28662	36174	36174	36149	54601
	E	m^3/h	14488	21255	21255	26704	24966	24966	26850	26850	26781	40488
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	81,8	84,6	85,9	82,2	85,0	85,1	85,4	86,5	87,7	88,1
	E	dB(A)	79,3	82,8	83,3	80,9	81,3	81,7	82,8	83,0	85,4	85,5
Sound pressure level (10 m)	A	dB(A)	50,0	52,7	54,1	50,3	53,2	53,3	53,5	54,5	55,8	56,0
	E	dB(A)	47,5	51,0	51,4	49,0	49,5	49,8	50,8	51,1	53,5	53,5

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			151	201	281	302	332	352	382	502	552	602
Fans: M												
Increased fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Asynchronous with phase cut									
Number	A,E	no.	-	-	-	-	-	-	2	2	2	3
Air flow rate	A	m^3/h	-	-	-	-	-	-	36174	36174	36149	54601
	E	m^3/h	-	-	-	-	-	-	26850	26850	26781	40488
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	-	85,4	86,5	87,7	88,1
	E	dB(A)	-	-	-	-	-	-	82,8	83,0	85,4	85,5
Sound pressure level (10 m)	A	dB(A)	-	-	-	-	-	-	53,5	54,5	55,8	56,0
	E	dB(A)	-	-	-	-	-	-	50,8	51,1	53,5	53,5

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			151	201	281	302	332	352	382	502	552	602
Dimensions and weights												
A	A,E	mm	1652	1652	1652	1652	1652	1652	1907	1907	1907	1900
B	A,E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	A,E	mm	2873	3372	3372	3372	3372	3372	3623	3623	3623	4373

Size			151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00												
Weights												
Weight empty + packaging	A,E	kg	826	899	899	986	1027	1028	1093	1101	1123	1313
Weight functioning	A,E	kg	795	867	867	955	996	997	1062	1072	1094	1284

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

NRGI 151H-602H

Reversible air/water heat pump

Cooling capacity 28.9 ÷ 123.7 kW – Heating capacity 31.6 ÷ 133.9 kW

- **High efficiency also at partial loads**
- **High modulation capacity**
- **Continuous modulation of the cooling capacity**
- **Compressors and fans with Inverter**
- **Low refrigerant charge**
- **Stable temperature control of the outlet water**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas.
Condensing coil with copper pipes and aluminium louvers, plate heat exchanger and **standard electronic expansion valve.**
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 49 °C in summer. Hot water production up to 60 °C
For more information refer to the selection program and to to the dedicated documentation.

High efficiency

These are flexible and reliable units which adapt to the most diverse load conditions thanks to the precise design and **the use of steady speed compressors together with inverter-controlled variable speed compressors** guaranteeing a high energy efficiency level both at full and partial load.

Inverter compressor + On-Off

They can be configured with a single variable speed compressor or two in tandem configuration, one steady and one variable speed. This pair guarantees high efficiency both with partial and full loads.
Sizes 151-281 have a single variable speed compressor. Sizes 302-602 have two compressors in tandem configuration.
This solution gets the best value out of the particularities and advantages of each compressor, enhancing the efficiency of each load condition and allowing for

— High seasonal efficiency
— steady and precise modulation of the chilling demand
— The stability of the outlet water temperature.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

Single-compressor units have a standard electronic expansion valve, while units with tandem compressors have two.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Inverter fans

All of the units are equipped as per standard with high-efficiency inverter-controlled axial fans which provide:

— Steady air flow rate adjustment
— Low consumption and reduced sound level at partial loads
— Operation with low outdoor air temperatures
— Precise condensation control for an extended operating range.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.*

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Swing HP and LP controls:** available for all models. By continuously modulating the fans, they streamline operation of the unit at any work point both in cooling and heating mode. This results in enhanced energy efficiency of the unit at partial loads.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

INTEGRATED SOLUTION

The **"integrated solution" concept has been implemented in the system architecture**, consisting in an integrated and streamlined control of compressors and electronic valves.

This solution allowed a variety of new features to be introduced, such as:

— **Low Superheat Control**: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
— **DLT control**: Control of electronic valves at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range, especially in heating mode.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.

AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

GP: Anti-intrusion grid.

VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	151	201	281	302	332	352	382	502	552	602
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•	•	•	•	•
SGD	A,E	•	•	•	•	•	•	•			

Remote panel

Model	Ver	151	201	281	302	332	352	382	502	552	602
PR4	A,E	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4										
A, E	VT17	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09, K1, K2, K3, K4, W1, W2, W3, W4										
A, E	VT13	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22

Anti-intrusion grid

Ver	151	201	281	302	332	352	382	502	552	602
A, E	GP3	GP4	GP4	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

Device for peak current reduction

Ver	151	201	281	302	332	352	382	502	552	602
A, E	-	-	-	DRENRGI302	DRENRGI332	DRENRGI352	DRENRGI382	DRENRGI502	DRENRGI552	DRENRGI602

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	151	201	281	302	332	352	382	502	552	602
A, E	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3,4		**NRGI**
5,6,7		**Size** 151, 201, 281, 302, 332, 352, 382, 502, 552, 602
8		**Operating field (1)**
	X	Electronic thermostatic expansion valve
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	°	Standard with phase cut
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump

Field		Description
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (3)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (3)
	07	Storage tank with holes for heaters and single high head pump (3)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (3)
		Double loop
	09	Double loop
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with inverter pump/s to fixed speed
	I1	Single low head pump + fixed speed inverter
	I2	Single low head pump with fixed speed inverter + stand-by pump
	I3	Single high head pump + fixed speed inverter
	I4	Single high head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and inverter pump/s to fixed speed
	K1	Single low head pump + storage tank + fixed speed inverter
	K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
	K3	Single high head pump + storage tank + fixed speed inverter
	K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and variable speed inverter pump/s
	W1	Single low head pump + Storage tank + variable speed inverter
	W2	Double low head pump + Storage tank + variable speed inverter
	W3	Single high head pump + Storage tank + variable speed inverter
	W4	Double high head pump + Storage tank + variable speed inverter

(1) Water produced from -10 °C ÷ 20 °C. Double electronic thermostatic valve from size 302 to 602.
(2) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRGI - HA

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	36,5	48,9	54,2	64,1	72,1	77,3	87,0	95,7	106,0	123,7
Input power	kW	12,1	15,6	18,1	21,5	23,9	26,3	28,4	32,3	36,1	39,1
Cooling total input current	A	18,0	24,0	27,0	38,0	42,0	47,0	44,0	51,0	55,0	60,0
EER	W/W	3,00	3,13	3,00	2,98	3,02	2,94	3,06	2,96	2,93	3,16
Water flow rate system side	l/h	6280	8416	9328	11028	12414	13315	14969	16471	18246	21290
Pressure drop system side	kPa	15	28	34	28	35	41	19	18	23	25
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	39,6	53,4	59,0	69,9	78,1	84,1	94,7	104,8	115,7	133,9
Input power	kW	11,6	15,4	17,3	20,3	23,0	24,9	29,4	32,2	34,6	40,6
Heating total input current	A	18,0	24,0	27,0	38,0	42,0	46,0	46,0	52,0	54,0	64,0
COP	W/W	3,42	3,46	3,42	3,45	3,40	3,37	3,22	3,25	3,34	3,30
Water flow rate system side	l/h	6869	9260	10228	12113	13544	14563	16431	18188	20074	23220
Pressure drop system side	kPa	18	33	40	34	42	49	23	22	27	29

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRGI - HE

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	28,9	37,0	42,6	56,7	64,9	70,1	78,8	84,0	94,0	111,3
Input power	kW	9,1	11,4	13,5	18,4	20,8	23,2	25,3	27,6	31,6	34,1
Cooling total input current	A	13,0	17,0	20,0	33,0	36,0	41,0	39,0	44,0	49,0	53,0
EER	W/W	3,17	3,25	3,15	3,07	3,12	3,03	3,12	3,04	2,97	3,26
Water flow rate system side	l/h	4974	6363	7326	9764	11165	12069	13554	14451	16179	19152
Pressure drop system side	kPa	10	16	21	22	29	33	16	14	18	20
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	31,6	41,2	47,5	62,3	70,4	76,5	87,0	93,3	104,4	122,0
Input power	kW	9,1	11,8	13,6	18,0	20,3	22,2	27,0	28,5	31,2	36,8
Heating total input current	A	15,0	20,0	22,0	35,0	38,0	43,0	43,0	47,0	50,0	59,0
COP	W/W	3,49	3,49	3,49	3,47	3,47	3,44	3,23	3,27	3,35	3,32
Water flow rate system side	l/h	5484	7151	8247	10814	12215	13253	15103	16186	18126	21177
Pressure drop system side	kPa	12	20	26	27	34	40	20	18	22	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
Performance in average ambient conditions (average) - 35 °C (1)												
Efficiency energy class	A		A++	A++	A++	A++	A++	-	-	-	-	-
	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Pdesignh	A	kW	34	46	51	61	67	73	82	91	100	116
	E	kW	27	35	41	54	61	66	75	81	90	105
SCOP	A	W/W	4,25	4,33	4,25	4,40	4,29	4,35	4,27	4,25	4,13	4,02
	E	W/W	4,28	4,35	4,28	4,43	4,33	4,38	4,30	4,29	4,17	4,05
ηsh	A	%	167,00	170,00	167,10	173,00	168,40	170,95	167,75	167,17	162,28	157,71
	E	%	168,00	171,00	168,00	174,00	170,00	172,00	169,12	168,53	163,60	159,00
Performance in average ambient conditions (average) - 55 °C (2)												
Efficiency energy class	A		A++	A++	A++	A++	A++	-	-	-	-	-
	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Pdesignh	A	kW	35	48	53	62	69	73	83	92	102	117
	E	kW	28	37	43	55	62	67	76	82	92	106
SCOP	A	W/W	3,31	3,40	3,38	3,38	3,43	3,49	3,28	3,35	3,35	3,27
	E	W/W	3,33	3,40	3,38	3,38	3,40	3,48	3,39	3,37	3,36	3,28
ηsh	A	%	129,40	133,00	132,10	132,00	134,00	136,50	128,10	130,80	130,90	127,70
	E	%	130,00	133,00	132,00	132,00	133,00	136,00	132,50	131,80	131,20	128,00

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Size			151	201	281	302	332	352	382	502	552	602
Fans: °												
Performance in average ambient conditions (average) - 35 °C (1)												
Efficiency energy class	A		A++	A++	A++	A++	A++	-	-	-	-	-
	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Pdesignh	A	kW	34	46	51	61	67	73	82	91	100	116
	E	kW	27	35	41	54	61	66	75	81	90	105
SCOP	A	W/W	4,10	4,20	4,13	4,28	4,15	4,22	4,14	4,13	4,01	3,90
	E	W/W	4,15	4,20	4,15	4,30	4,18	4,25	4,17	4,16	4,04	3,93
ηsh	A	%	161,00	165,00	162,00	168,00	163,00	165,73	162,63	162,06	157,32	152,89
	E	%	163,00	165,00	163,00	169,00	164,00	167,00	163,96	163,38	158,60	154,14
Performance in average ambient conditions (average) - 55 °C (2)												
Efficiency energy class	A		A++	A++	A++	A++	A++	-	-	-	-	-
	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Pdesignh	A	kW	35	48	53	62	69	73	83	92	102	117
	E	kW	28	37	43	55	62	67	76	82	92	106
SCOP	A	W/W	3,20	3,30	3,28	3,28	3,30	3,38	3,18	3,30	3,25	3,17
	E	W/W	3,23	3,30	3,28	3,28	3,30	3,38	3,29	3,27	3,26	3,18
ηsh	A	%	125,00	129,00	128,00	128,00	129,00	132,30	124,20	128,80	126,90	123,80
	E	%	126,00	129,00	128,00	128,00	129,00	132,00	128,40	127,70	127,20	124,10

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Size			151	201	281	302	332	352	382	502	552	602
SEER - (EN14825:2018) 12/7 with inverter fans (1)												
SEER	A	W/W	4,67	4,96	4,89	4,62	4,74	4,68	4,79	4,84	4,90	5,09
	E	W/W	4,71	5,00	4,93	4,66	4,78	4,72	4,83	4,88	4,94	5,13
Seasonal efficiency	A	%	183,90	195,27	192,49	181,84	186,68	184,20	188,75	190,52	192,91	200,54
	E	%	185,40	196,86	194,06	183,31	188,19	185,69	190,29	192,07	194,48	202,17

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

Size			151	201	281	302	332	352	382	502	552	602
SEER - 12/7 (EN14825:2018) with standard fans (1)												
SEER	A	W/W	4,49	4,76	4,69	4,44	4,55	4,49	4,60	4,64	4,70	4,88
	E	W/W	4,52	4,80	4,73	4,47	4,59	4,53	4,64	4,68	4,74	4,92
Seasonal efficiency	A	%	176,43	187,34	184,67	174,44	179,09	176,71	181,08	182,78	185,08	192,40
	E	%	177,86	188,86	186,17	175,86	180,55	178,15	182,56	184,26	186,58	193,96

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

ELECTRIC DATA

Size			151	201	281	302	332	352	382	502	552	602
Electric data												
Maximum current (FLA)	A,E	A	23,8	31,6	34,9	47,6	52,8	58,1	60,1	68,8	74,4	87,5
Peak current (LRA)	A	A	30,3	43,0	43,0	142,8	167,1	201,1	174,4	211,8	278,6	329,2
	E	A	30,3	43,0	43,0	136,2	160,5	194,5	166,6	204,0	270,8	317,5

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

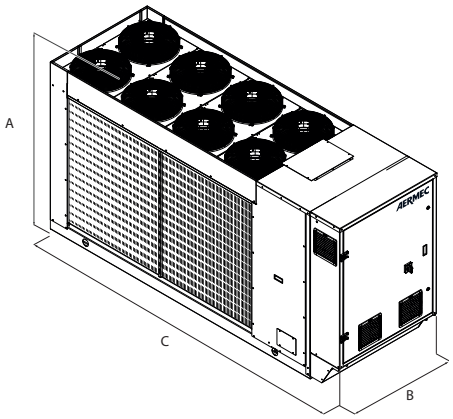
Size			151	201	281	302	332	352	382	502	552	602
Compressor												
Type	A,E	type	Scroll									
Compressor regulation	A,E	Type	Inverter	Inverter	Inverter	Inverter+On/Off	Inverter+On/Off	Inverter+On/Off	Inverter+On/Off	Inverter+On/Off	Inverter+On/Off	Inverter+On/Off
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	A,E	type	R32									
System side heat exchanger												
Type	A,E	type	Brazed plate									
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	81,8	84,6	86,0	82,2	85,0	85,1	85,4	86,5	87,8	88,1
	E	dB(A)	79,3	82,8	83,3	80,9	81,3	81,7	82,8	83,0	85,4	85,6

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
Fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Inverter									
Number	A,E	no.	4	6	6	8	8	8	2	2	2	3
Air flow rate	A	m^3/h	16896	24887	24891	31613	29660	29659	36859	36859	36859	55733
	E	m^3/h	14667	21591	21591	27379	25774	25774	27308	27308	27307	41430

DIMENSIONS



Size			151	201	281	302	332	352	382	502	552	602
Dimensions and weights												
A	A,E	mm	1652	1652	1652	1652	1652	1652	1907	1907	1907	1900
B	A,E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	A,E	mm	2873	3372	3372	3372	3372	3372	3623	3623	3623	4373

Size			151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00												
Weights												
Weight empty + packaging	A,E	kg	856	929	929	1019	1063	1064	1131	1137	1159	1365
Weight functioning	A,E	kg	825	897	897	988	1032	1033	1099	1108	1130	1336

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Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
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www.aermec.com

NRL 0280-0350

Air-water chiller

Cooling capacity 56 ÷ 82 kW

- **Low noise levels in silenced versions**
- **High efficiency also at partial loads**
- **Compact dimensions**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 47 °C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.

AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP: Anti-intrusion grid.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

PRM1: It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	0280	0300	0330	0350
AER485P1	E	•	•	•	•
AERBACP	E	•	•	•	•
AERLINK	E	•	•	•	•
AERNET	E	•	•	•	•
MULTICHILLER-EVO	E	•	•	•	•
PGD1	E	•	•	•	•
SGD	E	•	•	•	•

Model	Ver	0280	0300	0330	0350
C-TOUCH	E	•	•	•	•

Remote panel

Model	Ver	0280	0300	0330	0350
PR4	E	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0280	0300	0330	0350
Fans: M				
E	DCPX63	DCPX63	DCPX63	DCPX63

Antivibration

Ver	0280	0300	0330	0350
Integrated hydronic kit: 00, P1, P2, P3, P4				
E	VT17	VT17	VT17	VT17
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09				
E	VT13	VT13	VT13	VT13

Anti-intrusion grid

Ver	0280	0300	0330	0350
E	GP3	GP4	GP4	GP4

Device for peak current reduction

Ver	0280	0300	0330	0350
Power supply: °				
E	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350
E	RIF50	RIF50	RIF50	RIF51

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRL**
4,5,6,7		**Size** 0280, 0300, 0330, 0350
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	C	Motocondensing unit
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery
	°	Without heat recovery
11		**Version (4)**
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter (5)
	M	Oversized (6)
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit

Field		Description
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (7)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (7)
	07	Storage tank with holes for heaters and single high head pump (7)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (7)
		Double loop
	09	Double loop
	10	Double loop with supplementary electric heater
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump

(1) Water produced from 4 °C ÷ 18 °C
(2)) Water produced from 4 °C ÷ 18 °C for version"E", -10 °C for the others versions
(3) For "YT" - "ZT" - "YD" and "ZD" recovery versions, contact the headquarters; Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
(4) The size up 0280 ÷ 0350 are only available in the silenced versions "E" with inverer fans
(5) Standard for size 0280 ÷ 0350, without useful static pressure, option for other size with useful static pressure.
(6) Standard for size 0500, without useful static pressure, option for other size with useful static pressure.
(7) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRL - E

Size		0280	0300	0330	0350
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	56,8	64,8	73,8	82,8
Input power	kW	17,1	19,7	22,1	25,5
Cooling total input current	A	30,0	34,0	37,0	45,0
EER	W/W	3,33	3,29	3,34	3,24
Water flow rate system side	l/h	9793	11168	12714	14260
Pressure drop system side	kPa	43	39	35	44

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRL - C

Size			0280	0300	0330	0350
Model: C						
Cooling performance 12 °C / 7 °C (1)						
Cooling capacity	E	kW	59,0	67,0	76,0	85,0
Input power	E	kW	17,0	19,6	22,0	25,3
Input current	E	A	35,0	39,0	43,0	49,0
EER	E	W/W	3,47	3,42	3,45	3,36

(1) Evaporating temperature 5 °C, External air 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Energy index data

Size			0280	0300	0330	0350
Fans: J						
SEER - 12/7 (EN14825: 2018) (1)						
SEER	E	W/W	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	E	%	- (2)	- (2)	- (2)	- (2)
SEER - 23/18 (EN14825: 2018) (3)						
SEER	E	W/W	4,55	4,70	4,62	4,47
Seasonal efficiency	E	%	178,90	184,90	181,60	175,90
SEPR - (EN 14825: 2018) (3)						
SEPR	E	W/W	5,81	5,94	5,85	5,66

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

Size			0280	0300	0330	0350
Fans: M						
SEER - 12/7 (EN14825: 2018) (1)						
SEER	E	W/W	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	E	%	- (2)	- (2)	- (2)	- (2)
SEER - 23/18 (EN14825: 2018) (3)						
SEER	E	W/W	4,55	4,70	4,62	4,47
Seasonal efficiency	E	%	178,90	184,90	181,60	175,90
SEPR - (EN 14825: 2018) (3)						
SEPR	E	W/W	5,81	5,94	5,85	5,66

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0280	0300	0330	0350
Electric data						
Maximum current (FLA)	E	A	46,0	53,0	58,0	63,0
Peak current (LRA)	E	A	155,0	184,0	190,0	200,0

GENERAL TECHNICAL DATA

General data

Size			0280	0300	0330	0350
Compressor						
Type	E	type		Scroll		
Compressor regulation	E	Type		On-Off		
Number	E	no.	2	2	2	2
Circuits	E	no.	2	2	2	2
Refrigerant	E	type		R410A		
System side heat exchanger						
Type	E	type		Brazed plate		
Number	E	no.	1	1	1	1
System side hydraulic connections						
Connections (in/out)	E	Type		Grooved joints		
Sizes (in/out)	E	Ø		2"1/2		
Sound data calculated in cooling mode (1)						
Sound power level	E	dB(A)	74,0	74,0	75,0	76,0
Sound pressure level (10 m)	E	dB(A)	42,3	42,2	43,2	44,2

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Fans

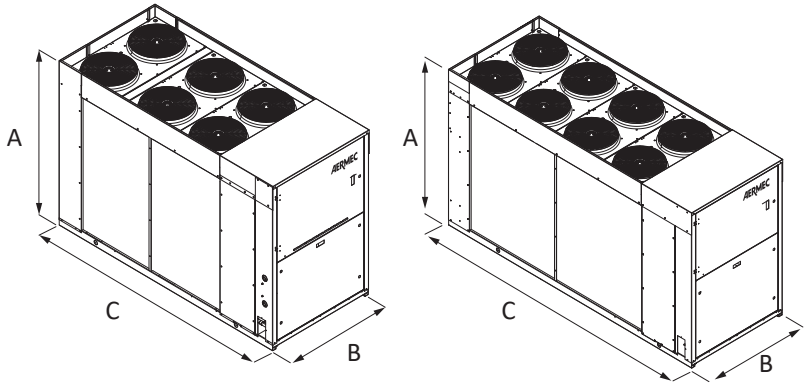
Size			0280	0300	0330	0350
Fan						
Type	E	type		Axial		
Number	E	no.	6	6	8	8

Size			0280	0300	0330	0350
Fans: M						
Increased fan						
Fan motor	E	type		Asynchronous with phase cut		
Without Static pressure						
Air flow rate	E	m^3/h	-	-	-	-
High static pressure	E	Pa	-	-	-	-
Sound power level	E	dB(A)	-	-	-	-
With static pressure						
Air flow rate	E	m^3/h	22000	22000	27000	27000
High static pressure	E	Pa	50	50	50	50
Sound power level	E	dB(A)	74,0	74,0	75,0	76,0

Size			0280	0300	0330	0350
Fans: J						
Inverter fan						
Fan motor	E	type		Inverter		
Air flow rate	E	m^3/h	22000	22000	27000	27000
High static pressure	E	Pa	80	80	80	80
Sound data calculated in cooling mode (1)						
Sound power level	E	dB(A)	74,0	74,0	75,0	76,0

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Dimensions and weights

Size			0280	0300	0330	0350
Dimensions and weights						
A	E	mm	1606	1606	1606	1606
B	E	mm	1100	1100	1100	1100
C	E	mm	2450	2950	2950	2950
Dimensions and weights without hydronic kit						
Empty weight	E	kg	686	751	761	767

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Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

NRL 0280H-0350H

Reversible air/water heat pump

Cooling capacity 51 ÷ 76 kW – Heating capacity 58 ÷ 86 kW

- **High efficiency also at partial loads**
- **Compact dimensions**
- **Quick & easy installation**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -15°C outside air temperature in winter, and up to 46°C in summer. Hot water production up to 55°C (for more information see the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP: Anti-intrusion grid.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0280	0300	0330	0350
AER485P1	E,L	•	•	•	•
AERBACP	E,L	•	•	•	•
AERLINK	E,L	•	•	•	•
AERNET	E,L	•	•	•	•
BMConverter	E,L	•	•	•	•
MULTICHILLER-EVO	E,L	•	•	•	•
PGD1	E,L	•	•	•	•
SGD	E,L	•	•	•	

Model	Ver	0280	0300	0330	0350
C-TOUCH	E,L	•	•	•	•

Remote panel

Model	Ver	0280	0300	0330	0350
PR4	E,L	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0280	0300	0330	0350
Fans: M				
E, L	DCPX63	DCPX63	DCPX63	DCPX63

Antivibration

Ver	0280	0300	0330	0350
Integrated hydronic kit: 00, P1, P2, P3, P4				
E, L	VT17	VT17	VT17	VT17
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09				
E, L	VT13	VT13	VT13	VT13

Anti-intrusion grid

Ver	0280	0300	0330	0350
E	GP3	GP4	GP4	GP4
L	GP3	GP3	GP3	GP3

Model	Ver	0280	0300	0330	0350
C-TOUCH	E,L	•	•	•	•

Device for peak current reduction

Ver	0280	0300	0330	0350
E, L	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350
E, L	RIF50	RIF50	RIF50	RIF51

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRL**
4,5,6,7		**Size** 0280, 0300, 0330, 0350
8		**Operating field**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (1)
	°	Without heat recovery
11		**Version**
	E	Silenced high efficiency
	L	Standard silenced
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter (2)
	M	Oversized
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**

Field	Description
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (3)
06	Storage tank with holes for heaters and pump low head + stand-by pump (3)
07	Storage tank with holes for heaters and single high head pump (3)
08	Storage tank with holes for heaters and pump high head + stand-by pump (3)
	Double loop
09	Double loop
10	Double loop with holes for heaters
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump

(1) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(2) Standard for size 0280 ÷ 0350, without useful static pressure, option for other size with useful static pressure.
(3) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRL HL

Size		0280	0300	0330	0350
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	50,8	60,8	65,9	72,8
Input power	kW	20,4	22,8	26,4	31,4
Cooling total input current	A	36,0	40,0	44,0	51,0
EER	W/W	2,49	2,67	2,49	2,32
Water flow rate system side	l/h	8762	10480	11340	12542
Pressure drop system side	kPa	47	43	29	45
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	58,2	68,2	75,2	82,3
Input power	kW	19,0	21,7	24,6	28,3
Heating total input current	A	33,0	38,0	41,0	50,0
COP	W/W	3,06	3,14	3,05	2,91
Water flow rate system side	l/h	10080	11818	13035	14252
Pressure drop system side	kPa	61	54	36	56

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRL HE

Size		0280	0300	0330	0350
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	52,9	61,9	68,8	76,8
Input power	kW	18,1	20,2	23,4	26,9
Cooling total input current	A	30,0	34,0	37,0	45,0
EER	W/W	2,93	3,06	2,94	2,86
Water flow rate system side	l/h	9106	10652	11855	13229
Pressure drop system side	kPa	27	27	51	29
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	59,1	69,2	76,3	86,2
Input power	kW	17,5	20,6	23,1	26,1
Heating total input current	A	35,0	39,0	43,0	49,0
COP	W/W	3,38	3,36	3,31	3,30
Water flow rate system side	l/h	10254	11992	13209	14947
Pressure drop system side	kPa	25	34	66	34

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ELECTRIC DATA

Size			0280	0300	0330	0350
Electric data						
Maximum current (FLA)	E	A	46,0	53,0	58,0	63,0
	L	A	46,0	53,0	53,0	63,0
Peak current (LRA)	E	A	155,0	184,0	190,0	200,0
	L	A	155,0	184,0	184,0	200,0

ENERGY DATA

Size			0280	0300	0330	0350
Cooling capacity with low leaving water temp (UE n° 2016/2281)						
SEER	E	W/W	3,74	3,71	3,80	3,71
	L	W/W	2,96	3,19	3,01	3,28
ηsc	E	%	146,50	145,20	148,90	145,30
	L	%	115,30	124,40	117,30	128,30
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)						
Efficiency energy class	E,L		A+	A+	A+	-
Pdesignh	E,L	kW	-	-	-	-
ηsh	E	%	138,00	137,00	137,00	135,00
	L	%	125,00	128,00	125,00	125,00
SCOP	E	W/W	3,53	3,50	3,50	3,45
	L	W/W	3,20	3,28	3,20	3,20

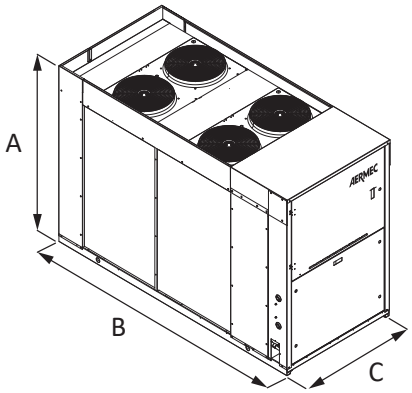
(1) Efficiencies for low temperature applications (35 °C)

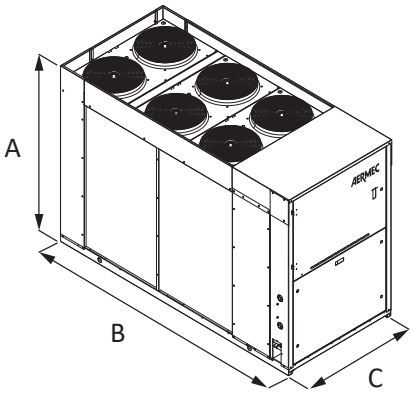
GENERAL TECHNICAL DATA

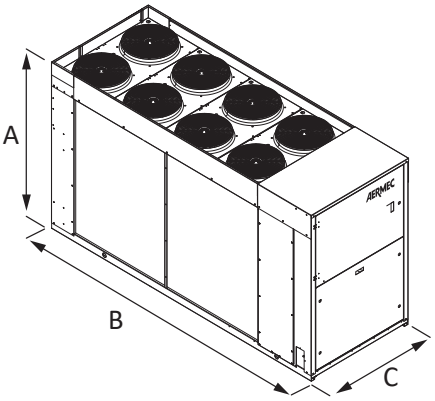
Size			0280	0300	0330	0350
Compressor						
Type	E,L	type		Scroll		
Compressor regulation	E,L	Type		On-Off		
Number	E,L	no.	2	2	2	2
Circuits	E,L	no.	2	2	2	2
Refrigerant	E,L	type		R410A		
System side heat exchanger						
Type	E,L	type		Brazed plate		
Number	E,L	no.	1	1	1	1
System side hydraulic connections						
Connections (in/out)	E,L	Type		Grooved joints		
Sizes (in/out)	E,L	Ø		2"1/2		
Fan						
Type	E,L	type		axials		
Number	E	no.	6	8	8	8
	L	no.	4	6	6	6
Air flow rate	E	m^3/h	20000	26000	26000	26000
	L	m^3/h	14000	20000	20000	20000
Sound data calculated in cooling mode (1)						
Sound power level	E	dB(A)	74,0	75,0	75,0	76,0
	L	dB(A)	73,0	74,0	74,0	75,0
Sound pressure level (10 m)	E	dB(A)	42,3	43,2	43,2	44,2
	L	dB(A)	41,3	42,3	42,3	43,3

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS







Size			0280	0300	0330	0350
Dimensions and weights						
A	E,L	mm	1606	1606	1606	1606
B	E,L	mm	1100	1100	1100	1100
C	E	mm	-	2950	2950	2950
	L	mm	2450	2450	2450	2450
Weights						
Without hydronic kit	E	kg	730	795	805	811
	L	kg	713	724	731	740

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www.aermec.com

NRG 0800-3600

Air-water chiller

Cooling capacity 225,7 ÷ 1034,5 kW

- **High efficiency also at partial loads**
- **Low refrigerant charge**
- **Night mode**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas axial fan, microchannel batteries and plate exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 49°C external air temperature. Unit can produce chilled water up to -10 °C in some versions.
For more information refer to the selection program and to to the dedicated documentation.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It's available in various configurations, with storage tank or pumps.

CONTROL PCO_5

The units from size 0800 to 2400 have 1 control card, while the units from size 2600 to 3600 have 2 control cards.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Floating HP control:** the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

— Possibility to control two units in a Master-Slave configuration (from size 0800 to 2400)

INTEGRATED SOLUTION (2600 ÷ 3600)

The **"integrated solution" concept has been implemented in the system architecture**, consisting in an integrated and streamlined control of compressors and electronic valve.
This solution allowed a variety of new features to be introduced, such as:

— **Low Superheat Control**: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
— **DLT control**: Control of electronic valve at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

AVX: Spring anti-vibration supports.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
AER485P1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•						
AER485P1 x no. 2	°,A,E,L,N,U												•	•	•	•	•	•
AERBACP	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•						
AERBACP x no. 2	°,A,E,L,N,U												•	•	•	•	•	•
AERLINK	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
PR4	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
Integrated hydronic kit: 00									
°	AVX1125	AVX1125	AVX1125	AVX1125	AVX1127	AVX1127	AVX1127	AVX1129	AVX1130
A, L	AVX1125	AVX1125	AVX1127	AVX1127	AVX1127	AVX1143	AVX1143	AVX1138	AVX1138
E, U	AVX1127	AVX1127	AVX1127	AVX1143	AVX1143	AVX1148	AVX1148	AVX1136	AVX1139
N	AVX1143	AVX1143	AVX1143	AVX1148	AVX1148	AVX1148	AVX1136	AVX1139	AVX1141
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ									
°	AVX1126	AVX1126	AVX1126	AVX1126	AVX1128	AVX1128	AVX1128	AVX1131	AVX1131
A, L	AVX1126	AVX1126	AVX1128	AVX1128	AVX1128	AVX1147	AVX1147	AVX1135	AVX1135
E, U	AVX1128	AVX1128	AVX1128	AVX1147	AVX1147	AVX1135	AVX1135	AVX1137	AVX1140
N	AVX1147	AVX1147	AVX1147	AVX1135	AVX1135	AVX1135	AVX1137	AVX1140	AVX1142
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ									
°	AVX1125	AVX1125	AVX1125	AVX1125	AVX1126	AVX1126	AVX1126	AVX1132	AVX1132
A, L	AVX1125	AVX1125	AVX1126	AVX1126	AVX1126	AVX1144	AVX1144	AVX1134	AVX1138
E, U	AVX1126	AVX1126	AVX1126	AVX1144	AVX1144	AVX1149	AVX1149	AVX1136	AVX1139
N	AVX1144	AVX1144	AVX1144	AVX1149	AVX1149	AVX1149	AVX1136	AVX1139	AVX1141

Ver	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00								
°	AVX1130	AVX1138	AVX1167	AVX1167	AVX1167	AVX1167	AVX1168	AVX1168
A, L	AVX1150	AVX1150	AVX1171	AVX1171	AVX1171	AVX1172	AVX1172	AVX1250
E, U	AVX1139	AVX1141	AVX1251	AVX1170	AVX1170	AVX1253	AVX1253	AVX1253
N	AVX1141	AVX1145	AVX1174	AVX1254	AVX1254	AVX1254	AVX1254	AVX1176
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ								
°	AVX1131	AVX1135	AVX1167	AVX1167	AVX1167	AVX1167	AVX1168	AVX1168
A, L	AVX1137	AVX1137	AVX1171	AVX1171	AVX1172	AVX1172	AVX1250	AVX1251
E, U	AVX1140	AVX1142	AVX1251	AVX1170	AVX1252	AVX1253	AVX1253	AVX1174
N	AVX1142	AVX1146	AVX1174	AVX1254	AVX1254	AVX1254	AVX1176	AVX1176
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ								
°	AVX1132	AVX1133	AVX1167	AVX1167	AVX1167	AVX1167	AVX1168	AVX1168
A, L	AVX1150	AVX1150	AVX1171	AVX1171	AVX1171	AVX1172	AVX1250	AVX1250
E, U	AVX1139	AVX1141	AVX1251	AVX1170	AVX1252	AVX1253	AVX1253	AVX1253
N	AVX1141	AVX1145	AVX1174	AVX1254	AVX1254	AVX1254	AVX1176	AVX1176

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
Fans: M									
°	DCPX161	DCPX161	DCPX161	DCPX161	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165
A	DCPX161	DCPX161	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165	DCPX167	DCPX167
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165	DCPX167	DCPX167	DCPX169	DCPX171

Ver	2200	2400	2600	2800	3000	3200	3400	3600
Fans: M								
°	DCPX165	DCPX167	As standard	As standard	As standard	As standard	As standard	As standard
A	DCPX169	DCPX169	As standard	As standard	As standard	As standard	As standard	As standard
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX171	DCPX172	As standard	As standard	As standard	As standard	As standard	As standard

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°, A, E, L, N, U	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400	DRENRG1600	DRENRG1800	DRENRG2000

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L, N, U	DRENRG2200	DRENRG2400	DRENRG2600	DRENRG2800	DRENRG3000	DRENRG3200	DRENRG3400	DRENRG3600

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°, A, E, L, N, U	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400	RIFNRG1600	RIFNRG1800	RIFNRG2000

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L, N, U	RIFNRG2200	RIFNRG2400	RIFNRG2600	RIFNRG2800	RIFNRG3000	RIFNRG3200	RIFNRG3400	RIFNRG3600

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°	GP2VN	GP2VN	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4G	GP4G
A, L	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G
E, U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°	GP4G	GP5G	GP11G	GP11G	GP11G	GP11G	GP11G	GP12G
A, L	GP6G	GP6G	GP11G	GP12G	GP12G	GP12G	GP13G	GP13G
E, U	GP7G	GP8G	GP12G	GP13G	GP14G	GP14G	GP14G	GP15G
N	GP8G	GP9G	GP13G	GP14G	GP15G	GP15G	GP15G	GP15G

A grey background indicates the accessory must be assembled in the factory

■ *GP2VN becomes GP2VNA if configured with a type A or B hydronic kit*

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°, A, E, L, N, U	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS2	T6NRGLS3

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L, N, U	T6NRGLS3	T6NRGLS3	T6NRGLS3	T6NRGLS4	T6NRGLS5	T6NRGLS5	T6NRGLS5	T6NRGLS5

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800, 3000, 3200, 3400, 3600
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper-copper
	S	Tinned copper
	V	Copper-painted alumimium
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	M	Oversized (5)
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (6)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (6)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
	AG	Storage tank and pump G
	AH	Storage tank and pump H
	AI	Storage tank and pump I
	AJ	Storage tank and pump J (6)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump
	BB	Storage tank with pump B + stand-by pump
	BC	Storage tank with pump C + stand-by pump
	BD	Storage tank with pump D + stand-by pump
	BE	Storage tank with pump E + stand-by pump
	BF	Storage tank with pump F + stand-by pump
	BG	Storage tank with pump G + stand-by pump
	BH	Storage tank with pump H + stand-by pump
	BI	Storage tank with pump I + stand-by pump
	BJ	Storage tank with pump J + stand-by pump (6)
		Kit with n° 1 inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed (7)
	IG	Pump G equipped with inverter device to work at fixed speed (7)
	IH	Pump H equipped with inverter device to work at fixed speed (7)
	II	Pump I equipped with inverter device to work at fixed speed (7)
	IJ	Pump J equipped with inverter device to work at fixed speed (8)
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (7)
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (7)
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed (7)
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed (7)
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (8)
		Kit with storage tank and n° 1 inverter pump to fixed speed
	CA	Buffer tank + pump A, equipped with inverter to work at fixed speed
	CB	Buffer tank + pump B, equipped with inverter to work at fixed speed
	CC	Buffer tank + pump C, equipped with inverter to work at fixed speed
	CD	Buffer tank + pump D, equipped with inverter to work at fixed speed
	EC	Buffer tank + pump E, equipped with inverter to work at fixed speed
	CF	Buffer tank + pump F, equipped with inverter to work at fixed speed (7)
	CG	Buffer tank + pump G, equipped with inverter to work at fixed speed (7)
	CH	Buffer tank + pump H, equipped with inverter to work at fixed speed (7)
	CI	Buffer tank + pump I, equipped with inverter to work at fixed speed (7)
	CJ	Buffer tank + pump J, equipped with inverter to work at fixed speed (7)
		Kit with storage tank and n° 1 pump + stand-by pump to fixed speed
	KA	Buffer tank+pump A+stand-by pump, both with inverter to work at fixed speed
	KB	Buffer tank+pump B+stand-by pump, both with inverter to work at fixed speed
	KC	Buffer tank+pump C+stand-by pump, both with inverter to work at fixed speed
	KD	Buffer tank+pump D+stand-by pump, both with inverter to work at fixed speed
	KE	Buffer tank+pump E+stand-by pump, both with inverter to work at fixed speed
	KF	Buffer tank+pump F+stand-by pump, both with inverter to work at fixed speed (7)
	KG	Buffer tank+pump G+stand-by pump, both with inverter to work at fixed speed (7)
	KH	Buffer tank+pump H+stand-by pump, both with inverter to work at fixed speed (7)
	KI	Buffer tank+pump I+stand-by pump, both with inverter to work at fixed speed (7)
	KJ	Buffer tank+pump J+stand-by pump, both with inverter to work at fixed speed (8)

(1) Water produced from 4 °C ÷ 20 °C
(2) Water produced from 8 °C ÷ -10 °C
(3) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
(4) None of the hydronic kits (from PA to KJ) are compatible with the following sizes and with versions with heat recovery T: 0800 - 0900 - 1000 - 1100 version °; 0800 - 0900 version A; 0800 - 0900 version L. None of the hydronic kits with pump(s) and storage tank (AA - AJ, BA-BJ, CA-CJ, KA-KJ) are compatible with all the sizes and with versions with heat recovery T. Total recovery is not compatible with sizes from 2600 to 3600.
(5) As standard in sizes fom 800 to 2400. DPCX included as standard in sizes from 2600 to 3600.
(6) For all configurations including pump J please contact the factory.
(7) Hydronic kit not available with sizes 0800 version °/L/A, 0900 version °/L/A, 1000 version °, 1100 version °.
(8) For all possible configurations which include the "J" pump please be in touch with Aermec. Hydronic kit is not available with sizes 0800 version °/L/A, 0900 version °/L/A, 1000 version °, 1100 version °.

PERFORMANCE SPECIFICATIONS

NRG - °

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	229,0	251,4	278,2	314,5	372,4	399,7	459,4	532,8	593,5	635,8	698,1	742,2	792,8	849,5	890,4	929,9	988,3
Input power	kW	70,6	80,3	90,1	107,8	118,6	129,5	152,5	170,8	197,3	212,9	226,5	237,4	260,6	286,7	302,3	318,7	329,5
Cooling total input current	A	121,9	138,4	155,6	182,3	197,6	222,2	248,5	282,0	325,0	353,5	366,3	399,8	449,0	492,2	512,4	547,7	550,4
EER	W/W	3,24	3,13	3,09	2,92	3,14	3,09	3,01	3,12	3,01	2,99	3,08	3,13	3,04	2,96	2,94	2,92	3,00
Water flow rate system side	l/h	39392	43247	47863	54104	64061	68767	79015	91640	102081	109354	120062	127638	136347	146093	153120	159916	169959
Pressure drop system side	kPa	36	44	54	51	60	62	42	57	62	62	64	64	73	80	83	85	93

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - L

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	225,7	247,6	279,0	317,6	360,5	410,2	451,3	526,9	590,3	640,5	679,3	730,9	800,5	861,6	899,4	951,1	987,3
Input power	kW	70,6	80,3	88,3	106,0	121,5	133,0	151,3	171,3	200,0	209,3	224,5	239,4	260,0	286,0	302,8	314,0	330,1
Cooling total input current	A	121,4	138,2	148,4	174,4	201,5	215,7	242,7	276,7	323,2	337,2	364,0	394,9	431,3	474,5	494,3	508,7	532,6
EER	W/W	3,20	3,09	3,16	3,00	2,97	3,08	2,98	3,08	2,95	3,06	3,03	3,05	3,08	3,01	2,97	3,03	2,99
Water flow rate system side	l/h	38832	42603	47996	54644	62004	70568	77616	90617	101513	110161	116806	125699	137666	148170	154674	163553	169784
Pressure drop system side	kPa	36	43	42	48	47	53	41	49	53	62	39	59	67	73	78	86	80

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - A

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	230,4	253,6	287,0	328,9	374,1	424,3	468,8	542,9	608,8	663,3	702,9	746,1	816,2	880,4	920,3	971,2	1009,6
Input power	kW	69,3	78,3	86,3	100,7	116,2	127,9	144,7	163,4	187,9	202,4	217,9	234,1	256,3	277,8	293,3	308,5	323,4
Cooling total input current	A	123,4	139,3	150,6	173,7	197,3	214,7	238,4	274,6	316,8	334,0	357,6	399,8	438,4	479,1	497,8	515,6	537,7
EER	W/W	3,33	3,24	3,33	3,27	3,22	3,32	3,24	3,32	3,24	3,28	3,23	3,19	3,18	3,17	3,14	3,15	3,12
Water flow rate system side	l/h	39642	43624	49381	56584	64350	72980	80631	93379	104697	114081	120866	128314	140372	151403	158257	167010	173615
Pressure drop system side	kPa	37	45	44	52	52	56	44	53	58	67	42	61	70	77	81	90	84

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	229,7	256,5	280,7	330,9	378,2	424,6	466,3	542,7	617,8	652,1	705,8	746,7	822,8	892,1	930,9	968,4	1019,2
Input power	kW	68,3	77,4	86,8	100,0	116,7	128,4	144,7	165,0	186,7	203,2	214,1	234,1	256,2	278,2	294,6	306,7	322,4
Cooling total input current	A	116,2	132,1	148,6	167,0	190,7	208,2	231,2	268,2	302,4	326,9	343,4	385,3	425,5	457,4	475,2	501,3	515,7
EER	W/W	3,37	3,32	3,24	3,31	3,24	3,31	3,22	3,29	3,31	3,21	3,30	3,19	3,21	3,21	3,16	3,16	3,16
Water flow rate system side	l/h	39530	44119	48278	56919	65043	73027	80200	93338	106248	112132	121358	128409	141496	153408	160081	166526	175267
Pressure drop system side	kPa	38	35	38	48	39	38	44	47	59	45	37	62	67	78	83	78	82

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - U

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	234,8	263,0	288,8	339,2	389,3	435,6	479,7	558,1	634,0	671,3	725,0	756,9	834,1	903,8	943,7	982,9	1033,7
Input power	kW	68,2	76,5	85,2	99,1	114,3	126,8	142,5	163,7	185,1	200,1	212,0	231,3	253,6	274,6	290,0	304,2	319,2
Cooling total input current	A	120,5	135,5	150,8	171,3	192,6	212,3	233,1	271,5	307,9	329,7	348,7	392,9	434,6	469,5	486,6	510,4	528,3
EER	W/W	3,44	3,44	3,39	3,42	3,41	3,44	3,37	3,41	3,43	3,35	3,42	3,27	3,29	3,29	3,25	3,23	3,24
Water flow rate system side	l/h	40397	45241	49677	58351	66957	74921	82502	95984	109036	115443	124657	130163	143439	155430	162284	169028	177747
Pressure drop system side	kPa	40	36	41	50	40	39	47	49	62	48	39	57	69	81	82	80	85

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - N

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	235,0	262,1	290,7	339,2	389,2	430,7	481,8	556,2	627,9	670,3	719,8	759,5	831,3	900,0	938,8	977,7	1019,2
Input power	kW	67,2	76,1	85,1	98,7	113,4	126,5	141,8	163,9	184,6	198,3	212,1	231,2	253,1	273,9	290,2	304,4	317,8
Cooling total input current	A	114,7	129,5	144,6	163,8	185,1	208,2	225,3	262,3	297,3	320,1	337,6	379,3	419,5	452,9	470,1	494,4	515,7
EER	W/W	3,50	3,44	3,42	3,44	3,43	3,40	3,40	3,39	3,40	3,38	3,39	3,29	3,28	3,29	3,24	3,21	3,21
Water flow rate system side	l/h	40430	45090	50006	58350	66941	74070	82857	95663	107988	115265	123768	130611	142953	154767	161439	168129	175265
Pressure drop system side	kPa	41	38	41	50	41	38	42	49	61	47	39	61	69	80	85	79	82

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																			
SEER - 12/7 (EN 14825: 2018) (1)																			
SEER	°	W/W	4,60	4,60	4,51	4,53	4,68	4,61	4,75	4,72	4,67	4,72	4,66	4,92	5,04	5,03	4,98	4,93	4,96
	A	W/W	4,82	4,85	4,82	4,84	4,85	4,85	4,87	4,92	4,91	4,90	4,85	5,01	5,15	5,19	5,14	5,08	5,04
	E	W/W	4,93	4,97	4,90	4,95	4,95	5,06	5,03	5,14	5,09	4,99	4,97	5,03	5,13	5,12	5,08	5,10	5,04
	L	W/W	4,74	4,74	4,81	4,80	4,79	4,99	4,84	4,98	4,97	4,96	4,93	4,94	5,07	5,10	5,07	5,04	5,01
	N	W/W	5,01	5,03	5,05	5,08	5,06	5,17	5,14	5,19	5,14	5,06	5,01	5,10	5,19	5,16	5,12	5,13	5,11
	U	W/W	4,88	4,89	4,91	4,94	4,93	4,87	4,95	4,96	4,87	4,84	4,84	5,11	5,25	5,25	5,14	5,12	5,10
Seasonal efficiency	°	%	181,20	180,81	177,55	178,19	184,10	181,33	187,11	185,77	183,62	185,93	183,49	193,99	198,74	198,31	196,15	194,31	195,23
	A	%	189,63	191,00	189,65	190,48	191,13	191,01	191,98	193,63	193,20	192,83	191,19	197,45	203,06	204,69	202,63	200,04	198,74
	E	%	194,09	195,85	192,97	195,14	195,09	199,22	198,28	202,75	200,40	196,73	195,73	198,31	202,20	201,77	200,04	200,90	198,74
	L	%	186,54	186,65	189,26	188,90	188,53	196,47	190,41	196,04	195,71	195,37	194,18	194,42	199,96	200,82	199,61	198,74	197,45
	N	%	197,31	198,10	199,16	200,08	199,21	203,95	202,63	204,40	202,46	199,48	197,51	200,90	204,54	203,58	201,92	202,36	201,34
	U	%	192,19	192,79	193,28	194,65	194,13	191,62	194,98	195,59	191,72	190,54	190,68	201,34	206,95	207,06	202,63	201,77	200,98
SEER - 23/18 (EN 14825: 2018) (1)																			
SEER	°	W/W	5,47	5,43	5,32	5,34	5,61	5,49	5,60	5,61	5,55	5,57	5,56	5,81	5,97	5,97	5,90	5,85	5,86
	A	W/W	5,77	5,79	5,79	5,78	5,74	5,78	5,72	5,84	5,84	5,84	5,80	6,00	6,17	6,22	6,15	6,07	6,03
	E	W/W	5,91	5,94	5,80	5,90	5,83	6,01	5,91	6,08	6,01	5,92	5,92	5,96	6,08	6,06	6,01	6,04	5,97
	L	W/W	5,69	5,66	5,69	5,66	5,59	5,88	5,64	5,82	5,80	5,81	5,77	5,78	5,95	5,97	5,94	5,91	5,87
	N	W/W	6,04	6,05	6,05	6,11	6,03	6,11	6,07	6,16	6,10	6,02	5,99	6,07	6,18	6,14	6,09	6,11	6,08
	U	W/W	5,93	5,92	5,90	5,96	5,89	5,80	5,87	5,93	5,86	5,85	5,86	6,18	6,35	6,35	6,21	6,19	6,16
Seasonal efficiency	°	%	215,77	214,03	209,84	210,78	221,22	216,68	221,00	221,39	218,97	219,81	219,27	229,30	235,87	235,76	233,09	230,91	231,55
	A	%	227,94	228,49	228,46	228,12	226,73	228,27	225,89	230,58	230,52	230,72	229,10	236,89	243,65	245,61	243,10	239,80	238,34
	E	%	233,50	234,52	229,14	233,17	230,29	237,47	233,26	240,04	237,31	233,77	233,69	235,56	240,22	239,55	237,47	238,59	235,95
	L	%	224,54	223,48	224,79	223,35	220,60	232,13	222,79	229,99	229,03	229,46	227,62	228,35	234,91	235,86	234,41	233,25	231,69
	N	%	238,70	239,11	239,16	241,55	238,13	241,52	239,72	243,56	240,96	237,95	236,49	239,74	244,07	242,76	240,75	241,39	240,13
	U	%	234,19	233,99	232,90	235,60	232,79	228,85	231,88	234,26	231,29	230,89	231,57	244,25	250,90	250,85	245,47	244,48	243,44
SEPR - (EN 14825: 2018) (2)																			
SEPR	°	W/W	5,84	5,73	5,82	5,67	5,95	6,14	6,27	6,31	6,09	6,12	6,30	6,38	6,60	6,61	6,53	6,47	6,47
	A	W/W	6,12	6,09	6,21	6,13	6,12	6,35	6,41	6,46	6,38	6,45	6,48	6,68	6,89	6,96	6,89	6,78	6,74
	E	W/W	6,24	6,26	6,28	6,23	6,14	6,72	6,72	6,78	6,73	6,64	6,62	6,70	6,84	6,82	6,77	6,80	6,72
	L	W/W	6,10	6,05	6,16	6,08	5,87	6,54	6,44	6,56	6,54	6,50	6,43	6,47	6,67	6,73	6,70	6,64	6,69
	N	W/W	6,36	6,35	6,37	6,38	6,43	6,82	6,80	6,93	6,85	6,78	6,71	6,85	6,99	6,95	6,89	6,92	6,88
	U	W/W	6,38	6,36	6,36	6,25	6,30	6,55	6,63	6,55	6,50	6,59	6,64	7,01	7,21	7,21	7,05	7,02	6,98

(1) Calculation performed with VARIABLE water flow rate
(2) Calculation performed with FIXED water flow rate

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: M																			
SEER - 12/7 (EN 14825: 2018) (1)																			
SEER	°	W/W	4,49	4,48	4,42	4,45	4,34	4,42	4,56	4,59	4,55	4,62	4,57	4,60	4,62	4,64	4,65	4,67	4,63
	A	W/W	4,57	4,61	4,59	4,64	4,66	4,81	4,78	4,81	4,82	4,77	4,73	4,63	4,66	4,69	4,71	4,69	4,69
	E	W/W	4,66	4,72	4,70	4,75	4,74	4,81	4,83	4,88	4,86	4,81	4,82	4,69	4,68	4,69	4,67	4,67	4,69
	L	W/W	4,52	4,54	4,61	4,61	4,60	4,81	4,74	4,81	4,80	4,80	4,78	4,63	4,65	4,65	4,65	4,64	4,65
	N	W/W	4,74	4,77	4,84	4,86	4,84	4,93	4,93	4,92	4,91	4,88	4,87	4,72	4,70	4,72	4,72	4,70	4,72
	U	W/W	4,63	4,66	4,68	4,74	4,73	4,82	4,86	4,86	4,78	4,72	4,73	4,67	4,71	4,73	4,72	4,73	4,71
Seasonal efficiency	°	%	176,62	176,29	173,89	175,16	170,44	173,62	179,47	180,79	179,09	181,96	179,69	180,94	181,88	182,75	183,18	183,61	182,32
	A	%	179,65	181,43	180,66	182,42	183,41	189,30	188,26	189,31	189,61	187,82	186,31	182,32	183,56	184,74	185,26	184,44	184,41
	E	%	183,47	185,88	184,93	186,81	186,78	189,58	190,12	192,35	191,44	189,50	189,92	184,46	184,04	184,46	183,61	183,98	184,46
	L	%	177,91	178,50	181,50	181,45	181,06	189,43	186,65	189,36	188,92	189,17	188,22	182,32	183,14	183,10	183,14	182,71	183,14
	N	%	186,42	187,94	190,76	191,43	190,66	194,09	194,23	193,86	193,28	192,09	191,66	185,75	184,92	185,77	185,78	184,89	185,68
	U	%	182,14	183,35	184,17	186,53	186,34	189,96	191,23	191,32	188,27	185,91	186,04	183,61	185,32	186,18	185,78	186,18	185,32
SEER - 23/18 (EN 14825: 2018) (1)																			
SEER	°	W/W	5,33	5,29	5,21	5,25	5,17	5,26	5,21	5,46	5,41	5,44	5,38	5,39	5,43	5,47	5,49	5,51	5,45
	A	W/W	5,47	5,50	5,51	5,53	5,49	5,73	5,61	5,71	5,72	5,69	5,65	5,53	5,56	5,60	5,61	5,59	5,59
	E	W/W	5,59	5,64	5,56	5,65	5,56	5,72	5,67	5,77	5,74	5,70	5,73	5,54	5,52	5,53	5,51	5,52	5,53
	L	W/W	5,43	5,42	5,46	5,43	5,37	5,67	5,53	5,63	5,59	5,62	5,59	5,41	5,43	5,44	5,44	5,42	5,44
	N	W/W	5,71	5,75	5,80	5,84	5,76	5,82	5,82	5,85	5,82	5,80	5,80	5,60	5,58	5,60	5,60	5,58	5,60
	U	W/W	5,62	5,64	5,62	5,71	5,65	5,75	5,76	5,80	5,75	5,70	5,71	5,63	5,68	5,70	5,69	5,71	5,68
Seasonal efficiency	°	%	210,28	208,66	205,52	207,05	203,71	207,46	205,26	215,21	213,44	214,60	212,06	212,65	214,00	215,76	216,46	217,23	214,80
	A	%	215,89	217,00	217,57	218,29	216,47	226,19	221,50	225,43	225,87	224,50	222,82	218,02	219,42	220,85	221,58	220,41	220,54
	E	%	220,65	222,52	219,54	223,14	219,44	225,89	223,61	227,72	226,58	224,85	226,30	218,58	217,96	218,35	217,34	217,87	218,39
	L	%	214,09	213,68	215,50	214,23	211,81	223,78	218,35	222,16	220,51	221,80	220,63	213,52	214,37	214,43	214,59	213,78	214,59
	N	%	225,54	226,84	229,06	230,70	227,28	229,69	229,77	230,98	229,93	228,93	229,01	221,18	220,09	220,95	220,99	220,05	220,96
	U	%	221,93	222,50	221,86	225,46	222,97	226,86	227,42	229,11	227,10	225,09	225,49	222,28	224,20	225,07	224,68	225,27	224,11

(1) Calculation performed with VARIABLE water flow rate
(2) Calculation performed with FIXED water flow rate

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
SEPR - (EN 14825: 2018) (2)																			
SEPR	°	W/W	5,68	5,58	5,70	5,58	5,60	5,96	5,95	6,10	5,92	5,97	6,07	5,91	5,95	6,01	6,03	6,05	5,97
	A	W/W	5,79	5,78	5,93	5,95	5,87	6,34	6,27	6,33	6,32	6,30	6,31	6,11	6,16	6,20	6,23	6,19	6,20
	E	W/W	5,94	5,94	6,04	6,00	5,89	6,41	6,41	6,47	6,44	6,36	6,42	6,18	6,16	6,17	6,15	6,16	6,18
	L	W/W	5,85	5,77	5,93	5,84	5,63	6,29	6,29	6,35	6,28	6,26	6,21	6,01	6,03	6,04	6,06	6,02	6,13
	N	W/W	6,03	6,02	6,12	6,13	6,17	6,49	6,50	6,60	6,52	6,50	6,49	6,28	6,25	6,27	6,28	6,26	6,28
	U	W/W	6,04	6,05	6,04	6,02	6,07	6,49	6,50	6,41	6,37	6,42	6,46	6,34	6,39	6,42	6,41	6,43	6,40

(1) Calculation performed with VARIABLE water flow rate
(2) Calculation performed with FIXED water flow rate

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Electric data																			
Maximum current (FLA)	°	A	158,2	176,5	198,8	226,7	262,4	290,3	318,1	371,7	417,5	445,4	481,1	542,5	588,3	634,1	662,0	689,9	725,5
	A,L	A	162,2	180,5	200,6	228,5	256,4	290,1	317,9	369,5	415,3	449,0	476,9	542,5	596,1	641,9	669,8	705,5	733,3
	E,U	A	164,0	182,3	200,6	234,3	262,2	295,9	323,7	375,3	426,9	454,8	488,5	550,3	603,9	657,5	685,4	713,3	748,9
	N	A	169,8	188,1	206,4	240,1	268,0	295,9	329,5	381,1	432,7	460,6	494,3	558,1	611,7	665,3	693,2	721,1	748,9
Peak current (LRA)	°	A	361,6	417,7	440,0	689,0	724,7	752,6	780,4	834,1	879,9	907,7	943,4	1004,8	1050,6	1096,4	1124,3	1152,2	1187,8
	A,L	A	365,6	421,7	441,8	690,8	718,7	752,4	780,2	831,9	877,7	911,3	939,2	1004,8	1058,4	1104,2	1132,1	1167,8	1195,6
	E,U	A	367,4	423,5	441,8	696,6	724,5	758,2	786,0	837,7	889,3	917,1	950,8	1012,6	1066,2	1119,8	1147,7	1175,6	1211,2
	N	A	373,2	429,3	447,6	702,4	730,3	758,2	791,8	843,5	895,1	922,9	956,6	1020,4	1074,0	1127,6	1155,5	1183,4	1211,2

■ *Data calculated without hydronic kit and accessories.*

GENERAL TECHNICAL DATA

Compressors

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Compressor																			
Type	°,A,E,L,N,U	type	Scroll																
Compressor regulation	°,A,E,L,N,U	Type	On/Off																
Number	°,A,E,L,N,U	no.	4	4	4	4	4	4	4	5	6	6	6	7	8	9	9	9	9
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
Refrigerant	°,A,E,L,N,U	type	R32																
Refrigerant load circuit 1 (1)	°	kg	10,5	10,9	11,3	14,0	15,0	15,0	15,8	20,6	20,6	24,1	29,0	21,0	20,5	21,6	21,6	24,6	29,0
	A,L	kg	11,3	10,9	11,0	15,0	15,8	18,0	18,0	20,6	24,0	24,4	26,3	21,0	24,0	24,0	24,0	24,4	26,3
	E,U	kg	15,4	15,0	16,1	19,9	19,9	24,0	23,3	25,9	28,1	33,8	30,8	23,3	25,9	28,1	28,1	33,8	30,8
	N	kg	16,0	16,0	17,3	24,2	26,3	26,3	30,8	30,0	37,5	34,1	34,1	30,8	30,0	37,5	37,5	34,1	34,1
Refrigerant load circuit 2 (1)	°	kg	10,5	10,9	11,3	14,0	15,0	15,0	15,8	20,6	20,6	25,6	29,0	22,5	20,5	23,6	23,6	26,0	29,0
	A,L	kg	11,3	10,9	11,0	15,0	15,8	20,5	20,5	20,6	24,0	24,4	26,3	22,5	28,0	24,0	24,0	24,4	26,3
	E,U	kg	15,4	15,0	16,1	19,9	19,9	25,5	23,3	25,9	28,1	33,8	30,8	23,3	25,9	28,1	28,1	33,8	30,8
	N	kg	16,0	16,0	18,8	25,4	26,3	26,3	30,8	30,0	37,5	34,1	34,1	30,8	30,0	37,5	37,5	34,1	30,8
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-	-	-	30,0	30,0	30,0	30,0	30,0	30,0
Potential global heating	°,A,E,L,N,U	GWP	675kgCO_2eq																

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

System side heat exchanger

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
System side heat exchanger																			
Type	°,A,E,L,N,U	type	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Hydraulic connections																			
Connections (in/out)	°,A,E,L,N,U	Type	Grooved joints																
Sizes (in/out)	°	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″
	A,L	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″	5″
	E,N,U	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″	5″

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

Fans

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																			
Inverter fan																			
Type	°,A,E,L,N,U	type	Axial																
Fan motor	°,A,E,L,N,U	type	Inverter																

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Number	°	no.	4	4	4	4	6	6	6	8	8	8	10	14	14	14	14	14	16
	A,L	no.	4	4	6	6	6	8	8	10	10	12	12	14	16	16	16	18	18
	E,U	no.	6	6	6	8	8	10	10	12	14	14	16	16	18	20	20	20	22
	N	no.	8	8	8	10	10	10	12	14	16	16	18	18	20	22	22	22	22
Air flow rate	°	m^3/h	65555	65555	76744	76744	115121	115121	115121	153480	153480	153480	191819	262339	262339	262339	262339	262339	299816
	A	m^3/h	76743	76743	98321	98321	98321	131111	131087	163789	163789	196572	196572	262339	299816	299816	299816	337293	337293
	E	m^3/h	74973	74973	74973	99978	99978	124970	124970	149950	174934	174934	199932	254531	285031	315528	315528	315528	346030
	L	m^3/h	62605	62605	74978	74978	74978	99996	99996	124953	124953	149882	149882	213489	243988	243988	243988	274487	274487
	N	m^3/h	99973	99973	99973	124966	124966	124966	149960	174953	199946	199946	224939	285030	315528	346027	346027	346027	346027
	U	m^3/h	98320	98320	98320	131139	131139	163815	163815	196680	229462	229462	262164	299816	337293	374770	374770	374770	412247
Sound data calculated in cooling mode (1)																			
Sound power level	°	dB(A)	87,1	87,1	90,5	90,6	92,4	92,5	92,6	93,8	93,8	93,9	94,8	96,5	96,6	96,6	96,6	96,7	97,3
	A	dB(A)	90,5	90,5	88,1	88,7	89,2	89,9	90,2	90,9	91,5	92,3	92,5	96,5	97,1	97,1	97,1	97,6	97,7
	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0	89,7	90,2	93,4	93,9	94,3	94,4	94,4	94,9
	L	dB(A)	85,1	85,1	84,5	85,1	85,4	86,6	87,2	87,7	88,4	89,1	89,5	89,8	90,1	90,2	90,5	91,0	91,2
	N	dB(A)	85,3	85,4	85,4	86,9	87,6	88,1	89,0	89,4	89,8	90,5	91,0	93,8	94,2	94,6	94,7	94,8	94,9
	U	dB(A)	88,6	88,6	88,6	90,1	90,5	91,6	91,9	92,5	93,0	93,2	93,8	97,0	97,5	97,9	98,0	98,0	98,5

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

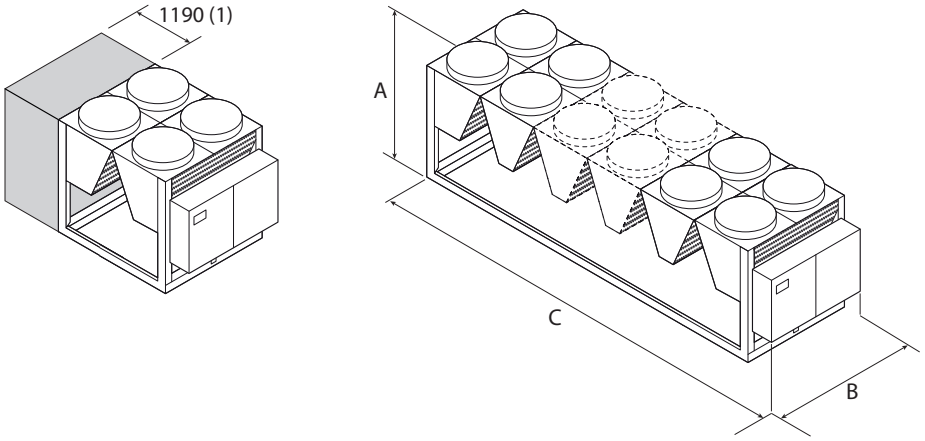
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000
Fans: M											
Increased fan											
Type	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Fan motor	°,A,U	type	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)
	E,L,N	type	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Number	°	no.	4	4	4	4	6	6	6	8	8
	A,L	no.	4	4	6	6	6	8	8	10	10
	E,U	no.	6	6	6	8	8	10	10	12	14
	N	no.	8	8	8	10	10	10	12	14	16
Without Static pressure											
Air flow rate	°	m^3/h	76740	76740	76744	76744	115121	115121	115121	153480	153480
	A	m^3/h	76743	76743	115110	115110	115110	153480	153480	191850	191850
	E	m^3/h	74973	74973	74973	99978	99978	124970	124970	149950	174934
	L	m^3/h	62605	62605	74978	74978	74978	99996	99996	124953	124953
	N	m^3/h	99973	99973	99973	124966	124966	124966	149960	174953	199946
	U	m^3/h	115110	115110	115110	153480	153480	191850	191850	230220	268590
Sound power level	°	dB(A)	89,2	89,2	90,5	90,6	92,4	92,5	92,6	93,8	93,8
	A	dB(A)	90,5	90,5	90,5	90,8	91,1	92,1	92,3	93,1	93,4
	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0
	L	dB(A)	85,1	85,1	84,5	85,1	85,4	86,6	87,2	87,7	88,4
	N	dB(A)	85,3	85,4	85,4	86,9	87,6	88,1	89,0	89,4	89,8
	U	dB(A)	90,8	90,8	90,8	92,2	92,5	93,5	93,6	94,3	94,9

(1) Asynchronous
(2) Asynchronous with phase cut

Size			2200	2400	2600	2800	3000	3200	3400	3600
Fans: M										
Increased fan										
Type	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Fan motor	°,A,U	type	- (1)	- (1)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E,L,N	type	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Number	°	no.	8	10	14	14	14	14	14	16
	A,L	no.	12	12	14	16	16	16	18	18
	E,U	no.	14	16	16	18	20	20	20	22
	N	no.	16	18	18	20	22	22	22	22
Without Static pressure										
Air flow rate	°	m^3/h	153480	191819	268597	268600	268600	268600	268600	307026
	A	m^3/h	230220	230220	268597	306979	306979	306979	345327	345327
	E	m^3/h	174934	199932	259432	290737	322041	322041	322041	353346
	L	m^3/h	149882	149882	219126	250455	250455	250455	281706	281706
	N	m^3/h	199946	224939	290848	322029	353368	353368	353368	353368
	U	m^3/h	268590	306960	306970	345339	383716	383711	383711	422082
Sound power level	°	dB(A)	93,9	94,8	96,5	96,6	96,6	96,6	96,7	97,3
	A	dB(A)	94,2	94,3	96,5	97,1	97,1	97,1	97,6	97,7
	E	dB(A)	89,7	90,2	93,4	93,9	94,3	94,4	94,4	94,9
	L	dB(A)	89,1	89,5	89,8	90,1	90,2	90,5	91,0	91,2
	N	dB(A)	90,5	91,0	93,8	94,2	94,6	94,7	94,8	94,9
	U	dB(A)	95,0	95,6	97,0	97,5	97,9	98,0	98,0	98,5

(1) Asynchronous
(2) Asynchronous with phase cut

DIMENSIONS



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
NRG 0800°, 0900°, 1000°, 1100°
NRG 0800L, 0900L
NRG 0800A, 0900A

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Dimensions and weights																			
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	2780	2780	3970	3970	3970	5160	5160	5160	6350	8730	8730	8730	8730	8730	9920
	A,L	mm	2780	2780	3970	3970	3970	5160	5160	6350	6350	7540	7540	8730	9920	9920	9920	11110	11110
	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9920	9920	11110	12300	12300	12300	13490
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9920	9920	11110	11110	12300	13490	13490	13490	13490

■ *The units 0800°, 0900°, 1000°, 1100°; 0800L, 0900L; and 0800A, 0900A with the "storage tank" option, are 3970mm long.*

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Weights																			
Empty weight	°	kg	2140	2140	2150	2310	2850	2960	3180	3830	4030	4210	4740	6280	6515	6810	6930	7135	7655
	A,L	kg	2160	2160	2580	2730	2870	3440	3650	4250	4460	4960	5070	6300	6960	7265	7380	7925	8015
	E,U	kg	2580	2590	2600	3220	3430	3930	4070	4660	5270	5400	5990	6755	7390	8120	8230	8390	8925
	N	kg	3050	3070	3080	3630	3850	3990	4470	5110	5750	5880	6370	7155	7870	8565	8675	8830	8955

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NRG 0800H-3600H

Reversible air/water heat pump

Cooling capacity 194,9 ÷ 962,3 kW – Heating capacity 209,6 ÷ 991,9 kW

- **High efficiency also at partial loads**
- **Low refrigerant charge**
- **Night mode**

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 49 °C in summer. Hot water production up to 60 °C (for more details refer to the technical documentation).

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *Refrigerant gas detector is supplied as per standard.*

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

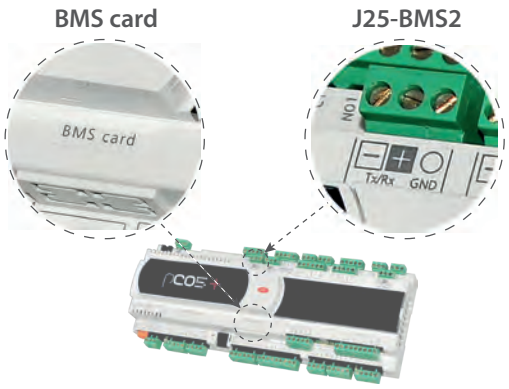
Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed pumps also inverter.

CONTROL PCO[5]

The units from size 0800 to 2400 have 1 control card, while the units from size 2600 to 3600 have 2 control cards.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Floating HP control:** available for all models with an inverter fan or DCPX. Thanks to continuous fan modulation, unit operation is optimised in every working position in cooling mode. The result is enhanced machine energy efficiency with partial loads.
- **"EASYLOG" data logger as per standard:** allows all operating data read by the pCO5 to be stored on an SD card.
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.
- Possibility to control two units in a Master-Slave configuration (from size 0800 to 2400)



In the 'BMS card' port, the compatible accessories are:

— AER485P1
— AERBACP
— MULTICHILLER-EVO + AER485P1

In the 'J25-BMS2' port, the compatible accessories are:

— AERNET

Note:

— "BMS card" and "J25-BMS2" are two ports on the unit's control board. Only one accessory can be connected to each port.
— An 'EASYLOG' diagnostic device may be present in port 'J25-BMS2', possibly disconnect it to connect the accessory AERNET.
— **For other requirements, please contact the company.**

INTEGRATED SOLUTION

The **"integrated solution" concept has been implemented in the system architecture**, consisting in an integrated and streamlined control of compressors and electronic valve.
This solution allowed a variety of new features to be introduced, such as:
— **Low Superheat Control**: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
— **DLT control**: Control of electronic valve at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range, especially in heating mode.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.
BRC1: Condensate drip tray. Consider 1 for each V-block.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
AER485P1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•						
AER485P1 x no. 2	°,A,E,L												•	•	•	•	•	•
AERBACP	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•						
AERBACP x no. 2	°,A,E,L												•	•	•	•	•	•
AERLINK	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
PR4	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°	DCPX161	DCPX161	DCPX161	DCPX163	DCPX163	DCPX163	DCPX163	DCPX165	DCPX167
A	DCPX161	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165	DCPX165	DCPX167	DCPX167
E, L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°	DCPX167	DCPX167	DCPX174	DCPX174	DCPX175	DCPX175	DCPX175	DCPX175
A	DCPX169	DCPX169	DCPX174	DCPX175	DCPX175	DCPX175	DCPX176	DCPX176
E, L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																	
°	AVX1151	AVX1151	AVX1151	AVX1153	AVX1153	AVX1153	AVX1153	AVX1154	AVX1163	AVX1163	AVX1163	AVX1167	AVX1167	AVX1171	AVX1171	AVX1171	AVX1171
A, L	AVX1151	AVX1153	AVX1153	AVX1153	AVX1154	AVX1154	AVX1154	AVX1156	AVX1156	AVX1159	AVX1159	AVX1167	AVX1171	AVX1171	AVX1171	AVX1169	AVX1169
E	AVX1153	AVX1154	AVX1154	AVX1154	AVX1156	AVX1156	AVX1159	AVX1161	AVX1161	AVX1165	AVX1165	AVX1169	AVX1173	AVX1173	AVX1173	AVX1175	AVX1175
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ																	
°	AVX1152	AVX1152	AVX1152	AVX1152	AVX1152	AVX1152	AVX1152	AVX1155	AVX1157	AVX1157	AVX1157	AVX1168	AVX1168	AVX1172	AVX1172	AVX1172	AVX1172
A, L	AVX1152	AVX1152	AVX1152	AVX1152	AVX1155	AVX1155	AVX1155	AVX1157	AVX1157	AVX1160	AVX1160	AVX1168	AVX1172	AVX1172	AVX1172	AVX1170	AVX1170
E	AVX1152	AVX1155	AVX1155	AVX1155	AVX1157	AVX1157	AVX1160	AVX1162	AVX1162	AVX1166	AVX1166	AVX1170	AVX1174	AVX1174	AVX1174	AVX1176	AVX1176
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ																	
°	AVX1151	AVX1151	AVX1151	AVX1153	AVX1153	AVX1153	AVX1153	AVX1154	AVX1163	AVX1163	AVX1163	AVX1167	AVX1167	AVX1171	AVX1171	AVX1171	AVX1171
A, L	AVX1151	AVX1153	AVX1153	AVX1153	AVX1154	AVX1154	AVX1158	AVX1156	AVX1156	AVX1164	AVX1164	AVX1167	AVX1171	AVX1171	AVX1171	AVX1169	AVX1169
E	AVX1153	AVX1154	AVX1154	AVX1154	AVX1156	AVX1156	AVX1159	AVX1161	AVX1161	AVX1165	AVX1165	AVX1169	AVX1173	AVX1173	AVX1173	AVX1175	AVX1175

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°, A, E, L	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400	DRENRG1600	DRENRG1800	DRENRG2000

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L	DRENRG2200	DRENRG2400	DRENRG2600	DRENRG2800	DRENRG3000	DRENRG3200	DRENRG3400	DRENRG3600

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°, A, E, L	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400	RIFNRG1600	RIFNRG1800	RIFNRG2000

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L	RIFNRG2200	RIFNRG2400	RIFNRG2600	RIFNRG2800	RIFNRG3000	RIFNRG3200	RIFNRG3400	RIFNRG3600

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
°	GP2VN	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP3G	GP4G	GP5G	GP5G	GP5G	GP11G	GP10G	GP12G	GP12G	GP12G	GP12G
A, L	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G	GP11G	GP12G	GP12G	GP12G	GP13G	GP13G
E	GP3G	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G	GP8G	GP13G	GP14G	GP14G	GP14G	GP15G	GP15G

A grey background indicates the accessory must be assembled in the factory

■ *GP2VN becomes GP2VNA if configured with a type A or B hydronic kit*

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS2	T6NRGLS3	T6NRGLS3	T6NRGLS3	T6NRGLS3	T6NRGLS4	T6NRGLS5	T6NRGLS5	T6NRGLS5	T6NRGLS5

A grey background indicates the accessory must be assembled in the factory

Condensate drip.

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°	BRC1 x 2 (1)	BRC1 x 2 (1)	BRC1 x 2 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 4 (1)	BRC1 x 5 (1)
A, L	BRC1 x 2 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 5 (1)	BRC1 x 5 (1)
E	BRC1 x 3 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 5 (1)	BRC1 x 5 (1)	BRC1 x 6 (1)	BRC1 x 7 (1)	BRC1 x 7 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°	BRC1 x 5 (1)	BRC1 x 5 (1)	BRC1 x 7 (1)	BRC1 x 7 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)
A, L	BRC1 x 6 (1)	BRC1 x 6 (1)	BRC1 x 7 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 9 (1)	BRC1 x 9 (1)
E	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 9 (1)	BRC1 x 10 (1)	BRC1 x 10 (1)	BRC1 x 10 (1)	BRC1 x 11 (1)	BRC1 x 11 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800, 3000, 3200, 3400, 3600
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (4)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (4)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
	AG	Storage tank and pump G
	AH	Storage tank and pump H
	AI	Storage tank and pump I
	AJ	Storage tank and pump J (4)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump
	BB	Storage tank with pump B + stand-by pump
	BC	Storage tank with pump C + stand-by pump
	BD	Storage tank with pump D + stand-by pump
	BE	Storage tank with pump E + stand-by pump
	BF	Storage tank with pump F + stand-by pump
	BG	Storage tank with pump G + stand-by pump
	BH	Storage tank with pump H + stand-by pump
	BI	Storage tank with pump I + stand-by pump
	BJ	Storage tank with pump J + stand-by pump (4)
		Kit with n° 1 inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed (5)
	IG	Pump G equipped with inverter device to work at fixed speed (5)
	IH	Pump H equipped with inverter device to work at fixed speed (5)
	II	Pump I equipped with inverter device to work at fixed speed (5)
	IJ	Pump J equipped with inverter device to work at fixed speed (6)
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (6)
		Kit with storage tank and n° 1 inverter pump to fixed speed
	CA	Buffer tank + pump A, equipped with inverter to work at fixed speed
	CB	Buffer tank + pump B, equipped with inverter to work at fixed speed
	CC	Buffer tank + pump C, equipped with inverter to work at fixed speed
	CD	Buffer tank + pump D, equipped with inverter to work at fixed speed
	EC	Buffer tank + pump E, equipped with inverter to work at fixed speed
	CF	Buffer tank + pump F, equipped with inverter to work at fixed speed (5)
	CG	Buffer tank + pump G, equipped with inverter to work at fixed speed (5)
	CH	Buffer tank + pump H, equipped with inverter to work at fixed speed (5)
	CI	Buffer tank + pump I, equipped with inverter to work at fixed speed (5)
	CJ	Buffer tank + pump J, equipped with inverter to work at fixed speed (6)
		Kit with storage tank and n° 1 pump + stand-by pump to fixed speed
	KA	Buffer tank+pump A+stand-by pump, both with inverter to work at fixed speed
	KB	Buffer tank+pump B+stand-by pump, both with inverter to work at fixed speed
	KC	Buffer tank+pump C+stand-by pump, both with inverter to work at fixed speed
	KD	Buffer tank+pump D+stand-by pump, both with inverter to work at fixed speed
	KE	Buffer tank+pump E+stand-by pump, both with inverter to work at fixed speed
	KF	Buffer tank+pump F+stand-by pump, both with inverter to work at fixed speed (5)
	KG	Buffer tank+pump G+stand-by pump, both with inverter to work at fixed speed (5)
	KH	Buffer tank+pump H+stand-by pump, both with inverter to work at fixed speed (5)
	KI	Buffer tank+pump I+stand-by pump, both with inverter to work at fixed speed (5)
	KJ	Buffer tank+pump J+stand-by pump, both with inverter to work at fixed speed (6)

(1) Water produced from 4 °C ÷ 20 °C
(2) Water produced from 8 °C ÷ -10 °C
(3) This option is not available with the Z operating field. The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) For all configurations including pump J please contact the factory.
(5) Hydronic kit not available with sizes 0800 version °/L/A, 0900 version °, 1000 version °, 1800 version °.
(6) For all possible configurations which include the "J" pump please be in touch with Aermec. Hydronic kit is not available with sizes 0800 version °/L/A, 0900 version °, 1000 version °, 1800 version °.

PERFORMANCE SPECIFICATIONS

NRG H°

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	200,5	220,2	238,5	292,2	325,7	353,6	381,6	456,8	531,9	561,5	591,1	705,6	749,2	824,6	859,3	895,1	925,3
Input power	kW	72,8	83,7	95,6	107,5	123,5	144,5	160,8	179,5	199,4	219,3	239,1	249,8	277,9	299,4	317,7	334,1	354,4
Cooling total input current	A	127,0	144,0	163,0	182,0	207,0	238,0	268,0	300,0	333,0	362,0	391,0	424,0	485,0	506,0	527,0	567,0	597,0
EER	W/W	2,75	2,63	2,49	2,72	2,64	2,45	2,37	2,55	2,67	2,56	2,47	2,83	2,70	2,75	2,70	2,68	2,61
Water flow rate system side	l/h	34503	37880	41031	50268	56029	60821	65615	78560	91483	96570	101650	121347	128839	141815	147773	153929	159128
Pressure drop system side	kPa	25	30	35	45	45	47	29	42	50	49	47	53	60	69	73	75	79
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	212,2	235,2	256,2	310,2	348,1	384,0	416,2	492,2	568,3	603,5	638,4	729,6	782,6	858,4	896,3	931,7	966,8
Input power	kW	66,1	73,5	80,8	98,1	109,5	123,5	129,7	153,3	175,5	186,3	198,1	232,9	252,2	275,3	288,2	299,7	312,5
Heating total input current	A	120,0	133,0	145,0	173,0	190,0	210,0	221,0	263,0	303,0	319,0	337,0	395,0	430,0	471,0	490,0	506,0	524,0
COP	W/W	3,21	3,20	3,17	3,16	3,18	3,11	3,21	3,21	3,24	3,24	3,22	3,13	3,10	3,12	3,11	3,11	3,09
Water flow rate system side	l/h	36823	40823	44470	53838	60421	66654	72264	85444	98663	104778	110847	126695	135884	149044	155628	161773	167874
Pressure drop system side	kPa	29	36	42	53	54	58	37	52	60	60	58	58	66	76	81	83	88

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HL

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	194,9	231,4	252,7	283,9	335,9	367,7	399,5	467,1	515,0	568,3	599,3	684,6	752,3	804,8	836,8	889,9	919,8
Input power	kW	73,7	78,6	88,8	107,7	118,0	136,6	154,7	175,4	203,9	213,7	232,1	255,0	275,5	305,5	325,1	334,6	353,5
Cooling total input current	A	125,0	136,0	153,0	179,0	196,0	222,0	249,0	285,0	331,0	346,0	374,0	420,0	457,0	506,0	528,0	540,0	568,0
EER	W/W	2,65	2,94	2,85	2,64	2,85	2,69	2,58	2,66	2,53	2,66	2,58	2,69	2,73	2,63	2,57	2,66	2,60
Water flow rate system side	l/h	33540	39819	43473	48838	57788	63245	68702	80332	88566	97728	103054	117728	129370	138391	143907	153027	158170
Pressure drop system side	kPa	23	33	34	39	45	47	33	39	41	49	35	51	59	64	67	75	70
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	209,6	244,9	268,8	305,3	357,3	394,2	431,7	502,3	558,0	611,4	647,2	717,8	788,1	844,0	880,6	933,5	969,8
Input power	kW	64,6	76,2	83,3	95,6	111,1	123,9	131,4	152,8	170,0	186,9	199,5	227,5	249,8	267,9	280,7	297,4	310,8
Heating total input current	A	115,0	134,0	147,0	165,0	188,0	207,0	219,0	257,0	288,0	313,0	333,0	378,0	416,0	447,0	466,0	491,0	512,0
COP	W/W	3,24	3,22	3,23	3,19	3,22	3,18	3,29	3,29	3,28	3,27	3,24	3,15	3,16	3,15	3,14	3,14	3,12
Water flow rate system side	l/h	36369	42513	46657	52988	62021	68420	74962	87217	96884	106143	112386	124645	136849	146552	152908	162100	168406
Pressure drop system side	kPa	28	39	40	47	53	56	40	47	51	60	42	57	66	71	75	84	80

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HA

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	200,5	236,4	258,7	292,2	344,0	378,0	412,2	480,7	532,0	584,8	618,3	700,8	768,8	824,7	859,0	911,3	943,6
Input power	kW	71,4	78,5	88,2	105,8	117,2	134,5	151,4	172,4	196,2	210,0	227,1	245,1	271,0	296,0	314,1	327,9	345,4
Cooling total input current	A	127,0	141,0	157,0	182,0	201,0	226,0	251,0	289,0	333,0	351,0	377,0	424,0	462,0	509,0	529,0	545,0	571,0
EER	W/W	2,81	3,01	2,93	2,76	2,94	2,81	2,72	2,79	2,71	2,78	2,72	2,86	2,84	2,79	2,73	2,78	2,73
Water flow rate system side	l/h	34505	40669	44506	50268	59178	65028	70879	82668	91485	100578	106317	120517	132216	141823	147725	156722	162264
Pressure drop system side	kPa	24	33	34	39	45	47	33	39	42	50	35	53	61	67	70	79	74
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	214,2	249,2	273,9	311,8	364,1	404,2	439,5	510,6	568,3	624,2	661,5	726,3	796,9	854,6	892,3	944,8	982,2
Input power	kW	65,5	76,7	84,1	96,3	111,6	125,5	132,9	153,9	171,9	189,2	201,7	229,0	250,4	268,2	280,9	299,3	312,3
Heating total input current	A	119,0	139,0	152,0	170,0	195,0	215,0	227,0	265,0	298,0	325,0	344,0	389,0	428,0	458,0	477,0	506,0	526,0
COP	W/W	3,27	3,25	3,25	3,24	3,26	3,22	3,31	3,32	3,31	3,30	3,28	3,17	3,18	3,19	3,18	3,16	3,15
Water flow rate system side	l/h	37179	43255	47538	54127	63192	70158	76308	88642	98663	108366	114875	126116	138372	148390	154943	164062	170550
Pressure drop system side	kPa	29	40	41	49	55	58	41	49	53	62	44	58	67	73	77	86	82

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HE

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	210,2	241,4	265,0	301,3	349,5	385,3	433,9	499,0	555,3	602,8	639,1	718,4	790,6	846,2	879,4	924,9	962,3
Input power	kW	68,8	76,7	85,7	101,9	115,0	130,8	142,8	165,0	189,0	202,2	217,7	241,7	264,6	289,3	308,3	320,7	337,3
Cooling total input current	A	120,0	135,0	150,0	173,0	192,0	215,0	234,0	272,0	312,0	332,0	355,0	390,0	433,0	474,0	493,0	512,0	536,0
EER	W/W	3,05	3,15	3,09	2,96	3,04	2,94	3,04	3,02	2,94	2,98	2,94	2,97	2,99	2,93	2,85	2,88	2,85
Water flow rate system side	l/h	36167	41535	45585	51820	60126	66279	74616	85811	95491	103665	109890	123535	135965	145529	151221	159049	165476
Pressure drop system side	kPa	24	33	34	40	45	47	33	40	42	50	35	56	62	70	74	71	74
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	220,6	251,8	277,3	320,3	367,5	407,1	456,1	525,1	586,9	634,6	674,7	737,8	806,3	867,9	904,3	951,9	991,9
Input power	kW	67,2	77,5	84,8	98,3	110,5	122,3	137,5	158,0	176,7	191,9	204,0	230,9	251,4	270,6	283,3	299,9	313,6
Heating total input current	A	119,0	137,0	150,0	170,0	189,0	207,0	229,0	266,0	299,0	321,0	340,0	384,0	419,0	452,0	470,0	497,0	516,0
COP	W/W	3,28	3,25	3,27	3,26	3,33	3,33	3,32	3,32	3,32	3,31	3,31	3,20	3,21	3,21	3,19	3,17	3,16
Water flow rate system side	l/h	38284	43702	48137	55596	63813	70679	79187	91172	101894	110186	117170	128108	140013	150692	157019	165295	172243
Pressure drop system side	kPa	31	35	39	45	36	35	44	45	55	47	39	60	65	75	79	77	81

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY INDEX

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																			
SEER - 12/7 (EN14825: 2018) (1)																			
SEER	°	W/W	3,91	4,03	3,76	4,01	3,91	3,74	3,72	3,92	4,10	-	-	-	-	-	-	-	-
	A	W/W	4,13	4,47	4,22	4,21	4,48	4,13	4,21	4,29	4,27	4,57	4,58	4,56	4,55	4,56	4,55	4,55	4,55
	E	W/W	4,48	4,70	4,65	4,49	4,69	4,49	4,73	4,76	4,56	4,68	4,65	4,76	4,76	4,74	4,68	4,69	4,64
	L	W/W	4,08	4,38	4,31	4,23	4,49	4,33	4,17	4,32	4,24	4,57	4,57	4,58	4,61	4,56	4,56	4,57	4,56
Seasonal efficiency	°	%	153,54	158,21	147,58	157,44	153,60	146,56	145,75	153,87	160,99	-	-	-	-	-	-	-	-
	A	%	162,28	175,77	165,92	165,53	176,30	162,21	165,54	168,43	167,63	179,84	180,02	179,30	179,05	179,25	179,11	179,12	179,03
	E	%	176,01	184,84	182,87	176,49	184,43	176,41	186,08	187,33	179,21	184,21	182,92	187,25	187,42	186,77	184,02	184,64	182,40
	L	%	160,02	172,22	169,30	166,37	176,46	170,12	163,61	169,99	166,45	179,96	179,77	180,32	181,27	179,57	179,44	179,67	179,24
SEER - 23/18 (EN14825: 2018) (2)																			
SEER	°	W/W	4,53	4,62	4,30	4,53	4,48	4,26	4,26	4,36	4,53	4,68	4,67	5,20	5,04	5,05	4,95	5,04	4,89
	A	W/W	4,82	5,14	4,88	4,83	5,05	4,68	4,77	4,78	4,70	4,74	4,81	5,32	5,32	5,33	5,34	5,33	5,33
	E	W/W	5,22	5,39	5,29	5,11	5,24	5,05	5,33	5,29	5,01	5,07	5,11	5,49	5,49	5,47	5,39	5,40	5,34
	L	W/W	4,86	5,04	4,92	4,80	5,00	4,85	4,70	4,80	4,72	4,81	4,84	5,12	5,16	5,10	5,09	5,10	5,09
Seasonal efficiency	°	%	178,23	181,99	169,18	178,03	176,17	167,49	167,32	171,54	178,15	184,08	183,60	205,12	198,46	198,95	195,09	198,65	192,44
	A	%	189,87	202,58	192,30	190,02	199,05	184,16	187,89	188,04	185,13	186,42	189,27	209,91	209,61	210,19	210,50	210,33	210,27
	E	%	205,68	212,67	208,75	201,59	206,78	199,04	210,37	208,55	197,30	199,90	201,24	216,49	216,66	215,99	212,50	213,20	210,64
	L	%	191,27	198,67	193,92	188,82	196,81	191,05	185,11	189,15	185,81	189,25	190,57	201,98	203,21	201,03	200,73	201,14	200,54
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)																			
SCOP	°	W/W	3,75	3,72	3,74	3,65	3,72	3,69	3,84	3,87	3,90	3,92	3,98	3,85	3,79	3,79	3,78	3,78	3,76
	A	W/W	3,98	3,87	3,91	3,92	3,89	3,93	4,04	4,03	4,08	4,08	4,13	4,01	4,00	3,98	3,95	3,93	3,90
	E	W/W	3,94	3,86	3,89	3,90	3,88	4,00	4,05	4,08	4,09	4,09	4,13	3,97	3,96	3,93	3,90	3,88	3,86
	L	W/W	3,85	3,81	3,86	3,82	3,85	3,87	3,94	3,98	4,02	3,99	4,06	3,91	3,90	3,89	3,87	3,85	3,84
ηsh	°	%	147,19	145,69	146,78	143,12	145,88	144,64	150,61	151,86	152,83	153,82	156,25	151,09	148,73	148,69	148,14	148,30	147,30
	A	%	156,18	151,63	153,29	153,96	152,61	154,02	158,78	158,12	160,03	160,11	162,27	157,54	157,00	156,15	155,07	154,33	152,86
	E	%	154,67	151,25	152,53	152,86	152,04	156,84	159,16	160,06	160,74	160,54	162,33	155,93	155,35	154,31	152,99	152,26	151,57
	L	%	151,15	149,30	151,53	149,80	151,00	151,92	154,77	156,17	157,80	156,44	159,42	153,41	152,88	152,46	151,65	151,15	150,49
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (4)																			
SCOP	°	W/W	3,13	3,11	3,12	3,08	3,11	3,05	3,08	3,15	3,26	3,26	3,29	3,18	3,15	3,17	3,17	3,17	3,12
	A	W/W	3,30	3,26	3,28	3,28	3,25	3,24	3,24	3,26	3,36	3,37	3,35	3,30	3,31	3,30	3,29	3,29	3,20
	E	W/W	3,31	3,25	3,27	3,26	3,22	3,28	3,29	3,33	3,42	3,38	3,37	3,30	3,30	3,30	3,28	3,26	3,21
	L	W/W	3,19	3,20	3,23	3,18	3,20	3,19	3,15	3,22	3,31	3,28	3,28	3,20	3,21	3,21	3,20	3,21	3,18
ηsh	°	%	122,27	121,29	121,95	120,26	121,59	119,01	120,35	122,90	127,46	127,29	128,67	124,30	123,00	123,82	123,69	123,98	121,67
	A	%	129,05	127,35	128,02	128,24	126,95	126,45	126,66	127,60	131,34	131,91	130,84	128,88	129,31	129,14	128,59	128,77	125,11
	E	%	129,38	127,17	127,67	127,41	125,90	128,13	128,78	130,27	133,70	132,16	131,79	129,12	129,08	129,12	128,32	127,41	125,24
	L	%	124,44	124,94	126,12	124,20	125,05	124,58	123,06	125,71	129,24	128,27	128,14	124,91	125,29	125,42	125,07	125,42	124,38
SEPR - (EN 14825: 2018) (2)																			
SEPR	°	W/W	5,05	5,15	4,98	5,20	5,21	5,23	5,12	5,31	5,49	5,45	5,37	5,51	5,52	5,52	5,51	5,51	5,51
	A	W/W	5,34	5,76	5,59	5,54	5,85	5,69	5,67	5,79	5,66	5,85	5,87	5,52	5,53	5,53	5,53	5,53	5,52
	E	W/W	5,91	6,15	6,16	5,82	6,03	6,22	6,44	6,48	6,24	6,31	6,25	5,56	5,57	5,57	5,56	5,56	5,56
	L	W/W	5,38	5,72	5,70	5,51	5,69	5,87	5,66	5,85	5,69	5,96	5,88	5,51	5,52	5,52	5,51	5,51	5,51

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: °																			
SEER - 12/7 (EN14825: 2018) (1)																			
SEER	°	W/W	3,82	3,93	3,69	3,95	3,76	3,66	3,63	3,77	3,94	-	-	-	-	-	-	-	-
	A	W/W	3,92	4,26	4,03	4,04	4,31	4,05	4,14	4,16	4,14	-	-	-	-	-	-	-	-
	E	W/W	4,24	4,47	4,46	4,30	4,49	4,23	4,54	4,48	4,30	-	-	-	-	-	-	-	-
	L	W/W	3,89	4,20	4,14	4,07	4,32	4,14	4,09	4,16	4,05	-	-	-	-	-	-	-	-
Seasonal efficiency	°	%	149,69	154,31	144,66	154,85	147,58	143,34	142,18	147,82	154,74	-	-	-	-	-	-	-	-
	A	%	153,94	167,22	158,24	158,70	169,32	159,16	162,42	163,51	162,60	-	-	-	-	-	-	-	-
	E	%	166,62	175,64	175,43	169,12	176,71	166,29	178,62	176,32	169,05	-	-	-	-	-	-	-	-
	L	%	152,78	164,88	162,52	159,98	169,62	162,45	160,44	163,31	158,98	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																			
SEER	°	W/W	4,42	4,52	4,23	4,46	4,31	4,17	4,16	4,25	4,43	4,56	4,55	4,84	4,69	4,70	4,61	4,69	4,57
	A	W/W	4,58	4,90	4,67	4,63	4,86	4,60	4,69	4,68	4,62	4,60	4,67	4,94	4,94	4,95	4,95	4,95	4,95
	E	W/W	4,95	5,13	5,09	4,90	5,03	4,78	5,13	5,04	4,80	4,95	5,00	5,15	5,16	5,15	5,07	5,09	5,03
	L	W/W	4,65	4,84	4,73	4,62	4,81	4,64	4,62	4,66	4,56	4,64	4,67	4,81	4,84	4,80	4,79	4,81	4,79
Seasonal efficiency	°	%	173,96	177,67	166,01	175,30	169,38	163,98	163,39	167,16	174,39	179,50	179,00	190,59	184,41	185,05	181,49	184,72	179,79
	A	%	180,39	193,01	183,69	182,32	191,25	180,93	184,52	184,13	181,81	180,84	183,73	194,77	194,67	194,96	194,98	195,10	194,96
	E	%	194,99	202,37	200,52	193,16	198,13	188,06	202,21	198,68	189,12	194,99	196,98	203,18	203,49	202,94	199,98	200,57	198,18
	L	%	182,93	190,46	186,38	181,81	189,53	182,80	181,68	183,24	179,38	182,56	183,91	189,59	190,78	188,98	188,76	189,33	188,66
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)																			
SCOP	°	W/W	3,70	3,66	3,70	3,62	3,63	3,64	3,78	3,78	3,84	3,84	3,87	3,78	3,72	3,72	3,70	3,71	3,68
	A	W/W	3,86	3,75	3,80	3,83	3,80	3,84	3,96	3,92	4,00	3,97	4,03	3,93	3,92	3,90	3,87	3,86	3,82
	E	W/W	3,82	3,74	3,79	3,80	3,78	3,86	3,96	3,93	3,99	3,96	4,02	3,90	3,88	3,86	3,82	3,81	3,79
	L	W/W	3,75	3,71	3,77	3,73	3,72	3,81	3,90	3,89	3,95	3,88	3,95	3,83	3,82	3,81	3,79	3,78	3,76
ηsh	°	%	144,95	143,51	145,03	141,70	142,39	142,72	148,37	148,22	150,74	150,57	151,99	148,07	145,75	145,71	145,18	145,33	144,35
	A	%	151,26	147,10	148,95	150,09	148,92	150,73	155,38	153,74	157,11	156,00	158,37	154,40	153,86	153,03	151,98	151,25	149,80
	E	%	149,60	146,63	148,74	148,95	148,14	151,30	155,26	154,27	156,73	155,51	157,88	152,82	152,24	151,22	149,93	149,22	148,54
	L	%	146,96	145,41	147,82	146,29	145,93	149,25	152,96	152,42	155,05	152,28	154,95	150,34	149,82	149,41	148,61	148,12	147,48
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (4)																			
SCOP	°	W/W	3,08	3,05	3,08	3,05	3,03	3,00	3,03	3,06	3,21	3,18	3,18	3,12	3,09	3,11	3,11	3,11	3,06
	A	W/W	3,18	3,15	3,17	3,19	3,16	3,16	3,17	3,17	3,29	3,27	3,25	3,23	3,24	3,24	3,23	3,23	3,14
	E	W/W	3,19	3,14	3,17	3,17	3,13	3,15	3,20	3,19	3,32	3,26	3,26	3,24	3,24	3,24	3,22	3,20	3,14
	L	W/W	3,09	3,10	3,14	3,10	3,08	3,12	3,11	3,13	3,23	3,18	3,17	3,14	3,14	3,15	3,14	3,15	3,12
ηsh	°	%	120,10	119,16	120,24	118,86	118,20	117,16	118,26	119,46	125,22	124,15	124,36	121,80	120,53	121,33	121,20	121,49	119,23
	A	%	124,31	122,92	123,79	124,47	123,37	123,50	123,70	123,68	128,55	127,96	127,17	126,29	126,72	126,55	126,01	126,19	122,60
	E	%	124,44	122,64	123,96	123,61	122,14	122,87	125,09	124,79	129,60	127,34	127,57	126,53	126,49	126,53	125,75	124,86	122,72
	L	%	120,43	121,14	122,52	120,80	120,36	121,82	121,38	122,19	126,39	124,30	123,94	122,40	122,78	122,90	122,56	122,90	121,88
SEPR - (EN 14825: 2018) (2)																			
SEPR	°	W/W	4,93	5,03	4,88	5,11	5,01	5,11	5,00	5,11	5,29	5,27	5,11	5,51	5,52	5,52	5,51	5,51	5,51
	A	W/W	5,07	5,49	5,34	5,31	5,63	5,58	5,57	5,62	5,49	5,55	5,58	5,52	5,53	5,53	5,53	5,53	5,52
	E	W/W	5,60	5,85	5,91	5,58	5,78	5,87	6,19	6,11	5,89	6,09	6,03	5,56	5,57	5,57	5,56	5,56	5,56
	L	W/W	5,14	5,48	5,47	5,31	5,48	5,61	5,55	5,63	5,44	5,65	5,56	5,51	5,52	5,52	5,51	5,51	5,51

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Electric data																			
Maximum current (FLA)	°	A	162,2	180,5	198,8	234,5	262,4	290,3	318,1	371,7	425,3	453,2	481,1	542,5	588,3	641,9	669,8	697,7	725,5
	A,L	A	162,2	188,3	206,6	234,5	270,2	298,1	325,9	379,5	425,3	461,0	488,9	542,5	596,1	641,9	669,8	705,5	733,3
	E	A	170,0	196,1	214,4	242,3	278,0	305,9	341,5	395,1	440,9	476,6	504,5	558,1	611,7	657,5	685,4	721,1	748,9
Peak current (LRA)	°	A	365,6	421,7	440,0	696,8	724,7	752,6	780,4	834,1	887,7	915,5	943,4	1004,8	1050,6	1104,2	1132,1	1160,0	1187,8
	A,L	A	365,6	429,5	447,8	696,8	732,5	760,4	788,2	841,9	887,7	923,3	951,2	1004,8	1058,4	1104,2	1132,1	1167,8	1195,6
	E	A	373,4	437,3	455,6	704,6	740,3	768,2	803,8	857,5	903,3	938,9	966,8	1020,4	1074,0	1119,8	1147,7	1183,4	1211,2

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Compressors

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Compressor																			
Type	°,A,E,L	type	Scroll																
Compressor regulation	°,A,E,L	Type	On-Off																
Number	°,A,E,L	no.	4	4	4	4	4	4	4	5	6	6	6	7	8	9	9	9	9
Circuits	°,A,E,L	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
Refrigerant	°,A,E,L	type	R32																
Refrigerant load circuit 1 (1)	°	kg	16,5	16,5	22,5	23,3	23,3	22,5	22,5	30,4	30,8	36,0	36,0	34,4	35,1	35,4	35,4	38,9	38,9
	A,L	kg	13,0	22,0	20,0	20,0	28,0	28,0	29,3	33,0	43,9	40,0	41,0	34,4	39,6	44,1	44,1	44,1	44,6
	E	kg	21,8	28,5	29,3	27,5	29,3	34,9	42,0	51,0	53,6	56,3	51,8	48,9	48,9	50,6	50,6	52,4	53,4
Refrigerant load circuit 2 (1)	°	kg	16,5	16,5	22,5	23,3	23,3	22,5	22,5	30,4	30,8	36,0	36,0	34,4	35,1	35,4	35,4	38,9	38,9
	A,L	kg	13,0	22,0	22,0	20,0	28,0	28,0	29,3	33,0	43,9	40,0	41,0	34,4	39,6	44,1	44,1	44,1	44,6
	E	kg	21,8	28,5	29,3	27,5	29,3	34,9	42,0	51,0	53,6	56,3	51,8	48,9	48,9	50,6	50,6	52,4	53,4
Refrigerant load circuit 3 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	34,4	35,1	35,4	35,4	38,9	38,9
	A,L	kg	-	-	-	-	-	-	-	-	-	-	-	34,4	39,6	44,1	44,1	44,1	44,6
	E	kg	-	-	-	-	-	-	-	-	-	-	-	48,9	48,9	50,6	50,6	52,4	53,4
Potential global heating	°,A,E,L	GWP	675kgCO_2eq																

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

System side heat exchanger

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
System side heat exchanger																			
Type	°,A,E,L	type	Brazed plate																
Number	°,A,E,L	no.	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Hydraulic connections																			
Connections (in/out)	°,A,E,L	Type	Grooved joints																
Sizes (in/out)	°	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″
	A,L	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″	5″
	E	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″	5″

Fans

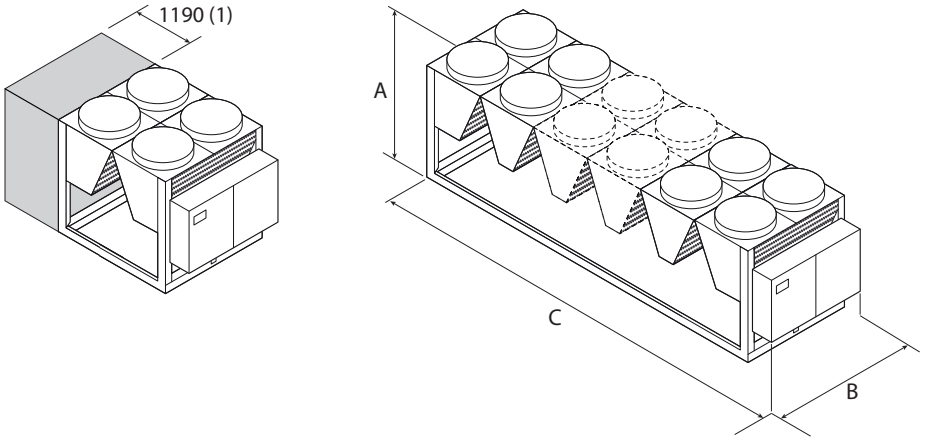
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: °																			
Fan																			
Type	°,A,E,L	type	Axial																
Number	°	no.	4	4	4	6	6	6	6	8	10	10	10	14	14	16	16	16	16
	A,L	no.	4	6	6	6	8	8	8	10	10	12	12	14	16	16	16	18	18
	E	no.	6	8	8	8	10	10	12	14	14	16	16	18	20	20	20	22	22
Fan motor	°,A	type	Asynchronous																
	E,L	type	Asynchronous with phase cut																
Air flow rate	°	m^3/h	82398	82398	82424	123596	123596	123561	123561	164866	205969	205969	205969	288399	288399	329594	329594	329598	329598
	A	m^3/h	82403	123609	123609	123605	164779	164779	164779	205996	205998	247152	247152	288414	329556	329556	329556	370819	370819
	E	m^3/h	102378	136491	136491	136491	170613	170613	204757	238871	238871	272982	272982	315634	349835	349835	349835	383943	383943
	L	m^3/h	68237	102348	102348	102356	136528	136528	136528	170617	170614	204825	204825	238801	273004	273004	273004	307010	307010

Sound data

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Sound data calculated in cooling mode (1)																			
Sound power level	°	dB(A)	90,5	90,5	90,5	92,3	92,4	92,5	92,6	93,8	94,7	94,7	94,8	96,5	96,6	97,1	97,1	97,2	97,3
	A	dB(A)	90,5	92,2	92,2	92,3	93,6	93,6	93,7	94,6	94,7	95,4	95,5	96,5	97,1	97,1	97,1	97,6	97,7
	E	dB(A)	85,2	86,2	86,2	87,0	88,3	88,8	89,7	90,1	90,2	90,9	91,2	92,2	92,5	92,6	92,8	93,3	93,5
	L	dB(A)	83,5	84,7	84,8	85,8	87,2	87,8	88,3	88,9	89,0	89,8	90,1	91,0	91,3	91,4	91,7	92,2	92,4
Sound pressure level (10 m)	°	dB(A)	58,4	58,4	58,4	60,0	60,1	60,2	60,4	61,3	62,1	62,2	62,2	63,7	63,7	64,1	64,2	64,3	64,3
	A	dB(A)	58,4	59,9	59,9	60,0	61,2	61,2	61,3	62,1	62,1	62,8	62,8	63,7	64,1	64,1	64,2	64,6	64,6
	E	dB(A)	52,9	53,8	53,8	54,6	55,7	56,3	57,0	57,3	57,4	57,9	58,2	59,1	59,3	59,4	59,7	60,0	60,2
	L	dB(A)	51,4	52,5	52,5	53,5	54,8	55,4	55,9	56,4	56,5	57,1	57,4	58,2	58,4	58,5	58,8	59,1	59,4

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
NRG 0800H°, 0900H°, 1000H°
NRG 0800HL
NRG 0800HA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ																			
Dimensions and weights																			
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	2780	3970	3970	3970	3970	5160	6350	6350	6350	8730	8730	9920	9920	9920	9920
	A,L	mm	2780	3970	3970	3970	5160	5160	5160	6350	6350	7540	7540	8730	9920	9920	9920	11110	11110
	E	mm	3970	5160	5160	5160	6350	6350	7540	8730	8730	9920	9920	11110	12300	12300	12300	13490	13490

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ																			
Dimensions and weights																			
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	3970	3970	3970	3970	3970	3970	3970	5160	6350	6350	6350	8730	8730	9920	9920	9920	9920
	A,L	mm	3970	3970	3970	3970	5160	5160	5160	6350	6350	7540	7540	8730	9920	9920	9920	11110	11110
	E	mm	3970	5160	5160	5160	6350	6350	7540	8730	8730	9920	9920	11110	12300	12300	12300	13490	13490

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Weights																			
Empty weight	°	kg	2375	2405	2405	3065	3215	3365	3635	4480	5260	5505	5620	7035	7310	8070	8185	8410	8520
	A,L	kg	2375	2875	2885	3050	3805	3965	4225	4970	5305	5930	5965	7035	7800	8105	8220	8840	8930
	E	kg	2860	3485	3495	3685	4460	4460	5050	5875	6180	6880	7010	7980	8810	9090	9200	9845	9970
Weight functioning	°	kg	2397	2427	2427	3090	3244	3396	3688	4533	5321	5577	5697	7114	7392	8160	8278	8514	8627
	A,L	kg	2397	2897	2910	3077	3838	3999	4278	5031	5377	6005	6048	7117	7890	8206	8324	8947	9043
	E	kg	2882	3510	3522	3714	4511	4513	5103	5947	6255	6961	7101	8062	8911	9194	9307	9958	10091

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www.aermec.com

NRB 0800-2406

Air-water chiller

Cooling capacity 216,9 ÷ 716,9 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **HP floating: ESEER +7% with inverter fans**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
They are outdoor units with axial fan scroll compressors, microchannel batteries and plate exchangers.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 51°C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.
It is standard in all sizes from 1805 to 2406.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO[5]

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Floating HP control:** available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. **ESEER up to +7% with inverter fans.**
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

CONFIGURATOR

Configuration options

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	C	Motocondensing unit (3)
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (4)
	T	With total recovery (5)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper-copper
	S	Tinned copper
	V	Copper-painted alumimium
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	M	Oversized
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (6)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump (7)
	DB	Pump B + stand-by pump (7)
	DC	Pump C + stand-by pump (7)
	DD	Pump D + stand-by pump (7)
	DE	Pump E + stand-by pump (7)
	DF	Pump F + stand-by pump (7)
	DG	Pump G + stand-by pump (7)
	DH	Pump H + stand-by pump (7)
	DI	Pump I + stand-by pump (7)
	DJ	Pump J + stand-by pump (8)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
	AG	Storage tank and pump G
	AH	Storage tank and pump H
	AI	Storage tank and pump I
	AJ	Storage tank and pump J (6)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump (7)
	BB	Storage tank with pump B + stand-by pump (7)
	BC	Storage tank with pump C + stand-by pump (7)
	BD	Storage tank with pump D + stand-by pump (7)
	BE	Storage tank with pump E + stand-by pump (7)
	BF	Storage tank with pump F + stand-by pump (7)
	BG	Storage tank with pump G + stand-by pump (7)
	BH	Storage tank with pump H + stand-by pump (7)
	BI	Storage tank with pump I + stand-by pump (7)
	BJ	Storage tank with pump J + stand-by pump (8)

(1) Water produced from 4 °C ÷ 18 °C
(2) Processed water from 4°C to -8°C for the ° - L versions, and from 4°C to -10°C for A - E - U - N versions
(3) Condensing units "C" are not compatible with the Y/X/Z/T/D option
(4) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(5) None of the hydronic kits (from PA to BJ) are compatible with the following sizes and with versions with heat recovery T: 0800 - 0900 - 1000 - 1100 version °; 0800 - 0900 version A; 0800 - 0900 version L. None of the hydronic kits with pump(s) and storage tank (from AA to BJ) are compatible with all the sizes and with versions with heat recovery T
(6) For all configurations including pump J please contact the factory.
(7) None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805 versions °- L-A, 2006-2206 version °.
(8) For all combinations with pump J, please contact our head office. None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805 versions °-L-A, 2006-2206 version °.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.
XLA: The Kit, which consists of resistances for the electric power board and "J" inverter fans, allows the outdoor air temperature operating range to be extended from –10°C to –20°C outdoor air.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400
Fans: M						
°	DCPX130	DCPX130	DCPX130	DCPX130	DCPX131	DCPX131
A	DCPX130	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX131	DCPX131	DCPX131	DCPX132	DCPX132	DCPX132

Ver	1600	1805	2006	2206	2406
Fans: M					
°	DCPX131	DCPX155	DCPX155	DCPX155	DCPX156
A	DCPX132	DCPX155	DCPX156	DCPX156	DCPX134
E, L, N	As standard	As standard	As standard	As standard	As standard
U	DCPX133	DCPX134	DCPX134	DCPX135	DCPX135

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	AVX805	AVX805	AVX805	AVX805	AVX808	AVX808	AVX808	AVX810	AVX810	AVX810	AVX809
A, L	AVX805	AVX805	AVX806	AVX808	AVX808	AVX808	AVX810	AVX810	AVX809	AVX809	AVX863
E, U	AVX806	AVX806	AVX808	AVX807	AVX807	AVX810	AVX809	AVX863	AVX863	AVX813	AVX813
N	AVX807	AVX807	AVX807	AVX809	AVX809	AVX809	AVX863	AVX812	AVX812	AVX814	AVX814
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, BA, BB, BC, BD, BE, BF, BG, BH											
°	AVX844	AVX844	AVX844	AVX844	AVX844	AVX848	AVX848	AVX845	AVX845	AVX845	AVX847
A, L	AVX844	AVX844	AVX844	AVX844	AVX844	AVX848	AVX845	AVX845	AVX847	AVX847	AVX849
E, U	AVX844	AVX844	AVX844	AVX845	AVX845	AVX845	AVX847	AVX849	AVX849	AVX851	AVX851
N	AVX845	AVX845	AVX845	AVX847	AVX847	AVX847	AVX849	AVX850	AVX851	AVX852	AVX852
Integrated hydronic kit: BI, BJ											
°	AVX844	AVX844	AVX844	AVX844	AVX846	AVX848	AVX848	AVX845	AVX845	AVX845	AVX847
A, L	AVX844	AVX844	AVX846	AVX846	AVX846	AVX848	AVX845	AVX845	AVX847	AVX847	AVX849
E, U	AVX844	AVX844	AVX846	AVX845	AVX845	AVX845	AVX847	AVX849	AVX849	AVX851	AVX851
N	AVX845	AVX845	AVX845	AVX847	AVX847	AVX847	AVX849	AVX850	AVX851	AVX852	AVX852
Integrated hydronic kit: DA, DB, DC, PA, PB, PC, PD, PE, PF, PG, PH											
°	AVX822	AVX822	AVX822	AVX822	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX828

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A, L	AVX822	AVX822	AVX825	AVX825	AVX825	AVX825	AVX826	AVX826	AVX828	AVX828	AVX830
E, U	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX828	AVX830	AVX830	AVX832	AVX832
N	AVX826	AVX826	AVX826	AVX828	AVX828	AVX828	AVX830	AVX831	AVX831	AVX833	AVX833
Integrated hydronic kit: DD, DE, DF, DG, DH, PI, PJ											
°	AVX823	AVX823	AVX823	AVX823	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX829
A, L	AVX823	AVX823	AVX825	AVX825	AVX825	AVX825	AVX826	AVX826	AVX829	AVX829	AVX830
E, U	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX829	AVX830	AVX830	AVX832	AVX832
N	AVX826	AVX826	AVX826	AVX829	AVX829	AVX829	AVX830	AVX831	AVX831	AVX833	AVX833
Integrated hydronic kit: DI, DJ											
°	AVX864	AVX864	AVX829	AVX864	AVX825	AVX825	AVX827	AVX827	AVX827	AVX827	AVX829
A, L	AVX864	AVX864	AVX825	AVX825	AVX825	AVX825	AVX827	AVX827	AVX829	AVX829	AVX830
E, U	AVX825	AVX825	AVX825	AVX827	AVX827	AVX827	AVX829	AVX830	AVX830	AVX832	AVX832
N	AVX827	AVX827	AVX827	AVX829	AVX829	AVX829	AVX830	AVX831	AVX831	AVX833	AVX833

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°, A, E, L, N, U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°, A, E, L, N, U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
°, A, L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E, U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A, L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2416
E, N, U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
°	GP2VN	GP2VN	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP4G	GP4G	GP4G	GP5G
A, L	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4G	GP5G	GP5G	GP6V
E, U	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

■ *GP2VN becomes GP2VNA if configured with a type A or B hydronic kit*

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
°	T6NRB13	T6NRB13	T6NRB13	T6NRB13	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15
A, L	T6NRB13	T6NRB13	T6NRB14	T6NRB14	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB16
E, U	T6NRB14	T6NRB14	T6NRB14	T6NRB14	T6NRB15	T6NRB15	T6NRB15	T6NRB17	T6NRB16	T6NRB19	T6NRB19
N	T6NRB14	T6NRB14	T6NRB14	T6NRB14	T6NRB15	T6NRB15	T6NRB18	T6NRB19	T6NRB19	T6NRB20	T6NRB20

A grey background indicates the accessory must be assembled in the factory

Kit for low temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
°	-	-	-	-	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)
A, L	-	-	-	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)
E, U	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)
N	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)

(1) With the accessory XLA do not use the DCPX.
The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

NRB - °

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	221,5	244,5	270,3	299,7	353,1	404,9	439,0	511,2	560,9	598,2	675,8
Input power	kW	73,3	83,1	94,1	110,3	117,5	135,4	155,1	175,7	194,0	216,6	236,5
Cooling total input current	A	128,3	143,1	160,0	185,5	201,6	229,9	260,8	299,7	329,8	366,5	404,6
EER	W/W	3,02	2,94	2,87	2,72	3,00	2,99	2,83	2,91	2,89	2,76	2,86
Water flow rate system side	l/h	38117	42077	46498	51565	60733	69640	75512	87913	96469	102883	116222
Pressure drop system side	kPa	46	55	38	45	44	39	46	40	47	53	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - L

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	216,9	237,7	272,7	307,7	343,9	391,0	438,4	498,2	555,4	608,2	666,2
Input power	kW	73,0	85,9	92,0	107,4	122,7	139,0	151,9	173,3	191,6	213,6	233,8
Cooling total input current	A	122,8	142,3	154,5	179,0	203,4	231,8	250,8	289,7	318,6	359,2	390,2
EER	W/W	2,97	2,77	2,97	2,87	2,80	2,81	2,89	2,87	2,90	2,85	2,85
Water flow rate system side	l/h	37323	40891	46905	52926	59137	67243	75381	85669	95498	104586	114564
Pressure drop system side	kPa	25	20	27	24	29	23	30	28	37	36	44

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	224,1	252,2	283,7	326,1	361,2	411,7	462,2	519,2	576,0	633,3	697,6
Input power	kW	70,6	80,9	90,2	104,7	115,3	131,8	147,6	166,3	183,5	203,1	223,3
Cooling total input current	A	123,9	139,9	158,8	181,8	198,2	224,1	252,4	283,8	316,2	348,7	386,3
EER	W/W	3,17	3,12	3,15	3,12	3,13	3,12	3,13	3,12	3,14	3,12	3,12
Water flow rate system side	l/h	38561	43394	48802	56076	62118	70789	79487	89271	99048	108894	119965
Pressure drop system side	kPa	27	22	30	27	32	25	34	30	39	39	48

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	219,2	248,3	275,0	321,4	358,7	403,2	455,0	514,5	569,0	637,2	688,3
Input power	kW	69,6	79,4	88,5	102,2	114,9	129,8	144,5	164,7	183,0	203,4	221,4
Cooling total input current	A	119,5	134,7	148,8	172,1	192,6	215,7	240,1	275,1	306,1	342,6	372,8
EER	W/W	3,15	3,13	3,11	3,15	3,12	3,11	3,15	3,12	3,11	3,13	3,11
Water flow rate system side	l/h	37710	42726	47303	55271	61679	69338	78240	88465	97841	109550	118323
Pressure drop system side	kPa	19	23	20	27	21	27	26	33	33	22	25

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	227,6	257,6	286,5	329,6	369,8	414,6	466,9	529,2	594,0	655,1	716,9
Input power	kW	68,8	77,7	86,8	99,5	111,7	126,1	140,9	159,5	179,0	197,8	215,3
Cooling total input current	A	124,3	138,5	152,9	176,0	195,6	218,0	244,0	278,3	311,7	347,7	377,4
EER	W/W	3,30	3,31	3,30	3,31	3,31	3,28	3,31	3,32	3,32	3,31	3,33
Water flow rate system side	l/h	39151	44308	49294	56689	63596	71302	80286	91003	102137	112618	123250
Pressure drop system side	kPa	20	25	21	29	23	28	27	35	36	23	27

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	227,7	260,4	284,7	327,7	367,7	412,3	466,1	521,6	579,1	645,7	702,6
Input power	kW	68,5	78,9	86,4	98,5	111,9	125,4	140,4	157,8	176,0	194,6	212,9
Cooling total input current	A	118,2	135,1	146,9	166,9	188,6	209,4	234,0	264,2	295,4	328,9	360,0
EER	W/W	3,32	3,30	3,30	3,33	3,29	3,29	3,32	3,31	3,29	3,32	3,30
Water flow rate system side	l/h	39166	44792	48972	56365	63234	70905	80151	89691	99569	111009	120789
Pressure drop system side	kPa	20	25	21	28	23	28	27	34	34	23	26

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
SEER - 12/7 (EN14825: 2018) (1)													
SEER	°	W/W	4,44	4,33	4,27	4,25	4,39	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,65	4,55	4,66	4,70	4,69	4,73	4,76	4,64	4,64	4,62	4,61
	E	W/W	4,75	4,67	4,63	4,81	4,82	4,76	4,88	4,73	4,67	4,70	4,74
	L	W/W	4,56	4,42	4,50	4,51	4,58	4,59	4,67	4,56	4,56	4,58	4,57
	N	W/W	4,85	4,79	4,83	4,96	4,93	4,97	5,03	4,93	4,82	4,89	4,83
	U	W/W	4,76	4,75	4,71	4,89	4,85	4,86	4,91	4,84	4,77	4,82	4,78
Seasonal efficiency	°	%	174,60	170,10	167,60	167,10	172,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	182,80	179,10	183,40	185,00	184,70	186,20	187,30	182,70	182,40	181,70	181,50
	E	%	187,00	183,70	182,00	189,30	189,60	187,50	192,30	186,20	183,90	184,80	186,40
	L	%	179,20	173,80	177,00	177,50	180,10	180,40	183,90	179,50	179,40	180,10	179,60
	N	%	191,10	188,40	190,30	195,40	194,20	195,90	198,10	194,10	189,90	192,40	190,00
	U	%	187,40	187,10	185,20	192,50	191,00	191,30	193,30	190,70	187,70	189,60	188,10
SEER - 23/18 (EN14825: 2018) (3)													
SEER	°	W/W	5,28	5,16	5,07	4,96	5,40	5,44	5,18	5,07	5,13	4,77	5,07
	A	W/W	5,50	5,35	5,50	5,51	5,55	5,55	5,63	5,34	5,44	5,30	5,42
	E	W/W	5,62	5,53	5,46	5,70	5,69	5,63	5,77	5,50	5,52	5,48	5,59
	L	W/W	5,34	5,14	5,35	5,33	5,37	5,34	5,47	5,26	5,32	5,20	5,26
	N	W/W	5,92	5,71	5,76	5,91	5,88	5,91	5,99	5,75	5,74	5,71	5,75
	U	W/W	5,65	5,67	5,59	5,82	5,76	5,80	5,83	5,67	5,69	5,61	5,68
Seasonal efficiency	°	%	208,10	203,40	199,80	195,40	212,90	214,50	204,10	199,90	202,10	187,80	199,60
	A	%	217,00	210,90	217,00	217,50	219,10	219,10	222,10	210,50	214,60	209,10	213,60
	E	%	221,90	218,30	215,30	224,90	224,50	222,20	227,70	216,80	217,70	216,00	220,60
	L	%	210,40	202,70	211,00	210,20	211,60	210,40	215,80	207,40	209,70	205,10	207,50
	N	%	229,90	225,30	227,50	233,50	232,10	233,40	236,40	226,80	226,40	225,50	227,10
	U	%	222,80	223,70	220,70	229,90	227,50	228,80	230,20	223,80	224,50	221,50	224,00
SEPR - (EN 14825: 2018) (3)													
SEPR	°	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	A	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,67	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
SEER - 12/7 (EN14825: 2018) (1)													
SEER	°	W/W	4,23	4,13	4,10	4,11	4,19	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,41	4,34	4,39	4,45	4,48	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E	W/W	4,47	4,40	4,40	4,54	4,54	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	L	W/W	4,31	4,17	4,25	4,27	4,31	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	W/W	4,61	4,56	4,58	4,72	4,68	4,72	4,78	4,66	4,58	4,61	4,62
	U	W/W	4,51	4,51	4,51	4,63	4,64	4,65	4,70	4,61	4,56	4,57	4,59
Seasonal efficiency	°	%	166,00	162,30	161,00	161,20	164,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	173,50	170,60	172,40	174,90	176,00	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E	%	175,60	173,10	173,10	178,70	178,50	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	L	%	169,40	163,60	166,80	167,60	169,20	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	%	181,30	179,30	180,00	185,70	184,10	185,90	188,20	183,40	180,30	181,50	181,60
	U	%	177,20	177,40	177,20	182,10	182,50	183,10	184,80	181,40	179,20	179,90	180,50
SEER - 23/18 (EN14825: 2018) (3)													
SEER	°	W/W	5,08	4,98	4,92	4,82	5,20	5,26	5,03	4,91	4,97	4,63	4,91
	A	W/W	5,29	5,15	5,25	5,28	5,35	5,37	5,42	5,15	5,22	5,09	5,22
	E	W/W	5,36	5,24	5,28	5,40	5,43	5,37	5,54	5,21	5,22	5,21	5,30
	L	W/W	5,06	4,87	5,07	5,08	5,05	5,10	5,19	5,02	5,02	4,92	4,99
	N	W/W	5,57	5,47	5,50	5,66	5,61	5,65	5,73	5,48	5,48	5,44	5,54
	U	W/W	5,41	5,44	5,41	5,58	5,56	5,60	5,63	5,46	5,49	5,39	5,50
Seasonal efficiency	°	%	200,10	196,00	193,60	189,90	205,10	207,30	198,30	193,30	195,70	182,00	193,50
	A	%	208,40	203,00	206,80	208,00	211,10	211,60	213,60	203,10	205,70	200,60	205,60
	E	%	211,40	206,40	208,30	213,00	214,00	211,80	218,50	205,50	205,70	205,30	208,90
	L	%	199,40	191,90	199,70	200,10	199,10	200,80	204,40	197,70	197,60	193,90	196,40
	N	%	219,70	215,80	216,80	223,40	221,50	223,00	226,20	216,00	216,30	214,60	218,40
	U	%	213,40	214,40	213,30	220,00	219,50	221,00	222,20	215,30	216,40	212,50	216,90

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
SEPR - (EN 14825: 2018) (3)													
SEPR	°	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	A	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,63	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	°	A	164,3	180,7	197,0	226,4	262,1	291,1	320,1	371,3	416,0	445,0	480,4
	A,L	A	177,1	193,4	222,5	251,8	281,2	310,2	351,9	396,7	454,2	483,2	530,8
	E,U	A	189,8	206,1	222,5	264,5	293,9	322,9	364,6	428,0	472,8	514,5	543,5
	N	A	202,5	218,8	235,2	277,3	306,6	335,6	383,2	440,7	485,5	527,2	556,2
Peak current (LRA)	°	A	352,9	408,1	424,4	477,1	512,8	625,3	654,3	705,5	750,3	779,3	814,6
	A,L	A	365,6	420,8	449,9	502,5	531,9	644,4	686,1	730,9	788,4	817,4	865,0
	E,U	A	378,3	433,5	449,9	515,3	544,6	657,1	698,8	762,2	807,0	848,7	877,7
	N	A	391,1	446,2	462,6	528,0	557,3	669,8	717,4	774,9	819,7	861,4	890,4

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	°,A,E,L,N,U	type	Scroll										
Compressor regulation	°,A,E,L,N,U	Type	Asynchronous										
Number	°,A,E,L,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type	R410A										
Refrigerant load circuit 1 (1)	°	kg	14,0	14,5	15,0	16,0	20,5	21,0	21,0	26,0	26,0	26,0	31,0
	A,L	kg	15,0	16,0	20,0	22,0	21,0	22,5	23,5	25,0	30,0	31,0	32,5
	E,U	kg	20,5	20,0	21,5	26,0	25,0	26,0	30,0	32,0	36,0	44,5	56,0
	N	kg	25,0	26,5	26,5	29,0	28,0	35,0	42,0	38,0	43,0	62,0	42,0
Refrigerant load circuit 2 (1)	°	kg	14,0	14,5	15,0	16,0	20,5	21,0	21,0	29,0	29,0	29,0	34,0
	A,L	kg	15,0	16,0	20,0	22,0	21,0	22,5	25,5	30,0	34,0	34,0	37,5
	E,U	kg	20,5	20,0	21,5	27,0	28,0	27,0	32,0	37,0	39,0	45,5	56,0
	N	kg	25,0	26,5	26,5	30,0	31,0	35,0	42,0	42,0	47,0	62,0	49,0
Potential global heating	°,A,E,L,N,U	GWP	2088kgCO_2eq										
System side heat exchanger													
Type	°,A,E,L,N,U	type	Brazed plate										
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections													
Connections (in/out)	°,A,E,L,N,U	Type	Grooved joints										
Hydraulic connections without hydronic kit													
Sizes (in/out)	°,A,E,L,N,U	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″
Hydraulic connections with hydronic kit													
Sizes (in/out)	°,A,E,L,N,U	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

Fans

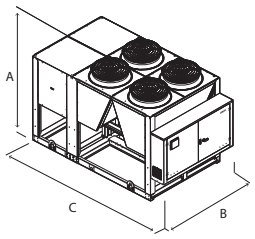
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
Fan													
Type	°,A,E,L,N,U	type	Axial										
Fan motor	°,A,U	type	Asynchronous										
	E,L,N	type	Asynchronous with phase cut										
Number	°	no.	4	4	4	4	6	6	6	8	8	8	10
	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
With static pressure													
Air flow rate	°	m^3/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m^3/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
High static pressure	°,A,U	Pa	50	50	50	50	50	50	50	50	50	50	50
	E,L,N	Pa	120	120	120	120	120	120	120	120	120	120	120
Without Static pressure													
Air flow rate	°	m^3/h	72000	72000	72000	72000	108000	108000	108000	144000	144000	144000	180000
	A	m^3/h	72000	72000	108000	108000	108000	108000	144000	144000	180000	180000	216000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	108000	108000	108000	144000	144000	144000	180000	216000	216000	252000	252000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0	0	0
With static pressure													
Sound power level	°	dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	90,0	90,0	90,0	91,5	91,5	91,5	92,7	94,2	94,7	96,0	96,5
Without Static pressure													
Sound power level	°	dB(A)	89,7	89,7	89,7	89,7	91,7	91,7	91,7	93,4	93,2	93,5	94,9
	A	dB(A)	89,7	89,7	91,7	91,7	91,7	91,7	93,1	93,4	94,3	94,6	95,8
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	92,3	92,3	92,3	93,6	93,6	93,6	94,6	95,7	95,5	96,5	96,8

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
Fan													
Type	°,A,E,L,N,U	type	Axial										
Fan motor	°,A,E,L,N,U	type	Inverter										
Number	°	no.	4	4	4	4	6	6	6	8	8	8	10
	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
Inverter fan													
Air flow rate	°	m^3/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m^3/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
High static pressure	°	Pa	120	120	120	120	120	120	120	75	75	75	75
	A,U	Pa	120	120	120	120	120	120	120	120	120	120	120
	E,L,N	Pa	200	200	200	200	200	200	200	200	200	200	200
Sound data calculated in cooling mode (1)													
Sound power level	°	dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	90,0	90,0	90,0	91,5	91,5	91,5	92,7	94,2	94,7	96,0	96,5

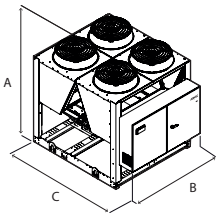
(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS

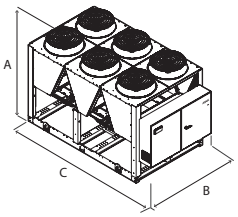
NRB 0800 - 1100 ° (1)
NRB 0800 - 0900 L/A (1)



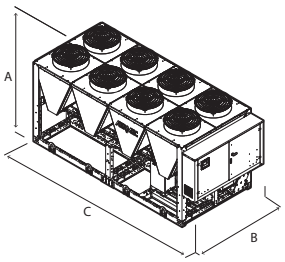
NRB 0800 - 1100 °
NRB 0800 - 0900 L/A



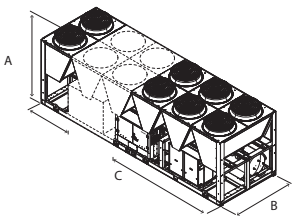
NRB 1200 - 1600 °
NRB 1000 - 1400 L/A
NRB 0800 -1000 E/U



NRB 1805 - 2406 °
NRB 1805 - 2206 L/A



NRB 2406 L/A
NRB 1100 - 2406 E/U
NRB 0800 - 2406 N



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
0800°, 0900°, 1000°, 1100°
0800L, 0900L
0800A, 0900A

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights													
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	2780	2780	3970	3970	3970	5160	5160	5160	6350
	A,L	mm	2780	2780	3970	3970	3970	3970	4760	5160	6350	6350	7140
	E,U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520

■ *The units 0800°, 0900°, 1000°, 1100°; 0800L, 0900L; and 0800A, 0900A with the "storage tank" option, are 3970mm long.*

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
Empty weight	°	kg	2240	2280	2350	2390	2880	2930	2960	3660	3830	3870	4360
	A,L	kg	2260	2320	2800	2870	2910	2970	3490	3710	4280	4360	4780
	E,U	kg	2720	2760	2840	3370	3440	3460	3940	4490	4700	5350	5390
	N	kg	3220	3270	3340	3770	3840	3870	4290	4940	5160	5750	5790

■ *The weights are for standard units with plate heat exchangers and no hydronic kit.*

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NRB 0800-2406 Q

Air-water chiller with shell and tube heat exchanger

Cooling capacity 216,9 ÷ 716,9 kW

- **Microchannel coil**
- **Shell and tube heat exchanger**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **HP floating: ESEER +7% with inverter fans**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
They are outdoor units with axial fan scroll compressors, microchannel coils and Shell and tube exchangers.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50°C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.
It is standard in all sizes from 1805 to 2406.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO[5]

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Floating HP control:** available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. **ESEER up to +7% with inverter fans.**
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	Q	Cooling only with shell and tube heat exchanger
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	M	Oversized

Field		Description
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit (5)
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump

(1) Water produced from 4 °C ÷ 18 °C
(2) Processed water from 4°C to -8°C for the ° - L versions, and from 4°C to -10°C for A - E - U - N versions
(3) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(4) For compatibility with total recovery see table below.
(5) For compatibility with the hydronic kit, see the table below.

Compatible with total recovery

Version		800	900	1000	1100	1200	1400	1600	1805	2006	2206	2406
standard	°	-	-	-	-	-	-	-	-	-	-	•
Standard silenced	L	-	-	-	-	-	-	-	-	•	•	•
High efficiency	A	-	-	-	-	-	-	-	-	•	•	•
Silenced high efficiency	E	-	-	-	-	-	-	•	•	•	•	•
Very high efficiency	U	-	-	-	-	-	-	•	•	•	•	•
Silenced very high efficiency	N	-	-	-	•	•	•	•	•	•	•	•

Compatibility of models with hydronic units available with a configurator

Version		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
standard	°	-	-	-	-	•	-	-	•	•	•	•
Standard silenced	L	-	-	•	-	-	-	•	•	•	•	•
High efficiency	A	-	-	•	-	-	-	•	•	•	•	•
Silenced high efficiency	E	•	•	-	•	•	•	•	•	•	•	•
Very high efficiency	U	•	•	-	•	•	•	•	•	•	•	•
Silenced very high efficiency	N	•	•	•	•	•	•	•	•	•	•	•

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

AVX: Spring anti-vibration supports.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400
Fans: M						
°	DCPX130	DCPX130	DCPX130	DCPX130	DCPX131	DCPX131
A	DCPX130	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX131	DCPX131	DCPX131	DCPX132	DCPX132	DCPX132

Ver	1600	1805	2006	2206	2406
Fans: M					
°	DCPX131	DCPX155	DCPX155	DCPX155	DCPX156
A	DCPX132	DCPX155	DCPX156	DCPX156	DCPX134
E, L, N	As standard	As standard	As standard	As standard	As standard
U	DCPX133	DCPX134	DCPX134	DCPX135	DCPX135

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	AVX1107	AVX1107	AVX1107	AVX1107	AVX1108	AVX1108	AVX1108	AVX1109	AVX1109	AVX1109	AVX1110
A, L	AVX1107	AVX1107	AVX1108	AVX1108	AVX1108	AVX1108	AVX1109	AVX1109	AVX1110	AVX1110	AVX1111
E, U	AVX1108	AVX1108	AVX1108	AVX1109	AVX1109	AVX1109	AVX1110	AVX1111	AVX1111	AVX1105	AVX1105
N	AVX1109	AVX1109	AVX1109	AVX1110	AVX1110	AVX1110	AVX1111	AVX1105	AVX1105	AVX1102	AVX1102
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
°	-	-	-	-	AVX1108	-	-	AVX1109	AVX1109	AVX1109	AVX1110
A, L	-	-	AVX1108	-	-	-	AVX1109	AVX1109	AVX1110	AVX1110	AVX1111
E, U	AVX1108	AVX1108	-	AVX1109	AVX1109	AVX1109	AVX1110	AVX1111	AVX1111	AVX1105	AVX1105
N	AVX1109	AVX1109	AVX1109	AVX1110	AVX1110	AVX1110	AVX1111	AVX1105	AVX1105	AVX1102	AVX1102

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°, A, E, L, N, U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°, A, E, L, N, U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
°, A, L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E, U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A, L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2416
E, N, U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	GP2VN	GP2VN	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP4VN	GP5VN
A, L	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN
E, U	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP4VN
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
°	-	-	-	-	GP3VN	-	-	GP4VN	GP4VN	GP4VN	GP5VN
A, L	-	-	GP3VN	-	-	-	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN
E, U	GP3VN	GP3VN	-	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP4VN

A grey background indicates the accessory must be assembled in the factory

Kit for low temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
°	-	-	-	-	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)
A, L	-	-	-	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)
E, U	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)
N	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)

(1) With the accessory XLA do not use the DCPX.
The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

NRB - °

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	221,5	244,5	270,3	299,7	353,1	404,9	439,0	511,2	560,9	598,2	675,8
Input power	kW	73,3	83,1	94,1	110,3	117,5	135,4	155,1	175,7	194,0	216,6	236,5
Cooling total input current	A	128,3	143,1	160,0	185,5	201,6	229,9	260,8	299,7	329,8	366,5	404,6
EER	W/W	3,02	2,94	2,87	2,72	3,00	2,99	2,83	2,91	2,89	2,76	2,86
Water flow rate system side	l/h	38117	42077	46498	51565	60733	69640	75512	87913	96469	102883	116222
Pressure drop system side	kPa	46	55	38	45	44	39	46	40	47	53	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - L

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	216,9	237,7	272,7	307,7	343,9	391,0	438,4	498,2	555,4	608,2	666,2
Input power	kW	73,0	85,9	92,0	107,4	122,7	139,0	151,9	173,3	191,6	213,6	233,8
Cooling total input current	A	122,8	142,3	154,5	179,0	203,4	231,8	250,8	289,7	318,6	359,2	390,2
EER	W/W	2,97	2,77	2,97	2,87	2,80	2,81	2,89	2,87	2,90	2,85	2,85
Water flow rate system side	l/h	37323	40891	46905	52926	59137	67243	75381	85669	95498	104586	114564
Pressure drop system side	kPa	25	20	27	24	29	23	30	28	37	36	44

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	224,1	252,2	283,7	326,1	361,2	411,7	462,2	519,2	576,0	633,3	697,6
Input power	kW	70,6	80,9	90,2	104,7	115,3	131,8	147,6	166,3	183,5	203,1	223,3
Cooling total input current	A	123,9	139,9	158,8	181,8	198,2	224,1	252,4	283,8	316,2	348,7	386,3
EER	W/W	3,17	3,12	3,15	3,12	3,13	3,12	3,13	3,12	3,14	3,12	3,12
Water flow rate system side	l/h	38561	43394	48802	56076	62118	70789	79487	89271	99048	108894	119965
Pressure drop system side	kPa	27	22	30	27	32	25	34	30	39	39	48

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	219,2	248,3	275,0	321,4	358,7	403,2	455,0	514,5	569,0	637,2	688,3
Input power	kW	69,6	79,4	88,5	102,2	114,9	129,8	144,5	164,7	183,0	203,4	221,4
Cooling total input current	A	119,5	134,7	148,8	172,1	192,6	215,7	240,1	275,1	306,1	342,6	372,8
EER	W/W	3,15	3,13	3,11	3,15	3,12	3,11	3,15	3,12	3,11	3,13	3,11
Water flow rate system side	l/h	37710	42726	47303	55271	61679	69338	78240	88465	97841	109550	118323
Pressure drop system side	kPa	19	23	20	27	21	27	26	33	33	22	25

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	227,6	257,6	286,5	329,6	369,8	414,6	466,9	529,2	594,0	655,1	716,9
Input power	kW	68,8	77,7	86,8	99,5	111,7	126,1	140,9	159,5	179,0	197,8	215,3
Cooling total input current	A	124,3	138,5	152,9	176,0	195,6	218,0	244,0	278,3	311,7	347,7	377,4
EER	W/W	3,30	3,31	3,30	3,31	3,31	3,28	3,31	3,32	3,32	3,31	3,33
Water flow rate system side	l/h	39151	44308	49294	56689	63596	71302	80286	91003	102137	112618	123250
Pressure drop system side	kPa	20	25	21	29	23	28	27	35	36	23	27

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	227,7	260,4	284,7	327,7	367,7	412,3	466,1	521,6	579,1	645,7	702,6
Input power	kW	68,5	78,9	86,4	98,5	111,9	125,4	140,4	157,8	176,0	194,6	212,9
Cooling total input current	A	118,2	135,1	146,9	166,9	188,6	209,4	234,0	264,2	295,4	328,9	360,0
EER	W/W	3,32	3,30	3,30	3,33	3,29	3,29	3,32	3,31	3,29	3,32	3,30
Water flow rate system side	l/h	39166	44792	48972	56365	63234	70905	80151	89691	99569	111009	120789
Pressure drop system side	kPa	20	25	21	28	23	28	27	34	34	23	26

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
SEER - 12/7 (EN14825: 2018) (1)													
SEER	°	W/W	4,44	4,33	4,27	4,25	4,39	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,65	4,55	4,66	4,70	4,69	4,73	4,76	4,64	4,64	4,62	4,61
	E	W/W	4,75	4,67	4,63	4,81	4,82	4,76	4,88	4,73	4,67	4,70	4,74
	L	W/W	4,56	4,42	4,50	4,51	4,58	4,59	4,67	4,56	4,56	4,58	4,57
	N	W/W	4,85	4,79	4,83	4,96	4,93	4,97	5,03	4,93	4,82	4,89	4,83
	U	W/W	4,76	4,75	4,71	4,89	4,85	4,86	4,91	4,84	4,77	4,82	4,78
Seasonal efficiency	°	%	174,60	170,10	167,60	167,10	172,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	182,80	179,10	183,40	185,00	184,70	186,20	187,30	182,70	182,40	181,70	181,50
	E	%	187,00	183,70	182,00	189,30	189,60	187,50	192,30	186,20	183,90	184,80	186,40
	L	%	179,20	173,80	177,00	177,50	180,10	180,40	183,90	179,50	179,40	180,10	179,60
	N	%	191,10	188,40	190,30	195,40	194,20	195,90	198,10	194,10	189,90	192,40	190,00
	U	%	187,40	187,10	185,20	192,50	191,00	191,30	193,30	190,70	187,70	189,60	188,10
SEER - 23/18 (EN14825: 2018) (3)													
SEER	°	W/W	5,28	5,16	5,07	4,96	5,40	5,44	5,18	5,07	5,13	4,77	5,07
	A	W/W	5,50	5,35	5,50	5,51	5,55	5,55	5,63	5,34	5,44	5,30	5,42
	E	W/W	5,62	5,53	5,46	5,70	5,69	5,63	5,77	5,50	5,52	5,48	5,59
	L	W/W	5,34	5,14	5,35	5,33	5,37	5,34	5,47	5,26	5,32	5,20	5,26
	N	W/W	5,92	5,71	5,76	5,91	5,88	5,91	5,99	5,75	5,74	5,71	5,75
	U	W/W	5,65	5,67	5,59	5,82	5,76	5,80	5,83	5,67	5,69	5,61	5,68
Seasonal efficiency	°	%	208,10	203,40	199,80	195,40	212,90	214,50	204,10	199,90	202,10	187,80	199,60
	A	%	217,00	210,90	217,00	217,50	219,10	219,10	222,10	210,50	214,60	209,10	213,60
	E	%	221,90	218,30	215,30	224,90	224,50	222,20	227,70	216,80	217,70	216,00	220,60
	L	%	210,40	202,70	211,00	210,20	211,60	210,40	215,80	207,40	209,70	205,10	207,50
	N	%	229,90	225,30	227,50	233,50	232,10	233,40	236,40	226,80	226,40	225,50	227,10
	U	%	222,80	223,70	220,70	229,90	227,50	228,80	230,20	223,80	224,50	221,50	224,00
SEPR - (EN 14825: 2018) (3)													
SEPR	°	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	A	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,67	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
SEER - 12/7 (EN14825: 2018) (1)													
SEER	°	W/W	4,23	4,13	4,10	4,11	4,19	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,41	4,34	4,39	4,45	4,48	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E	W/W	4,47	4,40	4,40	4,54	4,54	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	L	W/W	4,31	4,17	4,25	4,27	4,31	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	W/W	4,61	4,56	4,58	4,72	4,68	4,72	4,78	4,66	4,58	4,61	4,62
	U	W/W	4,51	4,51	4,51	4,63	4,64	4,65	4,70	4,61	4,56	4,57	4,59
Seasonal efficiency	°	%	166,00	162,30	161,00	161,20	164,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	173,50	170,60	172,40	174,90	176,00	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E	%	175,60	173,10	173,10	178,70	178,50	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	L	%	169,40	163,60	166,80	167,60	169,20	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	%	181,30	179,30	180,00	185,70	184,10	185,90	188,20	183,40	180,30	181,50	181,60
	U	%	177,20	177,40	177,20	182,10	182,50	183,10	184,80	181,40	179,20	179,90	180,50
SEER - 23/18 (EN14825: 2018) (3)													
SEER	°	W/W	5,08	4,98	4,92	4,82	5,20	5,26	5,03	4,91	4,97	4,63	4,91
	A	W/W	5,29	5,15	5,25	5,28	5,35	5,37	5,42	5,15	5,22	5,09	5,22
	E	W/W	5,36	5,24	5,28	5,40	5,43	5,37	5,54	5,21	5,22	5,21	5,30
	L	W/W	5,06	4,87	5,07	5,08	5,05	5,10	5,19	5,02	5,02	4,92	4,99
	N	W/W	5,57	5,47	5,50	5,66	5,61	5,65	5,73	5,48	5,48	5,44	5,54
	U	W/W	5,41	5,44	5,41	5,58	5,56	5,60	5,63	5,46	5,49	5,39	5,50
Seasonal efficiency	°	%	200,10	196,00	193,60	189,90	205,10	207,30	198,30	193,30	195,70	182,00	193,50
	A	%	208,40	203,00	206,80	208,00	211,10	211,60	213,60	203,10	205,70	200,60	205,60
	E	%	211,40	206,40	208,30	213,00	214,00	211,80	218,50	205,50	205,70	205,30	208,90
	L	%	199,40	191,90	199,70	200,10	199,10	200,80	204,40	197,70	197,60	193,90	196,40
	N	%	219,70	215,80	216,80	223,40	221,50	223,00	226,20	216,00	216,30	214,60	218,40
	U	%	213,40	214,40	213,30	220,00	219,50	221,00	222,20	215,30	216,40	212,50	216,90
SEPR - (EN 14825: 2018) (3)													
SEPR	°	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	A	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,63	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	°	A	164,3	180,7	197,0	226,4	262,1	291,1	320,1	371,3	416,0	445,0	480,4
	A,L	A	177,1	193,4	222,5	251,8	281,2	310,2	351,9	396,7	454,2	483,2	530,8
	E,U	A	189,8	206,1	222,5	264,5	293,9	322,9	364,6	428,0	472,8	514,5	543,5
	N	A	202,5	218,8	235,2	277,3	306,6	335,6	383,2	440,7	485,5	527,2	556,2
Peak current (LRA)	°	A	352,9	408,1	424,4	477,1	512,8	625,3	654,3	705,5	750,3	779,3	814,6
	A,L	A	365,6	420,8	449,9	502,5	531,9	644,4	686,1	730,9	788,4	817,4	865,0
	E,U	A	378,3	433,5	449,9	515,3	544,6	657,1	698,8	762,2	807,0	848,7	877,7
	N	A	391,1	446,2	462,6	528,0	557,3	669,8	717,4	774,9	819,7	861,4	890,4

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	°,A,E,L,N,U	type						Scroll					
Compressor regulation	°,A,E,L,N,U	Type						On/Off					
Number	°,A,E,L,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Partialisation of the unit with mechanical thermostatic valve	°,A,E,L,N,U	%	25%	25%	25%	25%	25%	25%	25%	17%	17%	17%	17%
Partialisation of the unit with electronic thermostatic expansion valve	°,A,E,L,N,U	%	25%	25%	25%	25%	25%	25%	25%	17%	17%	17%	17%
Refrigerant	°,A,E,L,N,U	type						R410A					
Refrigerant charge (1)	°	kg	28,0	29,0	30,0	32,0	41,0	42,0	42,0	55,0	55,0	55,0	65,0
	A,L	kg	30,0	32,0	40,0	44,0	42,0	45,0	49,0	55,0	64,0	65,0	70,0
	E,U	kg	41,0	40,0	43,0	53,0	53,0	53,0	62,0	69,0	75,0	90,0	112,0
	N	kg	50,0	53,0	53,0	59,0	59,0	70,0	84,0	80,0	90,0	124,0	91,0
Oil	°,A,E,L,N,U	Type											
Oil charge circuit 1	°,A,E,L,N,U	kg	9,3	11,5	13,6	13,1	12,6	12,6	12,6	16,6	24,9	24,9	12,6
Oil charge circuit 2	°,A,E,L,N,U	kg	9,3	11,5	13,6	13,1	12,6	12,6	12,6	24,9	24,9	24,9	24,9
System side heat exchanger													
Type	°,A,E,L,N,U	type						Shell and tube					
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections													
Connections (in/out)	°,A,E,L,N,U	Type						Grooved joints					
Hydraulic connections without hydronic kit													
Sizes (in/out)	°	Ø	5″	5″	5″	5″	5″	5″	5″	6″	6″	6″	6″
	A,L	Ø	5″	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″
	E,N,U	Ø	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″
Hydraulic connections with hydronic kit													
Sizes (in/out)	°	Ø	-	-	-	-	3″	-	-	4″	4″	4″	4″
	A,L	Ø	-	-	3″	-	-	-	4″	4″	4″	4″	4″
	E,U	Ø	3″	3″	-	3″	3″	3″	4″	4″	4″	4″	4″
	N	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Water filter not supplied. Installation is mandatory or the guarantee will void.

Fans

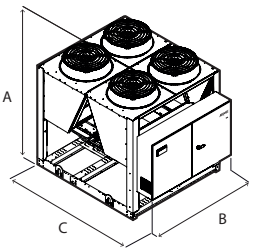
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
Fan													
Type	°,A,E,L,N,U	type	Axial										
Fan motor	°,A,U	type	Asynchronous										
	E,L,N	type	Asynchronous with phase cut										
Number	°	no.	4	4	4	4	6	6	6	8	8	8	10
	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
With static pressure													
Air flow rate	°	m^3/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m^3/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
High static pressure	°,A,U	Pa	50	50	50	50	50	50	50	50	50	50	50
	E,L,N	Pa	120	120	120	120	120	120	120	120	120	120	120
Without Static pressure													
Air flow rate	°	m^3/h	72000	72000	72000	72000	108000	108000	108000	144000	144000	144000	180000
	A	m^3/h	72000	72000	108000	108000	108000	108000	144000	144000	180000	180000	216000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	108000	108000	108000	144000	144000	144000	180000	216000	216000	252000	252000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0	0	0
With static pressure													
Sound power level	°	dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	90,0	90,0	90,0	91,5	91,5	91,5	92,7	94,2	94,7	96,0	96,5
Without Static pressure													
Sound power level	°	dB(A)	89,7	89,7	89,7	89,7	91,7	91,7	91,7	93,4	93,2	93,5	94,9
	A	dB(A)	89,7	89,7	91,7	91,7	91,7	91,7	93,1	93,4	94,3	94,6	95,8
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	92,3	92,3	92,3	93,6	93,6	93,6	94,6	95,7	95,5	96,5	96,8

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
Fan													
Type	°,A,E,L,N,U	type	Axial										
Fan motor	°,A,E,L,N,U	type	Inverter										
Number	°	no.	4	4	4	4	6	6	6	8	8	8	10
	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
Inverter fan													
Air flow rate	°	m^3/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m^3/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
High static pressure	°	Pa	120	120	120	120	120	120	120	75	75	75	75
	A,U	Pa	120	120	120	120	120	120	120	120	120	120	120
	E,L,N	Pa	200	200	200	200	200	200	200	200	200	200	200
Sound data calculated in cooling mode (1)													
Sound power level	°	dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	90,0	90,0	90,0	91,5	91,5	91,5	92,7	94,2	94,7	96,0	96,5

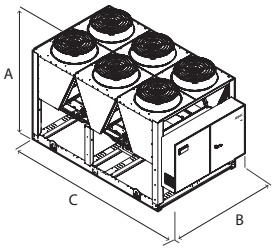
(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS

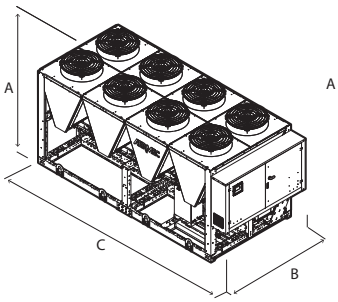
NRB 0800 - 1100 °
NRB 0800 - 0900 L/A



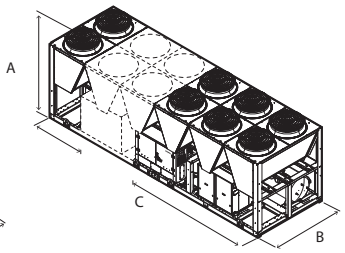
NRB 1200 - 1600 °
NRB 1000 - 1400 L/A
NRB 0800 -1000 E/U



NRB 1805 - 2206 °
NRB 1600 - 1805 L/A
NRB 1200 - 1400 E/U
NRB 0800 - 1000 N



NRB 2406 °
NRB 2006 - 2406 L/A
NRB 1600 - 2406 E/U
NRB 1100 - 2406 N



Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights without hydronic kit													
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	2780	2780	3970	3970	3970	5160	5160	5160	6350
	A,L	mm	2780	2780	3970	3970	3970	3970	4760	5160	6350	6350	7140
	E,U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520
Dimensions and weights with pump/s													
A	°	mm	-	-	-	-	2450	-	-	2450	2450	2450	2450
	A,L	mm	-	-	2450	-	-	-	2450	2450	2450	2450	2450
	E,U	mm	2450	2450	-	2450	2450	2450	2450	2450	2450	2450	2450
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°	mm	-	-	-	-	2200	-	-	2200	2200	2200	2200
	A,L	mm	-	-	2200	-	-	-	2200	2200	2200	2200	2200
	E,U	mm	2200	2200	-	2200	2200	2200	2200	2200	2200	2200	2200
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	-	-	-	-	3970	-	-	5160	5160	5160	6350
	A,L	mm	-	-	3970	-	-	-	4760	5160	6350	6350	7140
	E,U	mm	3970	3970	-	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
Empty weight	°	kg	2390	2430	2500	2540	3030	3080	3110	3810	3980	4020	4560
	A,L	kg	2410	2470	2950	3020	3060	3120	3640	3910	4480	4560	4980
	E,U	kg	2870	2910	2990	3520	3590	3610	4140	4690	4900	5650	5690
	N	kg	3370	3420	3490	3920	3990	4020	4490	5140	5360	6050	6090

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www.aermec.com

NRB 0800H-2406H

Reversible air/water heat pump

Cooling capacity 196,4 ÷ 647,7 kW – Heating capacity 209,8 ÷ 683,9 kW

- **High efficiency also at partial loads**
- **Night mode**
- **HP floating: ESEER +7% with inverter fans**
- **Also available with Shell and tube heat exchanger**

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 50 °C in summer. Hot water production up to 55 °C.
(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.
It is standard in all sizes from 1805 to 2406.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. **ESEER up to +7% with inverter fans.**
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
BRC1: Condensate drip tray. Consider 1 for each V-block.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	AVX1000	AVX1000	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1006	AVX1006	AVX1010	AVX1010
A, L	AVX1000	AVX1004	AVX1004	AVX1004	AVX1004	AVX1006	AVX1006	AVX1010	AVX1010	AVX1016	AVX1016
E	AVX1004	AVX1006	AVX1006	AVX1006	AVX1006	AVX1010	AVX1013	AVX1024	AVX1024	AVX1033	AVX1033
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, BA, BB, BC											
°	AVX1003	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1012	AVX1012
A, L	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1008	AVX1008	AVX1012	AVX1017	AVX1017
E	AVX1005	AVX1008	AVX1008	AVX1008	AVX1008	AVX1012	AVX1015	AVX1025	AVX1025	AVX1035	AVX1035
Integrated hydronic kit: AI, AJ, BD, BE, BF, BG, BH, BI, BJ											
°	AVX1003	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1008	AVX1012	AVX1012
A, L	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1008	AVX1012	AVX1012	AVX1017	AVX1017
E	AVX1005	AVX1008	AVX1008	AVX1008	AVX1008	AVX1012	AVX1015	AVX1025	AVX1025	AVX1035	AVX1035
Integrated hydronic kit: DA, DB, DC, PA, PB, PC, PD, PE, PF, PG, PH											
°	AVX1001	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1010	AVX1010
A, L	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1010	AVX1010	AVX1016	AVX1016
E	AVX1004	AVX1006	AVX1006	AVX1006	AVX1009	AVX1010	AVX1013	AVX1024	AVX1024	AVX1034	AVX1034
Integrated hydronic kit: DD, DE, DF, DG, DH, PI, PJ											
°	AVX1001	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1011	AVX1011
A, L	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1011	AVX1011	AVX1016	AVX1016
E	AVX1004	AVX1007	AVX1007	AVX1007	AVX1009	AVX1011	AVX1014	AVX1024	AVX1024	AVX1034	AVX1034
Integrated hydronic kit: DI, DJ											
°	AVX1002	AVX1002	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1007	AVX1007	AVX1011	AVX1011
A, L	AVX1002	AVX1004	AVX1004	AVX1004	AVX1004	AVX1007	AVX1007	AVX1011	AVX1011	AVX1016	AVX1016
E	AVX1004	AVX1007	AVX1007	AVX1007	AVX1007	AVX1011	AVX1014	AVX1024	AVX1024	AVX1034	AVX1034

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400
Fans: °						
°	DCPX130	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131
A	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131	DCPX132
E, L	As standard	As standard	As standard	As standard	As standard	As standard

Ver	1600	1805	2006	2206	2406
Fans: °					
°	DCPX131	DCPX155	DCPX155	DCPX156	DCPX156
A	DCPX132	DCPX156	DCPX156	DCPX134	DCPX134
E, L	As standard	As standard	As standard	As standard	As standard

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°, A, E, L	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°, A, E, L	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
°	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
A, L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1401
E	RIFNRB0800	RIFNRB0901	RIFNRB1001	RIFNRB1001	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A, L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2216	RIFNRB2416
E	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
°	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4G	GP4G	GP5G	GP5G
A, L	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5G	GP5G	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

The units 0800-0900 H°, 0800 HL/HA with the optional "storage tank" are 3970 mm long, and they must mount the GP2VNA grids.

Condensate drip

Ver	0800	0900	1000	1100	1200	1400
°	BRC1x2 (1)	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)
A, L	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x4 (1)
E	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)
A, L	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)	BRC1x6 (1)	BRC1x6 (1)
E	BRC1x6 (1)	BRC1x7 (1)	BRC1x7 (1)	BRC1x8 (1)	BRC1x8 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (3)

Field		Description
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump (4)
	DB	Pump B + stand-by pump (4)
	DC	Pump C + stand-by pump (4)
	DD	Pump D + stand-by pump (4)
	DE	Pump E + stand-by pump (4)
	DF	Pump F + stand-by pump (4)
	DG	Pump G + stand-by pump (4)
	DH	Pump H + stand-by pump (4)
	DI	Pump I + stand-by pump (4)
	DJ	Pump J + stand-by pump (5)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
	AG	Storage tank and pump G
	AH	Storage tank and pump H
	AI	Storage tank and pump I
	AJ	Storage tank and pump J (3)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump (4)
	BB	Storage tank with pump B + stand-by pump (4)
	BC	Storage tank with pump C + stand-by pump (4)
	BD	Storage tank with pump D + stand-by pump (4)
	BE	Storage tank with pump E + stand-by pump (4)
	BF	Storage tank with pump F + stand-by pump (4)
	BG	Storage tank with pump G + stand-by pump (4)
	BH	Storage tank with pump H + stand-by pump (4)
	BI	Storage tank with pump I + stand-by pump (4)
	BJ	Storage tank with pump J + stand-by pump (5)

(1) Electronic thermostatic as standard from size 1805÷2406.
(2) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) For all configurations including pump J please contact the factory.
(4) None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805-2006 version °.
(5) For all combinations with pump J, please contact our head office. None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805-2006 version °.

PERFORMANCE SPECIFICATIONS

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	196,4	218,0	251,8	279,2	314,2	353,8	389,0	456,7	501,9	568,7	616,1
Input power	kW	74,1	86,1	91,7	107,9	119,5	141,6	155,6	172,6	193,2	211,2	231,1
Cooling total input current	A	131,0	150,0	163,0	189,0	207,0	242,0	263,0	296,0	331,0	365,0	398,0
EER	W/W	2,65	2,53	2,74	2,59	2,63	2,50	2,50	2,65	2,60	2,69	2,67
Water flow rate system side	l/h	33794	37515	43314	48020	54046	60853	66910	78531	86311	97783	105939
Pressure drop system side	kPa	34	24	32	26	33	31	37	32	38	37	42
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	215,0	237,4	275,0	306,0	343,9	366,2	412,6	478,4	527,7	592,0	643,2
Input power	kW	70,2	77,7	89,6	99,8	112,3	121,7	137,0	157,3	174,3	193,9	210,7
Heating total input current	A	125,0	138,0	158,0	175,0	195,0	212,0	236,0	274,0	304,0	340,0	369,0
COP	W/W	3,06	3,06	3,07	3,07	3,06	3,01	3,01	3,04	3,03	3,05	3,05
Water flow rate system side	l/h	37311	41207	47745	53116	59705	63585	71640	83071	91620	102803	111681
Pressure drop system side	kPa	42	28	38	32	40	34	42	36	42	40	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	197,9	227,9	247,7	275,2	301,1	359,1	392,2	453,8	495,0	552,5	592,9
Input power	kW	75,3	78,6	89,8	106,2	123,2	133,0	153,4	169,0	193,9	208,9	234,1
Cooling total input current	A	126,0	133,0	150,0	176,0	203,0	220,0	252,0	280,0	321,0	347,0	390,0
EER	W/W	2,63	2,90	2,76	2,59	2,44	2,70	2,56	2,69	2,55	2,64	2,53
Water flow rate system side	l/h	34040	39194	42596	47339	51779	61758	67431	78030	85114	95003	101921
Pressure drop system side	kPa	14	18	15	19	14	20	18	23	23	29	17
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	209,8	250,3	274,3	304,8	334,3	394,3	431,0	497,4	543,0	609,3	654,3
Input power	kW	67,1	79,5	87,1	98,9	108,2	126,2	136,7	158,3	173,1	194,8	208,8
Heating total input current	A	119,0	139,0	152,0	171,0	187,0	216,0	234,0	272,0	299,0	336,0	363,0
COP	W/W	3,13	3,15	3,15	3,08	3,09	3,12	3,15	3,14	3,14	3,13	3,13
Water flow rate system side	l/h	36429	43447	47619	52924	58032	68469	74854	86379	94306	105817	113644
Pressure drop system side	kPa	15	22	19	23	17	24	21	28	28	35	21

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	206,2	243,8	266,9	297,0	329,2	385,5	425,3	488,4	538,3	601,4	651,3
Input power	kW	71,8	78,2	88,1	102,2	117,2	129,2	147,2	163,7	184,8	201,3	222,3
Cooling total input current	A	127,0	141,0	157,0	179,0	203,0	225,0	254,0	285,0	321,0	352,0	389,0
EER	W/W	2,87	3,12	3,03	2,91	2,81	2,98	2,89	2,98	2,91	2,99	2,93
Water flow rate system side	l/h	35459	41942	45909	51076	56619	66291	73125	83982	92547	103407	111966
Pressure drop system side	kPa	15	21	18	22	17	23	21	27	27	34	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	214,3	254,4	279,0	310,5	341,2	400,9	438,9	506,0	553,2	620,0	666,5
Input power	kW	66,6	79,3	86,7	97,1	106,2	124,8	137,1	157,5	171,8	193,5	207,0
Heating total input current	A	120,0	142,0	155,0	172,0	187,0	219,0	240,0	277,0	303,0	342,0	368,0
COP	W/W	3,22	3,21	3,22	3,20	3,21	3,21	3,20	3,21	3,22	3,20	3,22
Water flow rate system side	l/h	37204	44148	48436	53909	59226	69618	76226	87877	96076	107669	115772
Pressure drop system side	kPa	16	23	20	24	18	25	22	29	29	36	22

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	209,6	241,7	264,7	294,5	326,7	377,8	432,4	489,4	540,5	597,8	647,7
Input power	kW	67,3	77,4	85,0	98,1	112,4	125,3	139,1	157,0	177,4	192,3	215,2
Cooling total input current	A	115,0	132,0	144,0	164,0	187,0	208,0	230,0	261,0	296,0	322,0	362,0
EER	W/W	3,12	3,12	3,11	3,00	2,91	3,02	3,11	3,12	3,05	3,11	3,01
Water flow rate system side	l/h	36053	41586	45538	50642	56185	64960	74341	84155	92932	102793	111352
Pressure drop system side	kPa	15	20	18	22	16	22	21	27	27	33	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	223,4	258,1	283,7	316,7	349,3	403,2	458,7	520,7	571,9	634,1	683,9
Input power	kW	69,3	80,5	87,9	98,5	109,0	126,1	143,1	162,7	177,1	198,2	211,7
Heating total input current	A	122,0	140,0	153,0	170,0	188,0	216,0	244,0	278,0	305,0	341,0	367,0
COP	W/W	3,22	3,21	3,23	3,22	3,20	3,20	3,21	3,20	3,23	3,20	3,23
Water flow rate system side	l/h	38791	44787	49248	54989	60660	70010	79655	90422	99327	110122	118791
Pressure drop system side	kPa	17	23	20	25	19	25	24	31	31	38	23

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
	°	A	168,6	185,0	209,8	239,2	268,5	297,5	326,5	379,8	424,6	462,1	491,1
Maximum current (FLA)	A,L	A	168,6	193,5	209,8	239,2	268,5	306,0	335,0	388,3	433,1	470,6	499,6
	E	A	177,1	202,0	218,3	247,7	277,0	314,5	352,0	405,3	450,1	487,6	516,6
	°	A	357,2	412,4	437,2	489,9	519,2	631,7	660,7	714,0	758,8	796,3	825,3
Peak current (LRA)	A,L	A	357,2	420,9	437,2	489,9	519,2	640,2	669,2	722,5	767,3	804,8	833,8
	E	A	365,7	429,4	445,7	498,4	527,7	648,7	686,2	739,5	784,3	821,8	850,8

ENERGY INDICES (REG. 2016/2281 EU)

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	203	224	260	289	325	346	296	343	379	425	462
SCOP	W/W	3,65	3,65	3,65	3,68	3,65	3,60	3,73	3,73	3,80	3,73	3,80
ηsh	%	143,00	143,00	143,00	144,00	143,00	141,00	146,00	143,00	149,00	146,00	149,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,79	3,66	3,88	3,81	3,91	3,80	3,89	3,92	3,80	- (3)	- (3)
Seasonal efficiency	%	148,40	143,50	152,20	149,50	153,20	149,10	152,70	153,80	149,00	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,67	4,76
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	183,90	187,30
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,88	5,02
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	192,30	197,70
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	197	235	258	286	314	370	306	353	385	433	464
SCOP	W/W	3,73	3,75	3,75	3,68	3,68	3,73	3,93	3,83	3,95	3,83	3,93
ηsh	%	146,00	147,00	147,00	144,00	144,00	146,00	154,00	150,00	155,00	150,00	154,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,83	4,01	3,92	3,90	3,82	4,05	3,99	4,04	3,87	- (3)	- (3)
Seasonal efficiency	%	150,30	157,20	153,90	149,60	159,00	156,40	156,60	158,60	151,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,72	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,70	183,60
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,08	5,11
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	200,30	201,20
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	196	233	255	284	312	367	304	351	384	430	462
SCOP	W/W	3,03	3,08	3,03	3,08	3,03	3,10	3,13	3,08	3,30	3,08	3,15
ηsh	%	118,00	120,00	118,00	120,00	118,00	121,00	122,00	120,00	129,00	120,00	123,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,96	4,13	4,09	4,09	4,07	4,23	4,22	4,22	4,10	- (3)	- (3)
Seasonal efficiency	%	155,40	162,10	160,40	160,60	159,70	166,10	165,60	165,80	161,0	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	180,3%	179,6%
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,96	5,01
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	195,30	197,40
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	180,30	179,60
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	204	236	259	290	320	369	318	361	397	440	474
SCOP	W/W	3,05	3,08	3,05	3,10	3,03	3,08	3,13	3,05	3,30	3,08	3,15
ηsh	%	119,00	120,00	119,00	121,00	118,00	120,00	122,00	119,00	129,00	120,00	123,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	4,16	4,15	4,18	4,19	4,16	4,27	4,39	4,36	4,22	- (3)	- (3)
Seasonal efficiency	%	163,40	163,00	164,10	164,70	163,40	167,90	172,70	171,40	165,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,4%	183,7%
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,17	5,20
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	203,60	204,90
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

FANS

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °													
Fan													
Type	°,A,E,L	type	Axial										
Fan motor	°,A	type	Asynchronous										
	E,L	type	Asynchronous with phase cut										
Number	°	no.	4	4	6	6	6	6	6	8	8	10	10
	A,L	no.	4	6	6	6	6	8	8	10	10	12	12
	E	no.	6	8	8	8	8	10	12	14	14	16	16
Air flow rate	°	m^3/h	80000	80000	120000	120000	120000	120000	120000	160000	160000	200000	200000
	A	m^3/h	80000	120000	120000	120000	120000	160000	160000	200000	200000	240000	240000
	E	m^3/h	90000	120000	120000	120000	120000	150000	180000	210000	210000	240000	240000
	L	m^3/h	60000	90000	90000	90000	90000	120000	120000	150000	150000	180000	180000

GENERAL TECHNICAL DATA

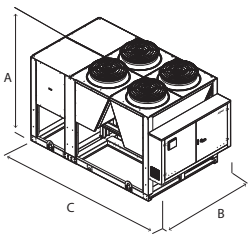
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	°,A,E,L	type	Scroll										
Compressor regulation	°,A,E,L	Type	On-Off										
Number	°,A,E,L	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L	type	R410A										
Refrigerant charge (1)	°	kg	44,0	44,0	54,0	62,0	62,0	60,0	60,0	81,0	82,0	100,0	95,0
	A	kg	44,0	60,0	64,0	62,0	66,0	81,0	78,0	99,0	102,0	117,0	119,0
	E	kg	58,0	76,5	78,0	76,0	78,0	93,0	112,0	136,0	143,0	152,0	152,0
	L	kg	44,0	60,0	64,0	62,0	66,0	78,0	78,0	104,0	102,0	117,0	117,0
System side heat exchanger													
Type	°,A,E,L	type	Brazed plate										
Hydraulic connections													
Connections (in/out)	°,A,E,L	Type	Grooved joints										
Hydraulic connections without hydronic kit													
Sizes (in/out)	°,A,E,L	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″
Hydraulic connections with hydronic kit													
Sizes (in/out)	°,A,E,L	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″
Sound data calculated in cooling mode (2)													
Sound power level	°	dB(A)	89,5	89,5	91,6	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2
	A	dB(A)	89,5	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2	95,1	95,1
	E	dB(A)	84,6	86,1	86,1	86,1	86,1	87,2	88,2	89,4	89,9	91,1	91,6
	L	dB(A)	82,6	84,6	84,6	84,6	84,6	86,1	86,1	87,7	88,2	89,6	90,1
Sound pressure level (10 m)	°	dB(A)	57,4	57,4	59,3	59,3	59,3	59,3	59,3	60,7	60,7	61,7	61,7
	A	dB(A)	57,4	59,3	59,3	59,3	59,3	60,7	60,7	61,6	61,6	62,5	62,5
	E	dB(A)	52,4	53,7	53,7	53,7	53,7	54,7	55,5	56,7	57,2	58,2	58,7
	L	dB(A)	50,5	52,4	52,4	52,4	52,4	53,8	53,8	55,2	55,7	57,0	57,5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

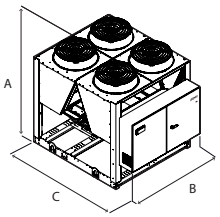
In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

DIMENSIONS

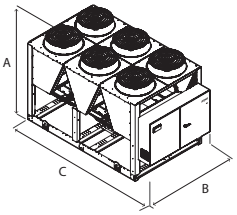
NRB 0800 H°/HL/HA (1)
NRB 0900 H° (1)



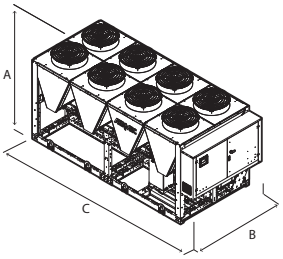
NRB 0800 H°/HL/HA
NRB 0900 H°



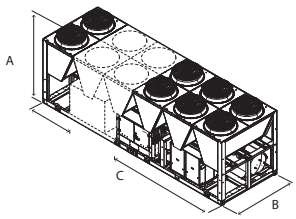
NRB 0800 HE
NRB 0900-1200 HL/HA
NRB 1000-1600 H°



NRB 1805-2406 H°
NRB 1805-2006 HL/HA



NRB 1400-1600 HL/HA
NRB 2206-2406 HL-HA
NRB 0900-2406 HE



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
NRB 0800H°, 0900H°
NRB 0800 HL/HA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights without hydronic kit													
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	3970	3970	3970	3970	3970	5160	5160	6350	6350
	A,L	mm	2780	3970	3970	3970	3970	4760	4760	6350	6350	7140	7140
	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520

The units 0800-0900 H°, 0800 HL/HA with the optional "storage tank" are 3970 mm long.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
Empty weight	°	kg	2520	2580	3160	3210	3250	3310	3340	4200	4370	4990	5030
	A,L	kg	2550	3130	3200	3240	3320	3970	4040	4780	4990	5490	5730
	E	kg	3080	3770	3840	3870	3950	4510	5020	5860	6080	6610	6800

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
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www.aermec.com

NRB 0800-2406 W

Reversible air/water heat pump with shell and tube heat exchanger

Cooling capacity 196,4 ÷ 647,7 kW – Heating capacity 209,8 ÷ 683,9 kW

- **Shell and tube heat exchanger**
- **High efficiency also at partial loads**
- **Night mode**
- **HP floating: ESEER +7% with inverter fans**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
They are outdoor units with axial fan scroll compressors and Shell and tube exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -10 °C outside air temperature in winter, and up to 50 °C in summer. Hot water production up to 55 °C.
(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.
It is standard in all sizes from 1805 to 2406.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. **ESEER up to +7% with inverter fans.**
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
BRC1: Condensate drip tray. Consider 1 for each V-block.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	AVX1001	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1123	AVX1123	AVX1124	AVX1124
A, L	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1123	AVX1123	AVX1124	AVX1124	AVX1115	AVX1115
E	AVX1004	AVX1123	AVX1123	AVX1123	AVX1123	AVX1124	AVX1119	AVX1117	AVX1117	AVX1116	AVX1116
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
°	-	-	AVX1004	AVX1004	AVX1004	-	-	AVX1123	AVX1123	AVX1124	AVX1124
A, L	-	AVX1004	-	-	-	AVX1123	AVX1123	AVX1124	AVX1124	AVX1115	AVX1115
E	AVX1004	AVX1123	AVX1123	AVX1123	AVX1123	AVX1124	AVX1119	AVX1117	AVX1117	AVX1116	AVX1116

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°, A, E, L	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°, A, E, L	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
°	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
A, L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1401
E	RIFNRB0800	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A, L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2216	RIFNRB2416
E	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP5VN
A	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP4VN	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP4VN	GP6V	GP7V	GP7V	GP8V	GP8V
L	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP5VN	GP4VN	GP5VN	GP5VN	GP6V	GP6V
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
°	-	-	GP3VN	GP3VN	GP3VN	-	-	GP4VN	GP4VN	GP5VN	GP5VN
A	-	GP3VN	-	-	-	GP4VN	GP4VN	GP5VN	GP4VN	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP4VN	GP6V	GP7V	GP7V	GP8V	GP8V
L	-	GP3VN	-	-	-	GP5VN	GP4VN	GP5VN	GP5VN	GP6V	GP6V

A grey background indicates the accessory must be assembled in the factory

Condensate drip

Ver	0800	0900	1000	1100	1200	1400
°	BRC1x2 (1)	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)
A, L	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x4 (1)
E	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)
A, L	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)	BRC1x6 (1)	BRC1x6 (1)
E	BRC1x6 (1)	BRC1x7 (1)	BRC1x7 (1)	BRC1x8 (1)	BRC1x8 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		**Operating field**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve
9		**Model**
	W	Heat pump with shell and tube heat exchanger
10		**Heat recovery**
	D	With desuperheater (1)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**

Field		Description
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (2)
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (2)

(1) The desuperheater can only be used with cold running.
(2) For all configurations including pump J please contact the factory.

Compatibility of models with hydronic units available with a configurator

Version		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406	2600	2800	3000	3200	3400	3600
Standard	H°	-	-	•	•	•	-	-	•	•	•	•	•	•	•	•	•	•
Standard silenced	HL	-	•	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•
High efficiency	HA	-	•	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•
Silenced high efficiency	HE	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

PERFORMANCE SPECIFICATIONS

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	196,4	218,0	251,8	279,2	314,2	353,8	389,0	456,7	501,9	568,7	616,1
Input power	kW	74,1	86,1	91,7	107,9	119,5	141,6	155,6	172,6	193,2	211,2	231,1
Cooling total input current	A	131,0	150,0	163,0	189,0	207,0	242,0	263,0	296,0	331,0	365,0	398,0
EER	W/W	2,65	2,53	2,74	2,59	2,63	2,50	2,50	2,65	2,60	2,69	2,67
Water flow rate system side	l/h	33794	37515	43314	48020	54046	60853	66910	78531	86311	97783	105939
Pressure drop system side	kPa	34	24	32	26	33	31	37	32	38	37	42
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	215,0	237,4	275,0	306,0	343,9	366,2	412,6	478,4	527,7	592,0	643,2
Input power	kW	70,2	77,7	89,6	99,8	112,3	121,7	137,0	157,3	174,3	193,9	210,7
Heating total input current	A	125,0	138,0	158,0	175,0	195,0	212,0	236,0	274,0	304,0	340,0	369,0
COP	W/W	3,06	3,06	3,07	3,07	3,06	3,01	3,01	3,04	3,03	3,05	3,05
Water flow rate system side	l/h	37311	41207	47745	53116	59705	63585	71640	83071	91620	102803	111681
Pressure drop system side	kPa	42	28	38	32	40	34	42	36	42	40	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	197,9	227,9	247,7	275,2	301,1	359,1	392,2	453,8	495,0	552,5	592,9
Input power	kW	75,3	78,6	89,8	106,2	123,2	133,0	153,4	169,0	193,9	208,9	234,1
Cooling total input current	A	126,0	133,0	150,0	176,0	203,0	220,0	252,0	280,0	321,0	347,0	390,0
EER	W/W	2,63	2,90	2,76	2,59	2,44	2,70	2,56	2,69	2,55	2,64	2,53
Water flow rate system side	l/h	34040	39194	42596	47339	51779	61758	67431	78030	85114	95003	101921
Pressure drop system side	kPa	14	18	15	19	14	20	18	23	23	29	17
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	209,8	250,3	274,3	304,8	334,3	394,3	431,0	497,4	543,0	609,3	654,3
Input power	kW	67,1	79,5	87,1	98,9	108,2	126,2	136,7	158,3	173,1	194,8	208,8
Heating total input current	A	119,0	139,0	152,0	171,0	187,0	216,0	234,0	272,0	299,0	336,0	363,0
COP	W/W	3,13	3,15	3,15	3,08	3,09	3,12	3,15	3,14	3,14	3,13	3,13
Water flow rate system side	l/h	36429	43447	47619	52924	58032	68469	74854	86379	94306	105817	113644
Pressure drop system side	kPa	15	22	19	23	17	24	21	28	28	35	21

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	206,2	243,8	266,9	297,0	329,2	385,5	425,3	488,4	538,3	601,4	651,3
Input power	kW	71,8	78,2	88,1	102,2	117,2	129,2	147,2	163,7	184,8	201,3	222,3
Cooling total input current	A	127,0	141,0	157,0	179,0	203,0	225,0	254,0	285,0	321,0	352,0	389,0
EER	W/W	2,87	3,12	3,03	2,91	2,81	2,98	2,89	2,98	2,91	2,99	2,93
Water flow rate system side	l/h	35459	41942	45909	51076	56619	66291	73125	83982	92547	103407	111966
Pressure drop system side	kPa	15	21	18	22	17	23	21	27	27	34	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	214,3	254,4	279,0	310,5	341,2	400,9	438,9	506,0	553,2	620,0	666,5
Input power	kW	66,6	79,3	86,7	97,1	106,2	124,8	137,1	157,5	171,8	193,5	207,0
Heating total input current	A	120,0	142,0	155,0	172,0	187,0	219,0	240,0	277,0	303,0	342,0	368,0
COP	W/W	3,22	3,21	3,22	3,20	3,21	3,21	3,20	3,21	3,22	3,20	3,22
Water flow rate system side	l/h	37204	44148	48436	53909	59226	69618	76226	87877	96076	107669	115772
Pressure drop system side	kPa	16	23	20	24	18	25	22	29	29	36	22

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	209,6	241,7	264,7	294,5	326,7	377,8	432,4	489,4	540,5	597,8	647,7
Input power	kW	67,3	77,4	85,0	98,1	112,4	125,3	139,1	157,0	177,4	192,3	215,2
Cooling total input current	A	115,0	132,0	144,0	164,0	187,0	208,0	230,0	261,0	296,0	322,0	362,0
EER	W/W	3,12	3,12	3,11	3,00	2,91	3,02	3,11	3,12	3,05	3,11	3,01
Water flow rate system side	l/h	36053	41586	45538	50642	56185	64960	74341	84155	92932	102793	111352
Pressure drop system side	kPa	15	20	18	22	16	22	21	27	27	33	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	223,4	258,1	283,7	316,7	349,3	403,2	458,7	520,7	571,9	634,1	683,9
Input power	kW	69,3	80,5	87,9	98,5	109,0	126,1	143,1	162,7	177,1	198,2	211,7
Heating total input current	A	122,0	140,0	153,0	170,0	188,0	216,0	244,0	278,0	305,0	341,0	367,0
COP	W/W	3,22	3,21	3,23	3,22	3,20	3,20	3,21	3,20	3,23	3,20	3,23
Water flow rate system side	l/h	38791	44787	49248	54989	60660	70010	79655	90422	99327	110122	118791
Pressure drop system side	kPa	17	23	20	25	19	25	24	31	31	38	23

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	°	A	168,6	185,0	209,8	239,2	268,5	297,5	326,5	423,4	487,6	516,6	570,9
	A,L	A	168,6	193,5	209,8	239,2	268,5	306,0	335,0	468,1	512,9	561,3	590,3
	E	A	177,1	202,0	218,3	247,7	277,0	314,5	352,0	487,5	532,3	580,7	609,7
Peak current (LRA)	°	A	357,2	412,4	437,2	489,9	519,2	631,7	660,7	757,6	821,8	850,8	905,1
	A,L	A	357,2	420,9	437,2	489,9	519,2	640,2	669,2	802,3	847,1	895,5	924,5
	E	A	365,7	429,4	445,7	498,4	527,7	648,7	686,2	821,7	866,5	914,9	943,9

ENERGY INDICES (REG. 2016/2281 EU)

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	203	224	260	289	325	346	296	343	379	425	462
SCOP	W/W	3,65	3,65	3,65	3,68	3,65	3,60	3,73	3,73	3,80	3,73	3,80
ηsh	%	143,00	143,00	143,00	144,00	143,00	141,00	146,00	143,00	149,00	146,00	149,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,79	3,66	3,88	3,81	3,91	3,80	3,89	3,92	3,80	- (3)	- (3)
Seasonal efficiency	%	148,40	143,50	152,20	149,50	153,20	149,10	152,70	153,80	149,00	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,67	4,76
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	183,90	187,30
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,88	5,02
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	197	235	258	286	314	370	306	353	385	433	464
SCOP	W/W	3,73	3,75	3,75	3,68	3,68	3,73	3,93	3,83	3,95	3,83	3,93
ηsh	%	146,00	147,00	147,00	144,00	144,00	146,00	154,00	150,00	155,00	150,00	154,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,83	4,01	3,92	3,90	3,82	4,05	3,99	4,04	3,87	- (3)	- (3)
Seasonal efficiency	%	150,30	157,20	153,90	149,60	159,00	156,40	156,60	158,60	151,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,72	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,70	183,60
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,08	5,11
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	196	233	255	284	312	367	304	351	384	430	462
SCOP	W/W	3,03	3,08	3,03	3,08	3,03	3,10	3,13	3,08	3,30	3,08	3,15
ηsh	%	118,00	120,00	118,00	120,00	118,00	121,00	122,00	120,00	129,00	120,00	123,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,96	4,13	4,09	4,09	4,07	4,23	4,22	4,22	4,10	- (3)	- (3)
Seasonal efficiency	%	155,40	162,10	160,40	160,60	159,70	166,10	165,60	165,80	161,0	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	180,3%	179,6%
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,96	5,01
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	195,30	197,40
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	204	236	259	290	320	369	318	361	397	440	474
SCOP	W/W	3,05	3,08	3,05	3,10	3,03	3,08	3,13	3,05	3,30	3,08	3,15
ηsh	%	119,00	120,00	119,00	121,00	118,00	120,00	122,00	119,00	129,00	120,00	123,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	4,16	4,15	4,18	4,19	4,16	4,27	4,39	4,36	4,22	- (3)	- (3)
Seasonal efficiency	%	163,40	163,00	164,10	164,70	163,40	167,90	172,70	171,40	165,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,4%	183,7%
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,17	5,20
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	203,60	204,90
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	°,A,E,L	type						Scroll					
Compressor regulation	°,A,E,L	Type						On-Off					
Number	°,A,E,L	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,L	type						R410A					
	E	type											
Refrigerant charge (1)	°	kg	41,0	42,0	55,0	56,0	56,0	58,0	58,0	84,0	84,0	100,0	100,0
	A,L	kg	43,0	56,0	58,0	58,0	60,0	84,0	87,0	100,0	103,0	116,0	125,0
	E	kg	56,0	80,0	82,0	82,0	84,0	97,0	113,0	137,0	140,0	153,0	162,0
System side heat exchanger													
Type	°,A,E,L	type						Shell and tube					
Hydraulic connections													
Connections (in/out)	°,A,E,L	Type						Grooved joints					
Hydraulic connections without hydronic kit													
Sizes (in/out)	°	Ø	5″	5″	5″	5″	5″	5″	5″	6″	6″	6″	6″
	A,E,L	Ø	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″
Hydraulic connections with hydronic kit													
Sizes (in/out)	°	Ø	-	-	3″	3″	3″	-	-	4″	4″	4″	4″
	A,L	Ø	-	3″	-	-	-	3″	4″	4″	4″	4″	4″
	E	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

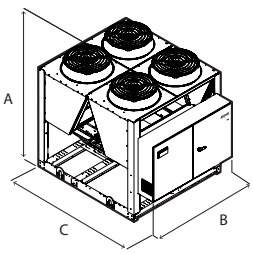
Water filter not supplied. Installation is mandatory or the guarantee will void.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fan													
Type	°,A,E,L	type	Axial										
Fan motor	°,A	type	Asynchronous										
	E,L	type	Asynchronous with phase cut										
Number	°	no.	4	4	6	6	6	6	6	8	8	10	10
	A,L	no.	4	6	6	6	6	8	8	10	10	12	12
	E	no.	6	8	8	8	8	10	12	14	14	16	16
Air flow rate	°	m^3/h	80000	80000	120000	120000	120000	120000	120000	160000	160000	200000	200000
	A	m^3/h	80000	120000	120000	120000	120000	160000	160000	200000	200000	240000	240000
	E	m^3/h	90000	120000	120000	120000	120000	150000	180000	210000	210000	240000	240000
	L	m^3/h	60000	90000	90000	90000	90000	120000	120000	150000	150000	180000	180000
Sound data calculated in cooling mode (1)													
Sound power level	°	dB(A)	89,5	89,5	91,6	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2
	A	dB(A)	89,5	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2	95,1	95,1
	E	dB(A)	84,6	86,1	86,1	86,1	86,1	87,2	88,2	89,4	89,9	91,1	91,6
	L	dB(A)	82,6	84,6	84,6	84,6	84,6	86,1	86,1	87,7	88,2	89,6	90,1
Sound pressure level (10 m)	°	dB(A)	57,4	57,4	59,3	59,3	59,3	59,3	59,3	60,7	60,7	61,7	61,7
	A	dB(A)	57,4	59,3	59,3	59,3	59,3	60,7	60,7	61,6	61,6	62,5	62,5
	E	dB(A)	52,4	53,7	53,7	53,7	53,7	54,7	55,5	56,7	57,2	58,2	58,7
	L	dB(A)	50,5	52,4	52,4	52,4	52,4	53,8	53,8	55,2	55,7	57,0	57,5

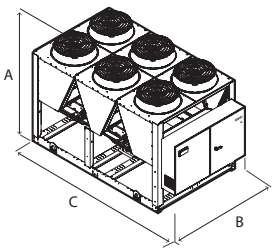
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

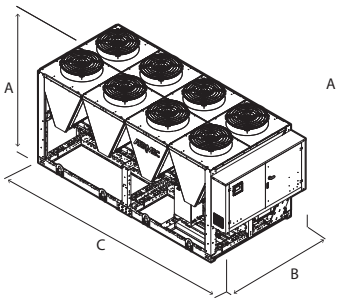
NRB 0800 - 0900 °
NRB 0800 L/A



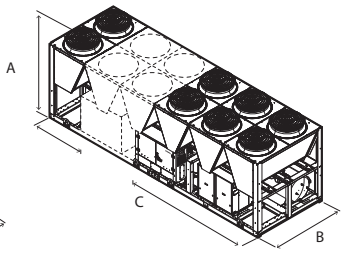
NRB 1000 - 1600 °
NRB 0900 - 1200 L/A
NRB 0800 E



NRB 1805 - 2006 °
NRB 1400 - 1600 L/A
NRB 0900 - 1200 E



NRB 2206 - 2406 °
NRB 1805 - 2406 L/A
NRB 1400 - 2406 E



Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights without hydronic kit													
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	3970	3970	3970	3970	3970	5160	5160	6350	6350
	A,L	mm	2780	3970	3970	3970	3970	4760	4760	6350	6350	7140	7140
	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520
Dimensions and weights with pump/s													
A	°	mm	-	-	2450	2450	2450	-	-	2450	2450	2450	2450
	A,L	mm	-	2450	-	-	-	2450	2450	2450	2450	2450	2450
	E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°	mm	-	-	2200	2200	2200	-	-	2200	2200	2200	2200
	A,L	mm	-	2200	-	-	-	2200	2200	2200	2200	2200	2200
	E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	-	-	3970	3970	3970	-	-	5160	5160	6350	6350
	A,L	mm	-	3970	-	-	-	4760	4760	6350	6350	7140	7140
	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
Empty weight	°	kg	2670	2730	3310	3360	3400	3460	3490	4350	4520	5190	5230
	A,L	kg	2700	3280	3350	3390	3470	4120	4240	4980	5190	5690	6030
	E	kg	3230	3920	3990	4020	4100	4660	5220	6060	6280	6810	7100

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www.aermec.com

CL 025-200

Air-water chiller

Cooling capacity 5,8 ÷ 41 kW

- **Standard version**
- **Version with Integrated hydronic kit system side**
- **Fan Plug-fan**

DESCRIPTION

Chillers for indoor installation for chilled water production with scroll compressors, plugfan fans, external copper coils with aluminum louvers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A With storage tank and pump
P With pump

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to -10°C.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.
In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Air supply

Horizontal or vertical, adjustable during installation for all sizes.
Directional air discharge hood:
— plastic for sizes 050 to 090
— galvanised steel for the other sizes

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.
The regulation using an outside air temperature sensor allows a dynamic control of the water temperature produced by increasing the energy efficiency of the system.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

VT: Anti-vibration supports.
CLPA: Galvanised steel plenum to be installed on the condenser coil, facilitates duct installations.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
KR: Anti-freeze electric heater for the plate heat exchanger.
GPCL: Protection grille for the source side exchange coil.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	025	030	050	070	090	100	150	200
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•
AERSET	°,A,P	•	•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	•
SPLW (1)	°,A,P	•	•	•	•	•	•	•	•

(1) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	025	030	040	050	070	080	090	100	150	200
PR4	°,A,P	•	•	•	•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

Antivibration

Ver	025	030	050	070	090	100	150	200
°, P	VT9	VT9	VT9	VT9	VT9	VT15	VT15	VT15
A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15	VT15	VT15

Galvanised steel plenum

Ver	025	030	050	070	090	100	150	200
°, A, P	CLPA1 (1)	CLPA1 (1)	CLPA2 (2)	CLPA2 (2)	CLPA2 (2)	CLPA3	CLPA3	CLPA3

(1) Not compatible with the GPCL1 accessory
(2) Not compatible with the GPCL2 accessory

Device for peak current reduction

Ver	025	030	050	070	090	100	150	200
°, A, P	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Antifreeze electric heater

Ver	025	030	050	070	090	100	150	200
°, A, P	KR2	KR2	KR2	KR2	KR2	KR100	KR100	KR100

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	025	030	050	070	090	100	150	200
°, A, P	GPCL1	GPCL1	GPCL2	GPCL2	GPCL2	GPCL3	GPCL3	GPCL3

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2	**CL**
3,4,5	**Size** 025, 030, 050, 070, 090, 100, 150, 200
6	**Model**
°	Cooling only
7	**Execution**
°	Standard
8	**Version**
°	Standard
A	With storage tank and pump
P	With pump
9	**Heat recovery**
D	With desuperheater (1)
°	Without heat recovery
10	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
11	**Operating field**
Y	Low temperature mechanic thermostatic valve (2)
Z	Low temperature electronic thermostatic valve (3)
°	Standard mechanic thermostatic valve (4)
12	**Evaporator**
C	Motocondensing unit
°	Standard
13	**Power supply**
M	230V ~ 3 50Hz (5)
°	400V ~ 3N 50Hz with magnet circuit breakers (6)

(1) It is only available in size CL 050 ÷ 200; If the unit is also fitted with one of the low temperature valves in addition to the desuperheater, it is necessary to always guarantee a water temperature of 35°C at the inlet of the desuperheater.
(2) Water produced from 0 °C ÷ - 10 °C
(3) Water produced from 0 °C ÷ 4 °C
(4) Water produced from 4 °C ÷ 18 °C
(5) Only for CL 025 ÷ 030 sizes
(6) Only for CL 025 ÷ 200 sizes

PERFORMANCE SPECIFICATIONS

CL ° - (version °) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	050	070	090	100	150	200
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	5,8	7,1	12,7	16,3	20,2	26,3	33,0	40,6
Input power	kW	2,2	2,6	4,3	5,5	6,8	8,8	11,3	14,4
Cooling total input current - 400V	A	4,8	5,1	8,4	10,0	13,0	17,0	19,0	25,0
Cooling total input current - 230V	A	10,0	13,0	-	-	-	-	-	-
EER	W/W	2,70	2,72	2,98	3,00	2,98	2,99	2,91	2,82
Water flow rate system side	l/h	1008	1233	2189	2817	3484	4533	5695	7001
Pressure drop system side	kPa	19	26	27	29	29	45	53	72

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

CL ° - (versions A/P) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	050	070	090	100	150	200
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	5,9	7,2	12,8	16,5	20,4	26,5	33,4	41,0
Input power	kW	2,1	2,6	4,2	5,4	6,8	8,9	11,6	14,6
Cooling total input current - 400V	A	5,1	5,4	9,0	11,0	13,0	18,0	21,0	27,0
Cooling total input current - 230V	A	11,0	14,0	-	-	-	-	-	-
EER	W/W	2,76	2,78	3,02	3,04	3,02	2,97	2,87	2,81
Water flow rate system side	l/h	1008	1233	2189	2817	3484	4533	5695	7001
Useful head system side	kPa	71	62	73	66	58	83	131	122

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY DATA

Size			025	030	050	070	090	100	150	200
SEER - 12/7 (EN14825:2018) with standard fans (1)										
SEER	°	W/W	4,11	4,11	4,10	4,11	4,12	4,38	4,32	4,10
	A,P	W/W	4,22	4,22	4,17	4,21	4,22	4,21	4,13	4,12
Seasonal efficiency	°	%	161,3%	161,4%	161,1%	161,3%	161,8%	172,0%	169,7%	161,0%
	A,P	%	165,7%	165,7%	163,8%	165,2%	165,6%	165,5%	162,3%	161,8%
SEER - 23/18 (EN14825: 2018) with standard fans (2)										
SEER	°	W/W	4,72	4,47	4,50	4,44	4,52	5,13	4,99	4,51
	A,P	W/W	4,86	4,62	4,64	4,58	4,72	4,90	4,65	4,36
Seasonal efficiency	°	%	185,9%	175,9%	176,8%	174,7%	177,7%	202,2%	196,6%	177,2%
	A,P	%	191,2%	181,7%	182,6%	180,0%	185,7%	193,1%	183,0%	171,5%
SEPR - (EN14825: 2018) High temperature with standard fans (2)										
SEPR	°	W/W	5,38	5,10	5,10	5,03	5,04	5,67	5,59	5,30
	A,P	W/W	5,49	5,21	5,18	5,13	5,16	5,56	5,37	5,20

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			025	030	050	070	090	100	150	200
Power supply: °										
Electric data										
Maximum current (FLA)	°	A	11,0	11,6	13,6	15,4	20,4	27,4	30,8	40,8
	A,P	A	11,4	12,0	14,4	16,1	21,1	29,3	33,8	43,8
Peak current (LRA)	°	A	44,6	40,6	77,2	77,2	105,2	90,9	92,6	125,6
	A,P	A	45,0	41,0	77,9	77,9	105,9	92,8	95,6	128,6

Size			025	030	050	070	090	100	150	200
Power supply: M										
Electric data										
Maximum current (FLA)	°	A	22,0	25,0	-	-	-	-	-	-
	A,P	A	22,6	25,6	-	-	-	-	-	-
Peak current (LRA)	°	A	67,0	88,0	-	-	-	-	-	-
	A,P	A	67,6	88,6	-	-	-	-	-	-

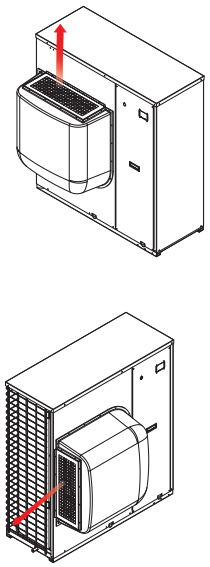
GENERAL TECHNICAL DATA

Size			025	030	050	070	090	100	150	200
Compressor										
Type	°,A,P	type	Scroll							
Compressor regulation	°,A,P	Type	On-off							
Number	°,A,P	no.	1	1	1	1	1	2	2	2
Circuits	°,A,P	no.	1	1	1	1	1	1	1	1
Refrigerant	°,A,P	type	R410A							
Refrigerant charge (1)	°,A,P	kg	1,5	2,7	4,0	4,0	4,0	5,5	7,5	7,5
System side heat exchanger										
Type	°,A,P	type	Brazed plate							
Number	°,A,P	no.	1	1	1	1	1	1	1	1
Hydraulic connections										
Connections (in/out)	°,A,P	Type	Gas - F							
Size (in)	°,A,P	Ø	1¼							
Size (out)	°,A,P	Ø	1¼							
Fan										
Type	°,A,P	type	Plug-fan							
Fan motor	°,A,P	type	Inverter							
Number	°,A,P	no.	1	1	1	1	1	2	2	2
Air flow rate	°,A,P	m^3/h	4000	4000	6500	6500	7500	10000	12000	12000
High static pressure	°,A,P	Pa	50	50	50	50	50	50	50	50
Intake plus machine body										
Sound power level	°,A,P	dB(A)	78,0	78,0	73,0	73,0	76,0	74,0	79,0	79,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	41,0	41,0	44,0	42,0	47,0	47,0
Machine exhaust										
Sound power level	°,A,P	dB(A)	78,0	78,0	78,0	78,0	81,0	78,0	83,0	83,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	46,0	46,0	49,0	47,0	52,0	52,0

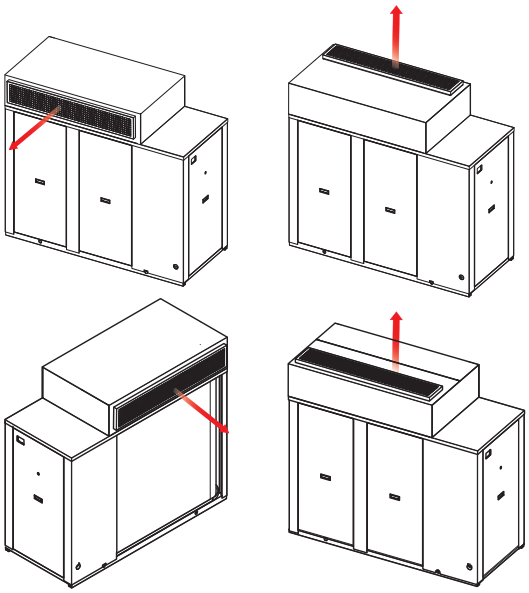
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DISCHARGE HOOD POSSIBLE CONFIGURATIONS

CL 025 ÷ 090



CL 100 ÷ 200

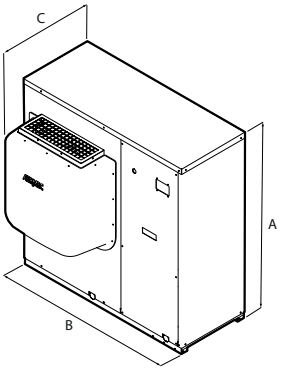


Air supply
Horizontal or vertical, adjustable during installation for all sizes.
Directional air discharge hood:

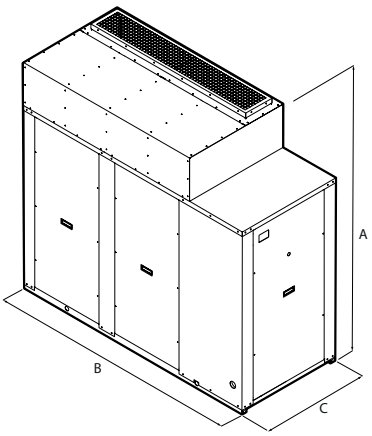
— plastic for sizes 050 to 090
— galvanised steel for the other sizes

DIMENSIONS

CL 025 ÷ 090



CL 100 ÷ 200



Size			025	030	050	070	090	100	150	200
Dimensions and weights										
A	°,A,P	mm	1028	1281	1281	1281	1281	1674	1674	1674
B	°,P	mm	1005	1006	1160	1160	1160	1897	1897	1897
	A	mm	1366	1458	1610	1610	1610	1897	1897	1897
C	°,A,P	mm	702	754	798	798	798	801	801	801
Empty weight	°	kg	127	160	208	210	212	469	471	475
	A	kg	157	201	252	260	256	532	537	542
	P	kg	133	166	217	225	221	482	487	492

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

CL 025H-200H

Reversible air/water heat pump

Cooling capacity 6,5 ÷ 50,9 kW – Heating capacity 7,7 ÷ 44,8 kW

- **Cooling / heating / high-temperature water production even for DHW production.**
- **Water produced up to 60 °C**
- **Heating operations with external temperatures down to -15 °C**
- **Fan Plug-fan**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A With storage tank and pump
P With pump

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 46 °C in summer. Hot water production up to 60 °C.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.
In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Air supply

Horizontal or vertical, adjustable during installation for all sizes.
Directional air discharge hood:
— plastic for sizes 050 to 090
— galvanised steel for the other sizes

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

Hot water production

Special attention has been paid to winter operation: compared with traditional heat pumps, the operating limits have been extended thanks to particular technological expedients.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.
The regulation using an outside air temperature sensor allows a dynamic control of the water temperature produced by increasing the energy efficiency of the system.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating

system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring
VT: Anti-vibration supports.
CLPA: Galvanised steel plenum to be installed on the condenser coil, facilitates duct installations.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	025	030	040	050	070	080	090	100	150	200
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•	•	•
AERSET	°,A,P	•	•	•	•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•	•	•
SDHW (1)	°,A,P	•	•	•	•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	•	•	•
SPLW (2)	°,A,P	•	•	•	•	•	•	•	•	•	•

(1) Probe required for MULTICONTROL for managing the domestic hot water system.
(2) Probe required for MULTICONTROL to manage the secondary circuit system.

■ *MODU-485BL = Accessory mandatory for the production of domestic hot water*

Remote panel

Model	Ver	025	030	040	050	070	080	090	100	150	200
PR4	°,A,P	•	•	•	•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

Antivibration

Ver	025	030	040	050	070	080	090	100	150	200
°, P	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15	VT15
A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15	VT15	VT15

BSKW: Electric heater kit

Ver	025	030	040	050	070	080	090	100	150	200
Power supply: M										
°, A, P	BS4KW230M, BS6KW230M	BS4KW230M, BS6KW230M	BS4KW230M, BS6KW230M	-	-	-	-	-	-	-
Power supply: °										
°, A, P	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T

Galvanised steel plenum

Ver	025	030	040	050	070	080	090	100	150	200
°, A, P	CLPA1 (1)	CLPA1 (1)	CLPA2 (2)	CLPA2 (2)	CLPA2 (2)	CLPA2 (2)	CLPA2 (2)	CLPA3	CLPA3	CLPA3

(1) Not compatible with the GPCL1 accessory
(2) Not compatible with the GPCL2 accessory

Device for peak current reduction

Ver	025	030	040	050	070	080	090	100	150	200
Power supply: °										
°, A, P	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Electric Heater for the Base

Ver	025	030	040	050	070	080	090	100	150	200
°, A, P	KRB4 (1)	KRB4 (1)	KRB5 (1)	KRB5 (1)	KRB5 (1)	KRB5 (1)	KRB5 (1)	KRB6 (1)	KRB6 (1)	KRB6 (1)

(1) Incompatible with the condensate collection basin accessory with integrated resistance.
A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	025	030	040	050	070	080	090	100	150	200
°, A, P	GPCL1	GPCL1	GPCL2	GPCL2	GPCL2	GPCL2	GPCL2	GPCL3	GPCL3	GPCL3

A grey background indicates the accessory must be assembled in the factory

■ *For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

FACTORY FITTED ACCESSORIES

KRB: Electric anti-freeze resistance kit for base.
GPCL: Protection grille for the source side exchange coil.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

CONFIGURATOR

Field	Description
1,2	**CL**
3,4,5	**Size** 025, 030, 040, 050, 070, 080, 090, 100, 150, 200
6	**Model**
H	Heat pump
7	**Execution**
°	Standard
8	**Version**
°	Standard
A	With storage tank and pump (1)
P	With pump
9	**Heat recovery**
°	Without heat recovery
10	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
11	**Operating field**
Y	Low temperature mechanic thermostatic valve (2)
Z	Low temperature electronic thermostatic valve (3)
°	Standard mechanic thermostatic valve (4)
12	**Evaporator**
°	Standard
13	**Power supply**
M	230V ~ 50Hz (5)
°	400V 3N ~ 50Hz (6)

(1) The version with integrated storage tank is not suitable for the production of domestic hot water (DHW).
(2) Water produced from 0 °C ÷ - 10 °C
(3) Water produced from 0 °C ÷ 4 °C
(4) Water produced from 4 °C ÷ 18 °C
(5) Only for CL 025 ÷ 040 sizes
(6) Only for CL 025 ÷ 200 sizes

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

CL - (H°) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	6,4	8,4	10,4	11,9	14,0	15,5	19,0	23,9	31,3	37,6
Input power	kW	2,6	3,1	3,8	4,2	4,8	5,6	6,8	8,2	10,9	14,4
Cooling total input current - 400V	A	5,5	6,3	6,6	7,5	8,3	9,6	13,0	14,0	21,0	26,0
Cooling total input current - 230V	A	13,0	15,0	16,0	-	-	-	-	-	-	-
EER	W/W	2,44	2,73	2,74	2,87	2,90	2,77	2,81	2,93	2,86	2,61
Water flow rate system side	l/h	1104	1441	1785	2054	2411	2676	3272	4122	5388	6477
Pressure drop system side	kPa	13	12	13	11	15	26	26	34	22	43
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	7,9	9,8	12,5	14,4	15,9	18,6	21,0	27,8	34,8	43,8
Input power	kW	2,3	2,9	3,7	4,1	4,7	5,5	6,5	8,1	10,6	14,4
Heating total input current - 400V	A	5,5	6,2	6,4	7,5	8,1	9,2	13,0	14,0	19,0	26,0
Heating total input current - 230V	A	12,0	14,0	15,0	-	-	-	-	-	-	-
COP	W/W	3,41	3,32	3,40	3,52	3,36	3,40	3,20	3,44	3,27	3,03
Water flow rate system side	l/h	1368	1693	2164	2502	2756	3214	3634	4822	6034	7581
Pressure drop system side	kPa	19	16	18	17	21	32	34	49	30	42

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

CL - (HP/HA) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	6,5	8,4	10,5	12,0	14,1	15,7	19,1	24,2	31,6	38,0
Input power	kW	2,6	3,0	3,7	4,2	4,8	5,6	6,7	8,3	11,3	14,7
Cooling total input current - 400V	A	5,8	6,7	7,0	8,1	8,9	10,0	14,0	15,0	23,0	28,0
Cooling total input current - 230V	A	13,0	16,0	16,0	-	-	-	-	-	-	-
EER	W/W	2,49	2,79	2,79	2,90	2,94	2,82	2,85	2,91	2,81	2,58
Water flow rate system side	l/h	1104	1441	1785	2054	2411	2676	3272	4122	5388	6477
Useful head system side	kPa	76	75	69	92	86	80	64	99	158	145
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	7,8	9,7	12,4	14,3	15,8	18,4	20,8	27,6	34,5	43,4
Input power	kW	2,3	2,9	3,6	4,1	4,7	5,4	6,5	8,2	11,0	14,8
Heating total input current - 400V	A	5,9	6,6	6,8	8,1	8,7	9,9	13,0	15,0	21,0	28,0
Heating total input current - 230V	A	12,0	15,0	16,0	-	-	-	-	-	-	-
COP	W/W	3,42	3,34	3,42	3,50	3,35	3,40	3,21	3,35	3,14	2,92
Water flow rate system side	l/h	1368	1693	2164	2502	2756	3214	3634	4822	6034	7581
Useful head system side	kPa	68	67	56	84	78	66	53	72	133	103

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

CL - (H°) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	8,5	11,1	13,8	15,8	18,6	20,6	25,2	31,7	41,6	49,9
Input power	kW	2,8	3,3	4,0	4,4	5,1	6,0	7,2	8,7	11,6	15,4
Cooling total input current - 400V	A	5,8	6,6	6,9	8,0	8,7	10,0	14,0	15,0	22,0	27,0
Cooling total input current - 230V	A	13,0	16,0	17,0	-	-	-	-	-	-	-
EER	W/W	3,05	3,42	3,43	3,59	3,63	3,45	3,50	3,63	3,57	3,24
Water flow rate system side	l/h	1472	1922	2381	2740	3216	3570	4364	5498	7187	8639
Pressure drop system side	kPa	23	21	23	20	27	46	46	60	39	77
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	8,2	10,1	12,9	15,0	16,5	19,2	21,7	28,9	36,1	45,4
Input power	kW	2,0	2,5	3,1	3,5	4,0	4,6	5,5	6,8	9,0	12,4
Heating total input current - 400V	A	4,7	5,3	5,4	6,4	6,8	7,8	11,0	12,0	16,0	22,0
Heating total input current - 230V	A	10,0	12,0	13,0	-	-	-	-	-	-	-
COP	W/W	4,16	4,08	4,15	4,30	4,12	4,17	3,93	4,22	3,99	3,67
Water flow rate system side	l/h	1413	1749	2235	2585	2846	3320	3754	4981	6233	7832
Pressure drop system side	kPa	20	17	19	18	22	34	36	52	32	45

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

CL - (HP/HA) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	8,6	11,2	13,9	16,0	18,7	20,8	25,4	32,0	41,9	50,3
Input power	kW	2,7	3,2	4,0	4,4	5,1	5,9	7,2	8,9	12,1	15,8
Cooling total input current - 400V	A	6,2	7,0	7,3	8,6	9,4	11,0	15,0	16,0	24,0	30,0
Cooling total input current - 230V	A	14,0	17,0	17,0	-	-	-	-	-	-	-
EER	W/W	3,13	3,50	3,50	3,64	3,69	3,52	3,55	3,58	3,45	3,18
Water flow rate system side	l/h	1472	1922	2381	2740	3216	3570	4364	5498	7187	8639
Useful head system side	kPa	63	59	48	79	66	55	27	41	81	57
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	8,1	10,0	12,8	14,8	16,3	19,1	21,6	28,6	35,8	45,0
Input power	kW	1,9	2,4	3,1	3,4	4,0	4,6	5,5	7,0	9,4	12,8
Heating total input current - 400V	A	5,0	5,6	5,8	7,0	7,5	8,5	11,0	13,0	18,0	24,0
Heating total input current - 230V	A	11,0	13,0	14,0	-	-	-	-	-	-	-
COP	W/W	4,18	4,11	4,19	4,30	4,13	4,19	3,94	4,09	3,80	3,52
Water flow rate system side	l/h	1413	1749	2235	2585	2846	3320	3754	4981	6233	7832
Useful head system side	kPa	66	65	54	82	76	63	49	65	124	93

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			025	030	040	050	070	080	090	100	150	200
Cooling capacity with low leaving water temp (UE n° 2016/2281)												
SEER	°	W/W	2,93	3,27	3,32	3,45	3,43	3,27	3,39	4,06	4,06	3,66
	A,P	W/W	3,11	3,47	3,53	3,62	3,62	3,46	3,60	4,06	3,85	3,60
ηsc	°	%	114,20	127,60	129,60	134,80	134,00	127,80	132,40	159,20	159,20	143,40
	A,P	%	121,40	135,90	138,00	142,00	141,70	135,30	141,00	159,50	150,80	141,10
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)												
Pdesignh	°,A,P	kW	-	-	-	-	-	-	-	-	-	-
SCOP	°	W/W	3,35	3,35	3,45	3,58	3,45	3,53	3,30	3,53	3,35	3,23
	A,P	W/W	3,43	3,43	3,53	3,63	3,50	3,58	3,35	3,45	3,23	3,20
ηsh	°	%	131,00	131,00	135,00	140,00	135,00	138,00	129,00	138,00	131,00	126,00
	A,P	%	134,00	134,00	138,00	142,00	137,00	140,00	131,00	135,00	126,00	125,00
Efficiency energy class	°,A,P		A+	A+	A+	A+	A+	A+	A+	A+	A+	A+

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			025	030	040	050	070	080	090	100	150	200
Power supply: °												
Electric data												
Maximum current (FLA)	°	A	11,0	11,9	11,9	13,5	14,7	15,2	20,4	27,0	30,3	40,8
	A,P	A	11,4	12,4	12,3	14,3	15,4	15,9	21,1	29,0	33,4	43,8
Peak current (LRA)	°	A	44,6	44,6	57,1	64,2	74,2	94,2	105,2	77,7	109,3	125,6
	A,P	A	45,0	45,0	57,6	64,9	74,9	94,9	105,9	79,6	112,4	128,6

Size			025	030	040	050	070	080	090	100	150	200
Power supply: M												
Electric data												
Maximum current (FLA)	°	A	19,0	24,0	24,0	-	-	-	-	-	-	-
	A,P	A	19,8	24,7	25,0	-	-	-	-	-	-	-
Peak current (LRA)	°	A	86,0	96,0	96,0	-	-	-	-	-	-	-
	A,P	A	87,1	96,5	97,1	-	-	-	-	-	-	-

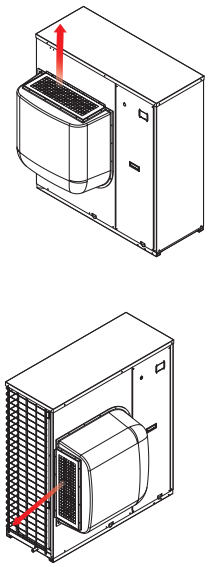
GENERAL TECHNICAL DATA

Size			025	030	040	050	070	080	090	100	150	200
Compressor												
Type	°,A,P	type	Scroll									
Compressor regulation	°,A,P	Type	On-off									
Number	°,A,P	no.	1	1	1	1	1	1	1	2	2	2
Circuits	°,A,P	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	°,A,P	type	R410A									
Refrigerant charge (1)	°,A,P	kg	2,7	2,7	4,3	5,6	5,6	5,6	5,7	8,3	8,0	7,5
System side heat exchanger												
Type	°,A,P	type	Brazed plate									
Number	°,A,P	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	°,A,P	Type	Gas - F									
Size (in)	°,A,P	Ø	1¼									
Size (out)	°,A,P	Ø	1¼									
Fan												
Type	°,A,P	type	Plug-fan									
Fan motor	°,A,P	type	Inverter									
Number	°,A,P	no.	1	1	1	1	1	1	1	2	2	2
Air flow rate	°,A,P	m^3/h	4000	4000	6500	6500	6500	6500	7500	10000	12000	16000
High static pressure	°,A,P	Pa	50	50	50	80	80	80	80	80	100	100
Intake plus machine body												
Sound power level	°,A,P	dB(A)	78,0	78,0	73,0	73,0	73,0	73,0	76,0	74,0	79,0	80,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	41,0	41,0	41,0	41,0	44,0	42,0	47,0	48,0
Machine exhaust												
Sound power level	°,A,P	dB(A)	78,0	78,0	78,0	78,0	78,0	78,0	81,0	78,0	83,0	85,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	46,0	46,0	46,0	46,0	49,0	47,0	52,0	54,0

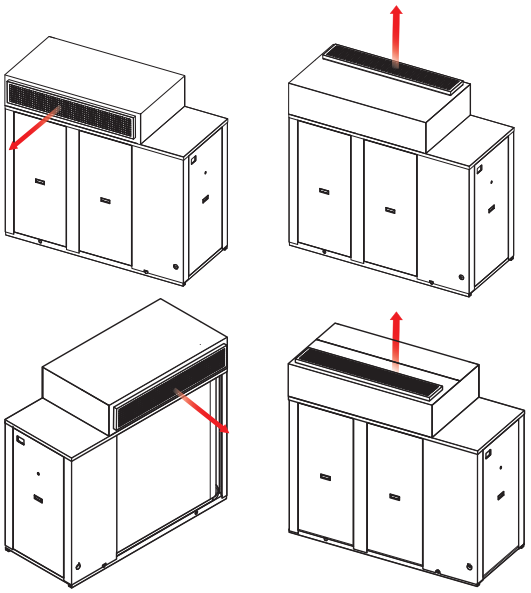
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DISCHARGE HOOD POSSIBLE CONFIGURATIONS

CL 025 ÷ 090



CL 100 ÷ 200

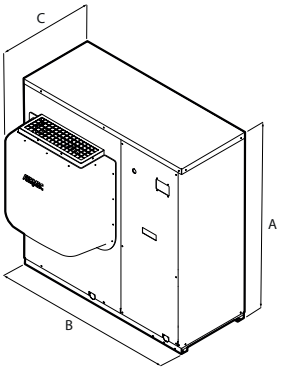


Air supply
Horizontal or vertical, adjustable during installation for all sizes.
Directional air discharge hood:

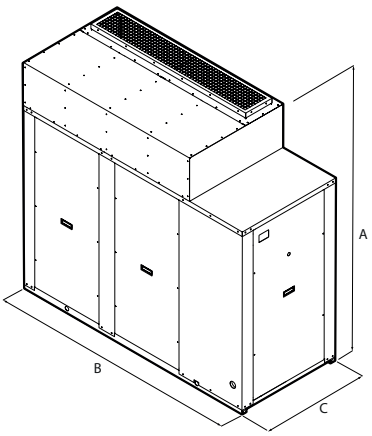
— plastic for sizes 050 to 090
— galvanised steel for the other sizes

DIMENSIONS

CL 025 ÷ 090



CL 100 ÷ 200



Size			025	030	040	050	070	080	090	100	150	200
Dimensions and weights												
A	°,A,P	mm	1028	1028	1281	1281	1281	1281	1281	1674	1674	1674
B	°,P	mm	1005	1005	1160	1160	1160	1160	1160	1897	1897	1897
	A	mm	1366	1366	1610	1610	1610	1610	1610	1897	1897	1897
C	°,A,P	mm	702	702	798	798	798	798	798	801	801	801
Empty weight	°	kg	142	142	229	229	240	240	234	504	527	515
	A	kg	172	172	274	274	284	284	279	567	593	581
	P	kg	148	148	239	239	250	250	243	517	543	531

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

NLC 0280-1250

Air-water chiller

Cooling capacity 53 ÷ 322 kW

- **High efficiency also at partial loads**
- **Complete air flow versatility**
- **EC fan Plug-fan with high performance**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Chiller offering chilled/hot water, designed to mit air conditioning needs in residential / commercial complexes or industrial applications.
Indoor units with Scroll compressors, centrifugal fans and plate heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to -10°C.

Units mono or dual-circuit

The range includes units with 2 compressors in single circuit and units with 4 compressors divided into two independent circuits.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.
In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

Hot water production

In the configuration with desuperheater or total recovery, it is also possible to produce free-hot water.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating

system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.
VT: Anti-vibration supports.
FLG: Flange for ducts.
FILW: Water filter

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
KRQ: Electric heater for the control and electric power board.
KRA: Anti-freeze electric heater for the buffer tank.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
AER485P1	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	°,A,E	•	•	•	•											

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
C-TOUCH	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
PR4	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

FILTROW

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°, A, E	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)

(1) Installation is mandatory, contrarily garantee becomes void.

Ver	0700	0750	0800	0900	1000	1100	1250
°, A, E	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)

(1) Installation is mandatory, contrarily garantee becomes void.

Flange for ducts

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°	FLG1	FLG1	FLG1	FLG1	FLG1	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)
A, E	FLG1	FLG1	FLG1	FLG1	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)

(1) x... indicates the quantity to buy.

Ver	0700	0750	0800	0900	1000	1100	1250
°	FLG1 x 2 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)
A, E	FLG1 x 2 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)

(1) x... indicates the quantity to buy.

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675
Integrated hydronic kit: 00								
°, A, E	VT17	VT17	VT17	VT17	-	-	-	-
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08								
°, A, E	VT11	VT11	VT11	VT11	-	-	-	-
Integrated hydronic kit: P1, P2, P3, P4, P5, P6, P7, P8								
°, A, E	VT13	VT13	VT13	VT13	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675
Integrated hydronic kit: 00								
°	-	-	-	-	AVX437	AVX421	AVX421	AVX421
A, E	-	-	-	-	AVX421	AVX421	AVX421	AVX421
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08								
°	-	-	-	-	AVX439	AVX423	AVX423	AVX423
A, E	-	-	-	-	AVX423	AVX423	AVX423	AVX423
Integrated hydronic kit: P1, P3, P5, P7								
°	-	-	-	-	AVX438	AVX421	AVX421	AVX421
A, E	-	-	-	-	AVX421	AVX421	AVX421	AVX421

Ver	0280	0300	0330	0350	0550	0600	0650	0675
Integrated hydronic kit: P2, P4, P6, P8								
°	-	-	-	-	AVX438	AVX422	AVX422	AVX422
A, E	-	-	-	-	AVX422	AVX422	AVX422	AVX422

The accessory cannot be fitted on the configurations indicated with -

Ver	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00							
°	AVX424	AVX440	AVX440	AVX444	AVX431	AVX431	AVX431
A, E	AVX424	AVX428	AVX431	AVX431	AVX431	AVX431	AVX431
Integrated hydronic kit: 01, 03, 05, 07							
°	AVX427	AVX441	AVX441	AVX446	AVX435	AVX434	AVX434
A, E	AVX427	AVX430	AVX434	AVX434	AVX434	AVX434	AVX434
Integrated hydronic kit: 02, 04, 06, 08							
°	AVX427	AVX441	AVX441	AVX446	AVX435	AVX436	AVX436
A, E	AVX427	AVX430	AVX435	AVX435	AVX435	AVX436	AVX436
Integrated hydronic kit: P1, P3, P5, P7							
°	AVX425	AVX425	AVX442	AVX445	AVX432	AVX432	AVX432
A, E	AVX425	AVX429	AVX432	AVX432	AVX432	AVX432	AVX432
Integrated hydronic kit: P2, P4, P6, P8							
°	AVX426	AVX426	AVX443	AVX445	AVX433	AVX433	AVX433
A, E	AVX426	AVX429	AVX433	AVX433	AVX433	AVX433	AVX433

DRE: Device for peak current reduction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°, A, E	DRE275 (1)	DRE275 (1)	DRE300 (1)	DRE350 (1)	DRE552 (1)	DRE602 (1)	DRE652 (1)	DRE675 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
°, A, E	DRE350 x 2	DRE552 x 2	DRE552 x 2	DRE602 x 2	DRE652 x 2	DRE675 x 2	DRE1250 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°, A, E	RIFNLC1	RIFNLC1	RIFNLC2	RIFNLC3	RIFNLC1	RIFNLC1	RIFNLC1	RIFNLC4

A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
°, A, E	RIFNLC3 x 2 (1)	RIFNLC3 + RIFNLC2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1)	RIFNLC4 x 2 (1)	RIFNLC3 x 2 (1)

(1) x... indicates the quantity to buy.
A grey background indicates the accessory must be assembled in the factory

Anti-condensate electric board resistance

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°, A, E	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ

A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
°, A, E	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ

A grey background indicates the accessory must be assembled in the factory

Anti-freeze electric heater for the storage tank

Ver	0280	0300	0330	0350	0550	0600	0650	0675
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08								
°, A, E	KRA1	KRA1	KRA1	KRA1	KRA2	KRA2	KRA2	KRA2

A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08							
°, A, E	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NLC**
4,5,6,7		**Size** 0280, 0300, 0330, 0350, 0550, 0600, 0650, 0675, 0700, 0750, 0800, 0900, 1000, 1100, 1250
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	C	Motocondensing unit
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with storage tank and inverter pump/s
	05	Storage tank with low-head inverter pump
	06	Storage tank with low head inverter pump + stand-by pump
	07	Storage tank with high head inverter pump
	08	Storage tank with high head inverter pump + stand-by pump
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with pump/s, with inverter speed
	P5	Single low head pump + fixed speed inverter (5)
	P6	Single low head pump with fixed speed inverter + stand-by pump (5)
	P7	Single high head pump + fixed speed inverter (5)
	P8	Single high head pump with fixed speed inverter + stand-by pump (5)

(1) Water produced from 4 °C ÷ 18 °C
(2) Water produced from 4 °C ÷ -10 °C
(3) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(4) Options not available for standard unit "°", condensing unit and with alls hydronic kit.
(5) The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.

PERFORMANCE SPECIFICATIONS

NLC - °

Size		0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	52,1	57,1	62,8	75,4	94,2	112,0	123,0	137,4	151,4	170,2	189,7	220,2	242,6	277,4	306,7
Input power	kW	20,4	23,4	24,3	28,9	39,3	44,3	50,1	53,7	58,6	66,6	79,0	86,4	99,8	107,6	121,3
Cooling total input current	A	38,0	42,0	46,0	57,0	68,0	77,0	85,0	92,0	113,0	121,0	136,0	148,0	169,0	181,0	208,0
EER	W/W	2,56	2,44	2,59	2,61	2,40	2,53	2,45	2,56	2,58	2,56	2,40	2,55	2,43	2,58	2,53
Water flow rate system side	l/h	8969	9828	10807	12972	16236	19277	21167	23676	26081	29294	32644	37884	41733	47712	52763
Pressure drop system side	kPa	19	22	28	27	43	27	31	43	37	30	38	35	35	41	48

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NLC - A

Size		0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	54,0	59,4	66,9	78,6	106,3	119,5	129,2	146,3	157,4	177,9	209,7	233,2	257,6	290,6	319,2
Input power	kW	19,5	21,5	23,4	27,7	37,7	42,9	45,0	52,4	55,3	60,3	75,4	84,8	89,6	105,7	115,9
Cooling total input current	A	36,0	40,0	43,0	53,0	63,0	71,0	73,0	87,0	107,0	113,0	126,0	139,0	146,0	173,0	198,0
EER	W/W	2,77	2,76	2,85	2,84	2,82	2,78	2,87	2,79	2,85	2,95	2,78	2,75	2,88	2,75	2,75
Water flow rate system side	l/h	9295	10223	11511	13539	18298	20566	22250	25188	27095	30617	36080	40118	44310	49980	54911
Pressure drop system side	kPa	20	24	22	30	25	30	36	36	25	25	33	33	35	37	43

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NLC - E

Size		0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	52,2	58,0	64,2	73,4	102,9	115,6	124,5	142,6	151,1	171,3	201,2	224,8	248,0	282,8	310,6
Input power	kW	19,3	21,5	23,7	27,4	37,6	42,7	45,9	52,5	55,4	60,1	74,9	85,2	90,6	105,8	116,0
Cooling total input current	A	36,0	39,0	43,0	53,0	62,0	69,0	73,0	85,0	106,0	112,0	123,0	138,0	146,0	170,0	197,0
EER	W/W	2,70	2,70	2,71	2,67	2,74	2,71	2,71	2,72	2,73	2,85	2,69	2,64	2,74	2,67	2,68
Water flow rate system side	l/h	8986	9982	11047	12628	17714	19896	21442	24552	25995	29483	34637	38675	42661	48640	53433
Pressure drop system side	kPa	19	23	20	26	23	29	34	34	23	24	31	30	33	35	41

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
SEER - 12/7 (EN14825: 2018) (1)																	
	°	W/W	5,33	5,02	4,92	4,97	4,25	4,87	4,57	4,73	4,28	4,15	4,10	4,12	4,10	4,15	4,10
SEER	A	W/W	5,79	5,77	5,33	5,34	5,24	5,33	5,15	5,03	4,75	4,93	4,55	4,46	4,63	4,42	4,35
	E	W/W	4,83	4,98	4,74	4,80	4,58	4,70	4,53	4,55	4,48	4,63	4,19	4,14	4,31	4,19	4,12
	°	%	210,30	197,80	193,90	195,80	167,10	191,60	179,60	186,00	168,20	162,80	161,00	161,90	161,10	163,10	161,00
Seasonal efficiency	A	%	228,60	227,60	210,20	210,40	206,70	210,10	202,90	198,30	186,90	194,00	178,80	175,50	182,30	173,90	171,10
	E	%	190,30	196,00	186,70	189,00	180,10	185,00	178,30	179,10	176,20	182,10	164,60	162,70	169,20	164,40	161,90
SEER - 23/18 (EN14825: 2018) (2)																	
	°	W/W	6,25	5,89	5,79	5,84	5,02	5,72	5,37	5,58	5,08	4,91	4,86	4,90	4,86	4,93	4,87
SEER	A	W/W	6,84	6,82	6,27	6,27	6,17	6,27	6,07	5,93	5,62	5,84	5,39	5,29	5,49	5,25	5,16
	E	W/W	5,68	5,85	5,58	5,64	5,39	5,54	5,35	5,37	5,29	5,46	4,96	4,90	5,10	4,95	4,88
	°	%	246,80	232,50	228,50	230,50	197,70	225,80	211,90	220,10	200,00	193,40	191,40	192,80	191,50	194,10	191,60
Seasonal efficiency	A	%	270,60	269,70	247,60	247,70	243,60	247,80	239,80	234,30	221,80	230,40	212,40	208,50	216,60	206,90	203,50
	E	%	224,20	230,80	220,30	222,70	212,70	218,40	211,00	211,80	208,60	215,50	195,30	193,00	200,90	195,00	192,00
SEPR - (EN 14825: 2018) (2)																	
	°	W/W	6,54	6,22	6,12	6,02	5,18	5,73	5,32	5,70	5,45	5,08	5,04	5,25	5,04	5,07	5,03
SEPR	A	W/W	6,87	6,88	6,44	6,47	6,21	6,35	5,98	5,90	5,94	6,32	5,65	5,40	5,72	5,41	5,39
	E	W/W	5,91	5,92	5,65	5,55	5,14	5,36	5,03	5,15	5,12	5,48	5,09	5,01	5,09	5,05	5,03

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Electric data																	
Maximum current (FLA)	°	A	52,0	56,0	62,0	73,0	103,0	111,0	119,0	132,0	146,0	169,0	206,0	222,0	238,0	263,0	289,0
	A,E	A	52,0	56,0	62,0	73,0	92,0	111,0	119,0	132,0	146,0	158,0	183,0	210,0	238,0	263,0	289,0
Peak current (LRA)	°	A	128,0	130,0	133,0	216,0	261,0	273,0	281,0	358,0	290,0	346,0	353,0	372,0	400,0	489,0	515,0
	A,E	A	128,0	130,0	133,0	216,0	273,0	273,0	281,0	358,0	290,0	357,0	376,0	384,0	400,0	489,0	515,0

GENERAL TECHNICAL DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Compressor																	
Type	°,A,E	type	Scroll														
Compressor regulation	°,A,E	Type	On/Off														
Number	°,A,E	no.	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4
Circuits	°,A,E	no.	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Refrigerant	°,A,E	type	R410A														
Refrigerant load circuit 1 (1)	°	kg	7,0	7,0	8,5	9,0	13,7	15,0	18,0	19,0	9,5	8,3	13,8	13,5	15,0	19,1	19,1
	A	kg	8,7	8,5	9,5	10,0	18,0	18,7	22,0	22,0	10,7	9,5	18,7	19,5	22,0	22,0	22,0
	E	kg	8,7	8,5	9,5	10,0	18,0	18,7	21,0	21,5	10,7	9,5	18,7	19,0	21,1	22,0	22,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	9,5	12,3	13,8	13,5	15,0	19,1	19,1
	A	kg	-	-	-	-	-	-	-	-	10,7	17,0	18,7	19,5	22,0	22,0	22,0
	E	kg	-	-	-	-	-	-	-	-	10,7	17,0	18,7	19,0	20,6	22,0	22,0
System side heat exchanger																	
Type	°,A,E	type	Brazed plate														
Number	°,A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

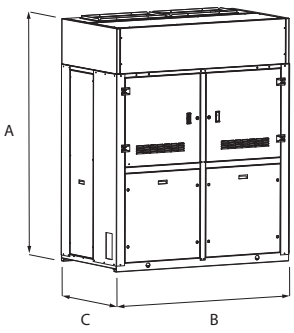
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

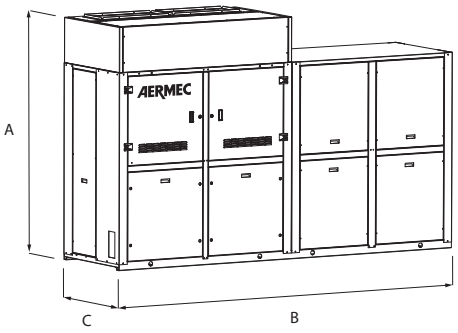
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00																	
System side hydraulic connections																	
Connections (in/out)	°,A,E	Type	Grooved joints														
Sizes (in/out)	°	Ø	2″	2″	2″	2″	2″	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	3″	3″	3″	3″	3″
	A,E	Ø	2″	2″	2″	2″	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	3″	3″	3″	3″	3″

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, P1, P2, P3, P4, P5, P6, P7, P8																	
System side hydraulic connections																	
Connections (in/out)	°,A,E	Type	Grooved joints														
Sizes (in/out)	°,A,E	Ø	2″	2″	2″	2″	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	3″	3″	3″	3″	3″

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Fan																	
Type	°,A,E	type	Plug-fun														
Fan motor	°,A,E	type	EC Inverter motors														
Number	°	no.	2	2	2	2	2	4	4	4	4	4	4	6	8	8	8
	A,E	no.	2	2	2	2	4	4	4	4	4	6	8	8	8	8	8
Air flow rate	°	m^3/h	21600	24000	21150	23600	23200	34050	34050	38200	47150	46750	46350	62150	68100	66650	71750
	A	m^3/h	21150	23600	19400	22050	27700	33350	27150	32750	44050	57900	55350	55350	54300	65450	65450
	E	m^3/h	15000	18400	14650	16450	14900	22200	14600	21750	32900	41900	29850	29850	29200	43500	43500
Machine exhaust																	
Sound power level	°	dB(A)	83,3	85,6	82,9	85,4	87,5	83,9	83,9	86,1	88,4	89,6	90,5	86,9	86,9	89,1	89,1
	A	dB(A)	83,6	86,1	81,9	84,5	82,9	85,2	82,9	85,1	87,5	85,8	85,9	88,2	85,9	88,1	88,1
	E	dB(A)	76,7	80,1	76,5	78,3	75,2	78,5	75,2	78,4	81,3	80,0	78,2	81,5	78,2	81,4	81,4
Intake plus machine body																	
Sound power level	°	dB(A)	78,4	80,1	79,2	81,0	83,8	86,4	84,8	85,6	83,9	85,1	86,7	87,7	87,2	89,3	89,3
	A	dB(A)	78,7	80,1	80,0	81,2	86,1	87,4	86,1	87,1	84,0	86,5	89,1	92,5	89,1	90,1	90,4
	E	dB(A)	76,8	76,7	78,6	79,2	84,2	85,1	84,1	84,7	81,0	82,4	86,2	89,7	86,2	86,6	86,8

DIMENSIONS





Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00																	
Dimensions and weights																	
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	°	mm	1750	1750	1750	1750	1750	3150	3150	3150	3500	3500	3500	4900	6300	6300	6300
	A,E	mm	1750	1750	1750	1750	3150	3150	3150	3150	3500	4900	6300	6300	6300	6300	6300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	°	kg	759	759	787	798	994	1409	1415	1450	1510	1682	1858	2294	2692	2775	2789
	A,E	kg	775	775	809	813	1432	1436	1470	1485	1553	2156	2728	2744	2818	2844	2858

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 01, 03, 05, 07																	
Dimensions and weights																	
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	°	mm	3400	3400	3400	3400	3500	4150	4150	4150	5250	4900	5250	5900	7300	7300	7300
	A,E	mm	3400	3400	3400	3400	4150	4150	4150	4150	5250	5900	7300	7300	7300	7300	7300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	°	kg	973	973	1001	1022	1479	1691	1707	1741	1889	2061	2259	2599	3018	3101	3115
	A,E	kg	989	989	1023	1038	1715	1719	1761	1777	1931	2438	3035	3050	3144	3170	3184

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 02, 04, 06, 08																	
Dimensions and weights																	
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	°	mm	3400	3400	3400	3400	3500	4150	4150	4150	5250	4900	5250	5900	7300	7300	7300
	A,E	mm	3400	3400	3400	3400	4150	4150	4150	4150	5250	5900	7300	7300	7300	7300	7300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	°	kg	1016	1016	1044	1076	1533	1745	1770	1804	1942	2114	2334	2674	3114	3197	3211
	A,E	kg	1032	1032	1066	1091	1768	1772	1824	1840	1985	2492	3110	3126	3240	3266	3280

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: P1, P3, P5, P7																	
Dimensions and weights																	
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	°	mm	2500	2500	2500	2500	2500	3150	3150	3150	4250	4250	7300	4900	6300	6300	6300
	A,E	mm	2500	2500	2500	2500	3150	3150	3150	3150	4250	4900	6300	6300	6300	6300	6300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	°	kg	888	888	916	937	1146	1468	1483	1518	1664	1836	2041	2375	2793	2876	2890
	A,E	kg	904	904	939	953	1491	1495	1538	1554	1707	2215	2809	2825	2919	2945	2959

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: P2, P4, P6, P8																	
Dimensions and weights																	
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	°	mm	2500	2500	2500	2500	2500	3150	3150	3150	4250	4250	7300	4900	6300	6300	6300
	A,E	mm	2500	2500	2500	2500	3150	3150	3150	3150	4250	4900	6300	6300	6300	6300	6300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	°	kg	931	960	991	1199	1522	1546	1581	1718	1890	2117	2451	2888	2972	3054	2986
	A	kg	948	948	982	1007	1545	1549	1601	1617	1760	2268	2885	2900	3014	3040	3054
	E	kg	948	948	982	1007	1545	1549	1601	1617	1760	2268	2885	2900	3014	3040	931

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www.aermec.com

NLC 0280H-1250H

Reversible air/water heat pump

Cooling capacity 53 ÷ 322 kW – Heating capacity 55 ÷ 342 kW

- **High efficiency also at partial loads**
- **Complete air flow versatility**
- **EC fan Plug-fan with high performance**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
Indoor units with Scroll compressors, centrifugal fans and plate heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Work up to 44°C of outdoor air temperature at full load, depending on size and version. For further details refer to the selection software / technical documentation.

Units mono or dual-circuit

The range includes units with 2 compressors in single circuit and units with 4 compressors divided into two independent circuits.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.
In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

FLG: Flange for ducts.
FILW: Water filter

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
KRB: Electric anti-freeze resistance kit for base.
KRQ: Electric heater for the control and electric power board.
KRA: Anti-freeze electric heater for the buffer tank.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FL	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	A,E	•	•	•	•											

Remote panel

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
PR4	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Water filter

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A, E	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)

(1) Installation is mandatory, contrarily garantee becomes void.

Ver	0700	0750	0800	0900	1000	1100	1250
A, E	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)

(1) Installation is mandatory, contrarily garantee becomes void.

Flange for ducts

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A, E	FLG1	FLG1	FLG1	FLG1	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)

(1) x... indicates the quantity to buy.

Ver	0700	0750	0800	0900	1000	1100	1250
A, E	FLG1 x 2 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)

(1) x... indicates the quantity to buy.

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00															
A, E	VT17	VT17	VT17	VT17	-	-	-	-	-	-	-	-	-	-	-
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08															
A, E	VT11	VT11	VT11	VT11	-	-	-	-	-	-	-	-	-	-	-
Integrated hydronic kit: P1, P2, P3, P4, P5, P6, P7, P8															
A, E	VT13	VT13	VT13	VT13	-	-	-	-	-	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00															
A, E	-	-	-	-	AVX410	AVX410	AVX410	AVX410	AVX410	AVX416	AVX418	AVX418	AVX420	AVX420	AVX420
Integrated hydronic kit: 01, 02, 03, 04															
A, E	-	-	-	-	AVX412	AVX412	AVX412	AVX412	AVX415	AVX417	AVX419	AVX419	AVX419	AVX419	AVX419
Integrated hydronic kit: 05, 06, 07, 08															
A	-	-	-	-	AVX423	AVX412	AVX412	AVX412	AVX415	AVX417	AVX419	AVX419	AVX419	AVX419	AVX419
E	-	-	-	-	AVX412	AVX412	AVX412	AVX412	AVX415	AVX417	AVX419	AVX419	AVX419	AVX419	AVX419
Integrated hydronic kit: P1, P3, P5, P7															
A, E	-	-	-	-	AVX410	AVX410	AVX410	AVX410	AVX413	AVX416	AVX418	AVX418	AVX420	AVX420	AVX420
Integrated hydronic kit: P2, P4, P6, P8															
A, E	-	-	-	-	AVX411	AVX411	AVX411	AVX411	AVX414	AVX416	AVX418	AVX418	AVX420	AVX420	AVX420

The accessory cannot be fitted on the configurations indicated with -

DRE: Device for peak current reduction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A, E	DRE275 (1)	DRE275 (1)	DRE300 (1)	DRE350 (1)	DRE552 (1)	DRE602 (1)	DRE652 (1)	DRE675 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
A, E	DRE350 x 2	DRE552 x 2	DRE552 x 2	DRE602 x 2	DRE652 x 2	DRE675 x 2	DRE1250 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A, E	RIFNLC1	RIFNLC1	RIFNLC2	RIFNLC3	RIFNLC1	RIFNLC1	RIFNLC1	RIFNLC4

A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
A, E	RIFNLC3 x 2 (1)	RIFNLC3 + RIFNLC2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1)	RIFNLC4 x 2 (1)	RIFNLC3 x 2 (1)

(1) x... indicates the quantity to buy.
A grey background indicates the accessory must be assembled in the factory

Anti-condensate electric board resistance

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
A, E	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ

A grey background indicates the accessory must be assembled in the factory

Anti-freeze electric heater for the storage tank

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
A, E	KRA1	KRA1	KRA1	KRA1	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2

A grey background indicates the accessory must be assembled in the factory

Electric heater for the base

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
A, E	KRB21 (1)	KRB21 (1)	KRB21 (1)	KRB21 (1)	KRB22 (1)	KRB22 (1)	KRB22 (1)	KRB22 (1)	KRB23 (1)	KRB24 (1)	KRB25 (1)	KRB25 (1)	KRB25 (1)	KRB25 (1)	KRB25 (1)

(1) Incompatible with the condensate collection basin accessory with integrated resistance.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NLC**
4,5,6,7		**Size** 0280, 0300, 0330, 0350, 0550, 0600, 0650, 0675, 0700, 0750, 0800, 0900, 1000, 1100, 1250
8		**Operating field (1)**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**

Field	Description
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with storage tank and inverter pump/s
05	Storage tank with low-head inverter pump
06	Storage tank with low head inverter pump + stand-by pump
07	Storage tank with high head inverter pump
08	Storage tank with high head inverter pump + stand-by pump
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with pump/s, with inverter speed
P5	Single low head pump + fixed speed inverter (3)
P6	Single low head pump with fixed speed inverter + stand-by pump (3)
P7	Single high head pump + fixed speed inverter (3)
P8	Single high head pump with fixed speed inverter + stand-by pump (3)

(1) Water produced from 4 °C ÷ 18 °C
(2) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.

PERFORMANCE SPECIFICATIONS

NLC - HA / HE

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Cooling performance 12 °C / 7 °C (1)																	
Cooling capacity	A	kW	54,4	60,4	66,7	78,6	102,5	115,3	126,0	143,4	158,1	181,1	202,0	232,5	252,7	287,1	316,5
	E	kW	52,1	58,2	63,5	75,0	97,8	110,6	118,5	136,8	150,2	172,1	192,7	223,8	242,2	273,7	305,0
Input power	A	kW	20,0	22,5	24,4	28,6	37,7	43,4	46,9	54,6	57,4	66,3	74,7	87,1	93,6	108,9	127,4
	E	kW	20,4	23,0	25,5	29,4	40,1	46,0	49,1	56,5	58,8	67,2	79,8	90,2	97,1	112,6	128,0
Cooling total input current	A	A	36,0	41,0	45,0	56,0	68,0	77,0	81,0	96,0	112,0	121,0	136,0	155,0	162,0	192,0	219,0
	E	A	36,0	40,0	45,0	55,0	69,0	77,0	83,0	95,0	111,0	121,0	139,0	153,0	166,0	191,0	218,0
EER	A	W/W	2,72	2,69	2,73	2,75	2,72	2,66	2,69	2,63	2,75	2,73	2,70	2,67	2,70	2,64	2,48
	E	W/W	2,55	2,53	2,49	2,55	2,44	2,40	2,41	2,42	2,55	2,56	2,42	2,48	2,49	2,43	2,38
Water flow rate system side	A	l/h	9368	10396	11480	13535	17638	19855	21700	24691	27213	31158	34751	40001	43480	49382	54436
	E	l/h	8967	10021	10934	12905	16829	19040	20401	23542	25847	29620	33162	38500	41662	47091	52474
Pressure drop system side	A	kPa	21	25	23	30	24	29	35	35	26	25	34	34	36	38	44
	E	kPa	20	24	20	27	20	25	29	30	24	25	33	35	38	42	53
Heating performance 40 °C / 45 °C (2)																	
Heating capacity	A,E	kW	56,4	63,5	70,7	82,6	109,8	122,4	137,1	156,5	168,5	193,6	218,3	244,7	273,4	312,4	348,1
Input power	A,E	kW	19,1	21,9	24,0	27,8	37,0	41,5	46,4	53,7	55,9	65,1	73,6	82,9	91,5	105,2	118,1
Heating total input current	A,E	A	36,0	40,0	44,0	54,0	65,0	74,0	78,0	91,0	105,0	114,0	129,0	145,0	153,0	179,0	199,0
COP	A,E	W/W	2,95	2,90	2,95	2,97	2,97	2,95	2,95	2,91	3,01	2,97	2,97	2,95	2,99	2,97	2,95
Water flow rate system side	A,E	l/h	9781	11023	12266	14321	19050	21235	23760	27154	29225	33591	37889	42470	47456	54236	60425
Pressure drop system side	A,E	kPa	22	27	25	32	27	32	40	41	29	28	38	37	41	43	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Cooling capacity with low leaving water temp (UE n° 2016/2281)																	
SEER	A	W/W	4,48	4,50	4,52	4,71	4,89	4,74	4,65	4,52	4,38	4,33	4,51	4,47	4,36	4,29	4,08
	E	W/W	4,16	4,16	4,08	4,50	4,29	4,23	4,29	4,22	4,20	4,14	3,98	4,21	4,13	3,99	3,86
ηsc	A	%	176,10	177,10	177,80	185,20	192,50	186,40	183,10	177,70	172,20	170,30	177,50	175,80	171,40	168,70	160,00
	E	%	163,20	163,50	160,30	177,10	168,50	166,00	168,40	165,90	165,00	162,60	156,20	165,30	162,20	156,40	151,40
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)																	
SCOP	A,E	W/W	3,28	3,20	3,28	-	-	-	-	-	-	-	-	-	-	-	-
ηsh	A,E	%	128,00	125,00	128,00	-	-	-	-	-	-	-	-	-	-	-	-
Efficiency energy class	A,E		A+	A+	A+	-	-	-	-	-	-	-	-	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Electric data																	
Maximum current (FLA)	A,E	A	52,2	55,6	62,0	71,4	103,0	110,9	118,8	131,8	142,8	167,1	206,0	221,8	237,6	263,6	289,6
Peak current (LRA)	A,E	A	127,9	129,6	132,8	215,4	272,9	272,9	280,8	357,8	286,8	355,6	375,9	383,8	399,6	489,6	515,6

GENERAL TECHNICAL DATA

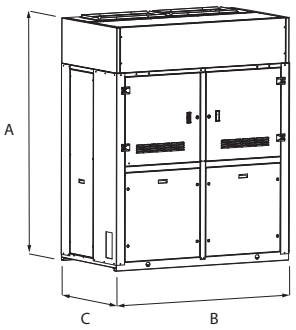
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Compressor																	
Type	A,E	type	Scroll														
Compressor regulation	A,E	Type	On-Off														
Number	A,E	no.	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4
Circuits	A,E	no.	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Refrigerant	A,E	type	R410A														
Refrigerant charge (1)	A,E	kg	9,2	9,5	11,0	11,0	18,5	20,0	25,0	25,0	23,0	32,0	42,0	42,0	50,0	50,0	50,0
System side heat exchanger																	
Type	A,E	type	Brazed plate														
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																	
Connections (in/out)	A,E	Type	Grooved joints														
Sizes (in/out)	A,E	Ø	2"	2"	2"	2"	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"
Fan																	
Type	A,E	type	Plug-fun														
Fan motor	A,E	type	EC Inverter motors														
Number	A,E	no.	2	2	2	2	4	4	4	4	4	6	8	8	8	8	8
Machine exhaust																	
Sound power level	A	dB(A)	84,1	87,9	86,3	88,9	85,2	87,9	86,4	89,5	91,9	86,7	88,2	90,9	89,4	92,5	92,5
	E	dB(A)	77,3	80,5	77,6	81,5	78,5	81,3	79,4	83,2	84,5	79,4	81,5	84,3	82,4	86,2	86,2

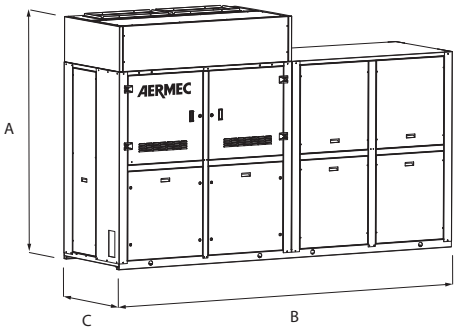
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Intake plus machine body																	
Sound power level	A	dB(A)	78,9	81,7	80,6	83,1	83,9	85,1	84,4	85,7	85,3	86,0	87,2	88,2	87,2	88,9	89,3
	E	dB(A)	75,1	78,0	76,0	79,7	82,3	82,8	82,3	84,1	82,7	85,3	85,3	85,8	85,3	87,1	88,2

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DIMENSIONS





Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Dimensions and weights																	
A	A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	A,E	mm	1750	1750	1750	1750	3150	3150	3150	3150	3500	4900	6300	6300	6300	6300	6300
C	A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	A,E	kg	790	790	828	832	1452	1456	1492	1507	1586	2194	2768	2783	2863	2889	2903
Dimensions and weights with pump/s																	
A	A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	A,E	mm	2500	2500	2500	2500	3150	3150	3150	3150	4250	4900	6300	6300	6300	6300	6300
C	A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Dimensions and weights with storage tank and pump/s																	
A	A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	A,E	mm	3400	3400	3400	3400	4150	4150	4150	4150	5250	5900	7300	7300	7300	7300	7300
C	A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100

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NSM 1402-9603

Air-water chiller

Cooling capacity 302 ÷ 2100 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **HP floating: ESEER +5% with inverter fans**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 51 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Inverter fans

Standard inverter fans for sizes and versions (°) from 2002 to 9603, optional for other sizes and versions. Option for all configurations.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

■ *As standard from size 5202÷6402 and 8403÷9603, optional for all other sizes.*

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO_5

Units include 1 control board for each compressor.
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** available for all models with inverter fans or with DCPX. Allows, with continuous fan modulation, to optimize the operation of the unit in any operating point, ensuring an increase in the energy efficiency at partial load. **ESEER up to +5% with inverter fans**
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.
— Possibility to control two units in a Master-Slave configuration (from size 1402 to 6402)

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud con-

nection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1 x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•						
AER485P1 x no. 3	°,A,L								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERBACP x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•						
AERBACP x no. 3	°,A,L								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERNET	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
MULTICHILLER-EVO	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
PRV3	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002
Fans: M										
°	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX111	DCPX111	DCPX112
A	DCPX111	DCPX111	DCPX111	DCPX111	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX113
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX111	DCPX111	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX114	DCPX114

Ver	3202	3402	3602	3902	4202	4502	4802	5202	5602	6002
Fans: M										
°	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX115
A	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX116	DCPX116	DCPX116	DCPX117	DCPX118
E, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	-	-
U	DCPX114	DCPX115	DCPX115	DCPX116	DCPX117	DCPX117	DCPX118	DCPX119	DCPX130	DCPX131

Ver	6402	6503	6703	6903	7203	8403	9603
Fans: M							
°	DCPX116	DCPX135+DCPX113	DCPX135+DCPX113	DCPX125+DCPX114	DCPX114+DCPX136	DCPX114+DCPX136	DCPX114+DCPX136
A	DCPX118	DCPX115+DCPX136	DCPX115+DCPX136	DCPX116+DCPX136	DCPX116+DCPX136	DCPX117+DCPX136	DCPX118+DCPX137
E	As standard	As standard	As standard	As standard	As standard	-	-
L	As standard	As standard	As standard	As standard	As standard	As standard	-
N	As standard	As standard	-	-	-	-	-
U	DCPX132	DCPX116+DCPX137	DCPX117+DCPX137	DCPX117+DCPX137	DCPX118+DCPX137	-	-

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ														
°	AVX900	AVX900	AVX900	AVX904	AVX904	AVX904	AVX904	AVX904	AVX904	AVX959	AVX959	AVX960	AVX960	AVX911
A, L	AVX901	AVX901	AVX901	AVX904	AVX959	AVX959	AVX959	AVX903	AVX903	AVX903	AVX903	AVX909	AVX909	AVX907
E, U	AVX901	AVX901	AVX959	AVX959	AVX959	AVX903	AVX903	AVX906	AVX906	AVX906	AVX906	AVX907	AVX907	AVX912
N	AVX959	AVX959	AVX903	AVX903	AVX903	AVX906	AVX906	AVX907	AVX907	AVX907	AVX907	AVX912	AVX910	AVX913

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00, TF, TG, TH, TI, TJ													
°	AVX911	AVX909	AVX909	AVX907	AVX907	AVX907	AVX912	AVX914	AVX914	AVX915	AVX916	AVX916	AVX916
A, L	AVX907	AVX912	AVX912	AVX912	AVX910	AVX913	AVX913	AVX924	AVX924	AVX925	AVX925	AVX927	AVX926
E, U	AVX910	AVX910	AVX913	AVX913	AVX920	AVX917	AVX918	AVX925	AVX927	AVX927	AVX928	-	-
N	AVX913	AVX917	AVX918	AVX919	AVX921	AVX921	AVX921	AVX926	-	-	-	-	-
Integrated hydronic kit: DA, DB, DC, DD, DE, PA, PB, PC, PD, PE													
°	AVX911	-	-	-	-	-	-	-	-	-	-	-	-
A, L	AVX907	-	-	-	-	-	-	-	-	-	-	-	-
E, U	AVX910	-	-	-	-	-	-	-	-	-	-	-	-
N	AVX913	-	-	-	-	-	-	-	-	-	-	-	-
Integrated hydronic kit: DF, DG, DH, DI, DJ, PF, PG, PH, PI, PJ													
°	AVX911	AVX909	AVX909	AVX907	AVX907	AVX907	AVX912	-	-	-	-	-	-
A, L	AVX907	AVX912	AVX912	AVX912	AVX910	AVX913	AVX913	-	-	-	-	-	-
E, U	AVX910	AVX910	AVX913	AVX913	AVX920	AVX917	AVX918	-	-	-	-	-	-
N	AVX913	AVX917	AVX918	AVX919	AVX921	AVX921	AVX921	-	-	-	-	-	-

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
°	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802Q
A, L	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
°	RIFNSM3002Q	RIFNSM3202Q	RIFNSM3402Q	RIFNSM3602Q	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
A, E, L, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
°, A, L	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Grids

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
°	GP3V	GP3V	GP3V	GP4V	GP4V	GP4V	GP4V	GP4V	GP4V
A, L	GP4V	GP4V	GP4VN	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V
E, U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
°	GP5V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP8V
A, L	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP9V	GP9V	GP9V
E, U	GP7V	GP7V	GP8V	GP8V	GP9V	GP10V	GP10V	GP11V	GP11V
N	GP8V	GP8V	GP9V	GP10V	GP11V	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V

A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
°	GP8V	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP11V
A, L	GP11V	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP5V+GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E, U	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP8V+GP8V	GP8V+GP8V	GP8V+GP8V	GP6V+GP11V	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
°, A, L	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23
E, N, U	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
°	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24
A, E, L	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
N	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23
U	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS24	KRS24

A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
°	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
A, L	KRS24	KRS24	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E, U	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
N	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSM**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403, 9603
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (3)
9		**Model**
	C	Motocondensing unit (4)
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (5)
	T	With total recovery (6)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	M	Oversized
14		**Power supply**
	8	400V~3 50Hz with magnet circuit breakers
	°	400V~3 50Hz with fuses
15,16		**Integrated hydronic kit**

Field		Description
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump
		Kit with 2 pumps
	TF	Double pump F (7)
	TG	Double pump G (7)
	TH	Double pump H (7)
	TI	Double pump I (7)
	TJ	Double pump J (7)

(1) Water produced from 4 °C ÷ 18 °C
(2) Water produced from 4 °C ÷ - 8 °C
(3) Water produced from 4 °C ÷ 15 °C
(4) The motor condensing units are not configurable with option D and T, and with the integrated hydronic kit
(5) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(6) The models 1402° - 1602° - 1802° cannot have total recovery, which is available for all the other sizes and versions. If it is necessary to have total recovery as well as the hydronic kit, feasibility must be evaluated when ordering.
(7) The unit from 5602 to 9603 can only have hydronic kit "TF - TG - TH- TI - TJ"

PERFORMANCE SPECIFICATIONS

NSM - °

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	307,5	348,9	397,0	450,3	489,4	524,7	543,8	577,3	613,8	680,5	725,1	770,1	813,8	906,1
Input power	kW	104,8	121,0	139,0	152,8	166,4	180,6	193,9	210,5	226,5	232,7	247,5	272,1	298,3	316,2
Cooling total input current	A	182,0	207,0	229,0	257,0	281,0	306,0	329,0	356,0	381,0	392,0	414,0	447,0	484,0	520,0
EER	W/W	2,93	2,88	2,86	2,95	2,94	2,91	2,81	2,74	2,71	2,92	2,93	2,83	2,73	2,87
Water flow rate system side	l/h	52881	59999	68270	77459	84185	90223	93509	99261	105543	117009	124685	132413	139916	155801
Pressure drop system side	kPa	27	36	38	49	57	26	28	33	35	39	42	47	38	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM °

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	958,5	1051,2	1099,1	1168,1	1195,0	1237,7	1327,6	1393,8	1439,8	1578,6	1669,7	1742,2	1859,9
Input power	kW	345,9	360,3	388,1	403,4	430,8	453,1	460,3	488,6	517,2	559,8	575,1	659,2	730,6
Cooling total input current	A	573,0	597,0	641,0	668,0	712,0	749,0	766,0	806,0	857,0	927,0	966,0	1103,0	1230,0
EER	W/W	2,77	2,92	2,83	2,90	2,77	2,73	2,88	2,85	2,78	2,82	2,90	2,64	2,55
Water flow rate system side	l/h	164794	180726	188953	200816	205451	212795	228246	239604	247511	271348	287011	299461	319697
Pressure drop system side	kPa	41	48	42	46	48	55	62	44	46	30	33	36	40

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - L

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	302,4	344,0	392,7	428,1	490,9	513,8	537,4	583,4	602,8	664,4	709,1	771,0	826,1	908,8
Input power	kW	102,7	117,2	135,7	155,9	167,8	179,4	192,5	202,9	215,3	238,3	261,2	265,4	296,6	316,1
Cooling total input current	A	173,0	196,0	218,0	254,0	277,0	297,0	319,0	336,0	354,0	391,0	426,0	429,0	473,0	509,0
EER	W/W	2,94	2,94	2,89	2,75	2,93	2,86	2,79	2,88	2,80	2,79	2,72	2,91	2,79	2,88
Water flow rate system side	l/h	52016	59162	67531	73600	84402	88342	92402	100313	103652	114244	121903	132545	142018	156242
Pressure drop system side	kPa	27	36	38	18	24	25	28	33	31	36	23	23	25	32

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - L

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	949,7	1032,5	1076,9	1122,7	1183,7	1254,5	1295,6	1395,1	1436,6	1605,1	1649,4	1758,0	1946,7
Input power	kW	348,7	365,9	395,0	428,8	442,3	453,2	476,4	491,5	523,6	556,9	586,7	660,2	713,5
Cooling total input current	A	567,0	593,0	638,0	693,0	716,0	736,0	776,0	793,0	849,0	914,0	960,0	1067,0	1163,0
EER	W/W	2,72	2,82	2,73	2,62	2,68	2,77	2,72	2,84	2,74	2,88	2,81	2,66	2,73
Water flow rate system side	l/h	163268	177512	185148	193004	203496	215669	222723	239820	246956	275911	283536	302181	334622
Pressure drop system side	kPa	34	44	46	33	36	42	45	33	34	45	47	34	45

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	315,6	360,2	415,2	461,4	509,5	544,9	576,9	620,9	658,9	699,4	741,7	800,6	884,3	955,2
Input power	kW	99,0	113,7	133,7	148,3	161,8	173,6	183,3	197,5	208,3	223,6	237,4	253,4	281,2	303,8
Cooling total input current	A	175,0	198,0	223,0	250,0	278,0	298,0	314,0	340,0	355,0	378,0	399,0	421,0	459,0	502,0
EER	W/W	3,19	3,17	3,11	3,11	3,15	3,14	3,15	3,14	3,16	3,13	3,12	3,16	3,15	3,14
Water flow rate system side	l/h	54280	61954	71417	79331	87600	93687	99196	106766	113293	120259	127516	137633	152015	164211
Pressure drop system side	kPa	30	39	43	21	26	28	32	37	37	40	25	25	29	36

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - A

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	1021,7	1084,5	1160,1	1213,2	1275,8	1352,3	1402,7	1462,2	1531,9	1682,9	1753,4	1908,6	2106,4
Input power	kW	328,5	347,0	371,7	389,2	410,5	432,6	451,5	466,3	493,4	534,6	560,2	614,3	673,3
Cooling total input current	A	547,0	577,0	614,0	647,0	685,0	725,0	758,0	772,0	821,0	897,0	936,0	1017,0	1132,0
EER	W/W	3,11	3,13	3,12	3,12	3,11	3,13	3,11	3,14	3,10	3,15	3,13	3,11	3,13
Water flow rate system side	l/h	175657	186457	199460	208561	219327	232478	241144	251345	263330	289291	301409	328062	362058
Pressure drop system side	kPa	39	49	53	38	42	49	52	36	39	49	53	41	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	319,6	368,5	417,6	472,4	514,2	543,2	579,6	615,2	652,1	695,4	740,6	796,5	881,6	951,8
Input power	kW	101,7	117,4	132,3	150,0	165,4	173,7	186,0	194,8	210,1	224,0	238,6	255,4	283,8	305,7
Cooling total input current	A	171,0	196,0	214,0	245,0	272,0	288,0	309,0	324,0	347,0	367,0	389,0	411,0	450,0	490,0
EER	W/W	3,14	3,14	3,16	3,15	3,11	3,13	3,12	3,16	3,10	3,11	3,10	3,12	3,11	3,11
Water flow rate system side	l/h	54958	63367	71800	81228	88406	93396	99657	105762	112115	119555	127316	136926	151562	163628
Pressure drop system side	kPa	15	14	18	21	24	26	30	24	26	29	26	25	29	36

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	1018,9	1082,1	1159,1	1206,7	1265,2	1322,0	1389,6	1464,9	1528,1	1670,1	1752,6	-	-
Input power	kW	325,9	347,4	370,9	387,8	405,6	422,2	443,7	469,4	489,0	534,5	563,0	-	-
Cooling total input current	A	529,0	560,0	598,0	628,0	656,0	686,0	724,0	764,0	792,0	861,0	898,0	-	-
EER	W/W	3,13	3,11	3,13	3,11	3,12	3,13	3,13	3,12	3,13	3,12	3,11	-	-
Water flow rate system side	l/h	175173	186051	199271	207449	217481	227238	238869	251810	262683	287098	301260	-	-
Pressure drop system side	kPa	40	49	36	38	24	24	29	35	40	49	45	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	331,0	378,1	432,1	481,7	527,6	564,7	590,5	635,0	675,3	708,2	750,8	811,2	902,5	975,6
Input power	kW	98,6	113,5	128,9	145,7	161,0	169,2	178,4	190,3	204,2	214,1	228,0	245,2	273,3	294,9
Cooling total input current	A	173,0	197,0	218,0	248,0	275,0	292,0	309,0	330,0	352,0	366,0	387,0	410,0	448,0	490,0
EER	W/W	3,36	3,33	3,35	3,31	3,28	3,34	3,31	3,34	3,31	3,31	3,29	3,31	3,30	3,31
Water flow rate system side	l/h	56933	65026	74302	82821	90716	97089	101524	109164	116096	121764	129073	139455	155146	167724
Pressure drop system side	kPa	17	15	19	21	25	28	31	25	28	30	26	26	30	37

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - U

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	1043,4	1104,7	1184,6	1234,0	1301,2	1360,8	1419,5	1505,6 (2)	1579,3	1693,4	1772,6	-	-
Input power	kW	315,2	336,8	357,4	380,5	400,8	418,5	427,8	453,3	472,9	522,1	540,7	-	-
Cooling total input current	A	530,0	562,0	597,0	634,0	671,0	706,0	725,0	762,0	795,0	870,0	896,0	-	-
EER	W/W	3,31	3,28	3,31	3,24	3,25	3,25	3,32	3,32	3,34	3,24	3,28	-	-
Water flow rate system side	l/h	179384	189926	203652	212142	223669	233910	244004	258808	271482	291091	304708	-	-
Pressure drop system side	kPa	42	51	38	40	26	26	31	37	42	51	46	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Unit not Eurovent certified because it exceeds 1500 kW

NSM - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	329,8	375,3	431,9	474,4	517,0	550,9	578,6	620,4	659,2	701,2	743,2	803,1	879,6	955,4
Input power	kW	98,1	113,1	127,6	144,8	160,4	168,7	178,2	190,1	204,5	217,3	231,1	247,6	270,2	292,6
Cooling total input current	A	165,0	190,0	207,0	237,0	265,0	281,0	297,0	317,0	339,0	358,0	378,0	399,0	429,0	470,0
EER	W/W	3,36	3,32	3,38	3,28	3,22	3,27	3,25	3,26	3,22	3,23	3,22	3,24	3,26	3,27
Water flow rate system side	l/h	56717	64546	74260	81573	88881	94723	99476	106664	113329	120551	127777	138054	151226	164260
Pressure drop system side	kPa	16	15	19	21	24	28	30	25	27	29	26	25	30	37

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - N

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	1014,4	1086,1	1169,7	1219,0	1267,1	1317,0	1367,2	1452,6	-	-	-	-	-
Input power	kW	315,6	332,8	352,6	374,6	396,5	410,4	428,2	450,1	-	-	-	-	-
Cooling total input current	A	513,0	540,0	569,0	605,0	643,0	668,0	700,0	731,0	-	-	-	-	-
EER	W/W	3,21	3,26	3,32	3,25	3,20	3,21	3,19	3,23	-	-	-	-	-
Water flow rate system side	l/h	174394	186718	201086	209575	217799	226384	235022	249705	-	-	-	-	-
Pressure drop system side	kPa	40	35	44	44	26	26	30	37	-	-	-	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Increased fan

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: M																
SEPR - (EN 14825: 2018) (1)																
SEPR	°	W/W	5,41	5,44	5,37	5,53	5,54	5,51	5,54	5,51	5,53	5,51	5,51	5,52	5,52	5,53
	A	W/W	5,70	5,67	5,57	5,54	5,61	5,60	5,62	5,62	5,65	5,51	5,52	5,53	5,60	5,61
	E	W/W	5,82	5,76	5,80	5,71	5,66	5,79	5,74	5,77	5,73	5,64	5,60	5,63	5,72	5,74
	L	W/W	5,62	5,59	5,48	5,54	5,53	5,52	5,56	5,54	5,60	5,52	5,52	5,52	5,55	5,54
	N	W/W	5,94	5,85	5,98	5,79	5,70	5,78	5,75	5,77	5,70	5,63	5,57	5,65	5,73	5,74
	U	W/W	5,91	5,85	5,89	5,81	5,77	5,88	5,84	5,87	5,83	5,75	5,68	5,74	5,82	5,84

(1) Calculation performed with FIXED water flow rate.

Size			4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: M													
SEPR - (EN 14825: 2018) (1)													
SEPR	°	W/W	5,53	5,52	5,53	5,52	5,52	5,64	5,51	5,54	5,55	5,51	5,54
	A	W/W	5,60	5,57	5,60	5,60	5,57	5,66	5,61	5,71	5,69	5,62	5,68
	E	W/W	5,75	5,62	5,60	5,60	5,74	5,85	5,90	5,70	5,77	-	-
	L	W/W	5,55	5,54	5,56	5,55	5,52	5,64	5,61	5,68	5,66	5,63	5,68
	N	W/W	5,73	5,79	5,65	5,67	5,65	5,79	-	-	-	-	-
	U	W/W	5,85	5,73	5,71	5,72	5,84	5,93	5,98	5,82	5,87	-	-

(1) Calculation performed with FIXED water flow rate.

Inverter fan

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: J																
SEER - 12/7 (EN14825: 2018) (1)																
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,44	4,40	4,55	4,56	4,56	4,56	4,57	4,55	4,56	4,56	4,57	4,57	4,56	4,56
	E	W/W	4,48	4,47	4,57	4,57	4,58	4,58	4,58	4,58	4,58	4,59	4,59	4,59	4,59	4,60
	L	W/W	4,43	4,39	4,53	4,55	4,56	4,56	4,56	4,55	4,56	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,54	4,51	4,60	4,60	4,61	4,59	4,60	4,61	4,60	4,61	4,60	4,60	4,60	4,60
	U	W/W	4,49	4,48	4,57	4,59	4,60	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,60
Seasonal efficiency	°	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	174,50	172,80	179,00	179,20	179,40	179,40	179,70	179,10	179,50	179,50	179,70	179,60	179,50	179,40
	E	%	176,30	175,60	179,60	179,80	180,20	180,00	180,10	180,00	180,20	180,60	180,40	180,40	180,50	180,80
	L	%	174,00	172,40	178,30	179,00	179,30	179,20	179,20	179,00	179,40	179,20	179,30	179,30	179,30	179,20
	N	%	178,70	177,40	180,80	180,90	181,30	180,70	180,90	181,20	180,90	181,30	181,10	181,10	181,00	181,10
	U	%	176,60	176,10	179,80	180,40	180,90	180,50	180,70	180,60	180,70	180,60	180,60	180,40	180,50	180,90
SEPR - (EN 14825: 2018) (3)																
SEPR	°	W/W	5,41	5,44	5,37	5,53	5,54	5,51	5,54	5,51	5,53	5,51	5,51	5,52	5,52	5,53
	A	W/W	5,70	5,67	5,57	5,54	5,61	5,60	5,62	5,62	5,65	5,51	5,52	5,53	5,60	5,61
	E	W/W	5,82	5,76	5,80	5,71	5,66	5,79	5,74	5,77	5,73	5,64	5,60	5,63	5,72	5,74
	L	W/W	5,62	5,59	5,48	5,54	5,53	5,52	5,56	5,54	5,60	5,52	5,52	5,52	5,55	5,54
	N	W/W	5,94	5,85	5,98	5,79	5,70	5,78	5,75	5,77	5,70	5,63	5,57	5,65	5,73	5,74
	U	W/W	5,91	5,85	5,89	5,81	5,77	5,88	5,84	5,87	5,83	5,75	5,68	5,74	5,82	5,84

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: J															
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,56	4,56	4,56	4,55	4,57	4,56	4,56	4,56	4,57	4,56	4,56	4,56	4,57
	E	W/W	4,58	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,60	4,58	4,59	-	-
	L	W/W	4,55	4,56	4,55	4,56	4,56	4,57	4,56	4,57	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,60	4,60	4,60	4,60	4,60	4,61	4,60	4,61	-	-	-	-	-
	U	W/W	4,59	4,59	4,60	4,60	4,60	4,60	4,59	4,60	4,60	4,59	4,59	-	-
Seasonal efficiency	°	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	179,50	179,40	179,40	179,10	179,80	179,40	179,40	179,20	179,60	179,20	179,40	179,50	179,70
	E	%	180,30	180,60	180,70	180,60	180,40	180,40	180,60	180,50	180,90	180,20	180,40	-	-
	L	%	179,00	179,20	179,10	179,20	179,40	179,60	179,40	179,60	179,30	179,20	179,50	179,40	179,50
	N	%	180,80	181,00	181,10	181,00	181,10	181,20	180,80	181,40	-	-	-	-	-
	U	%	180,40	180,60	180,80	180,90	180,90	180,80	180,60	180,80	180,90	180,60	180,60	-	-
SEPR - (EN 14825: 2018) (3)															
SEPR	°	W/W	5,51	5,52	5,53	5,52	5,53	5,52	5,52	5,64	5,51	5,54	5,55	5,51	5,54
	A	W/W	5,56	5,60	5,60	5,57	5,60	5,60	5,57	5,66	5,61	5,71	5,69	5,62	5,68
	E	W/W	5,75	5,70	5,75	5,62	5,60	5,60	5,74	5,85	5,90	5,70	5,77	-	-
	L	W/W	5,51	5,53	5,55	5,54	5,56	5,55	5,52	5,64	5,61	5,68	5,66	5,63	5,68
	N	W/W	5,71	5,71	5,73	5,79	5,65	5,67	5,65	5,79	-	-	-	-	-
	U	W/W	5,85	5,81	5,85	5,73	5,71	5,72	5,84	5,93	5,98	5,82	5,87	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
Maximum current (FLA)	°	A	229,0	257,0	284,0	324,0	357,0	379,0	400,0	433,0	458,0	466,0	466,0	514,0	562,0	619,0
	A,L	A	235,0	263,0	291,0	324,0	364,0	385,0	406,0	437,0	462,0	462,0	462,0	516,0	564,0	619,0
	E,U	A	235,0	263,0	297,0	330,0	364,0	391,0	413,0	444,0	468,0	468,0	468,0	523,0	571,0	625,0
	N	A	242,0	270,0	303,0	337,0	370,0	398,0	419,0	450,0	475,0	475,0	475,0	529,0	583,0	644,0
Peak current (LRA)	°	A	251,0	292,0	335,0	380,0	403,0	450,0	467,0	502,0	512,0	521,0	521,0	645,0	685,0	814,0
	A,L	A	257,0	299,0	342,0	380,0	409,0	456,0	473,0	507,0	517,0	517,0	517,0	647,0	687,0	814,0
	E,U	A	257,0	299,0	348,0	386,0	409,0	462,0	480,0	513,0	523,0	523,0	523,0	653,0	693,0	821,0
	N	A	263,0	305,0	354,0	392,0	415,0	469,0	486,0	519,0	529,0	529,0	529,0	660,0	706,0	839,0

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Electric data															
Maximum current (FLA)	°	A	667,0	714,0	753,0	805,0	848,0	882,0	924,0	949,0	997,0	1084,0	1137,0	1266,0	1368,0
	A,L	A	667,0	712,0	751,0	813,0	865,0	913,0	947,0	955,0	1003,0	1094,0	1133,0	1268,0	1406,0
	E,U	A	679,0	718,0	770,0	813,0	862,0	902,0	943,0	968,0	1022,0	1100,0	1145,0	-	-
	N	A	692,0	743,0	789,0	838,0	887,0	921,0	955,0	987,0	-	-	-	-	-
Peak current (LRA)	°	A	841,0	914,0	936,0	1100,0	1147,0	1259,0	1264,0	1038,0	1065,0	1160,0	1197,0	1446,0	1552,0
	A,L	A	841,0	911,0	934,0	1108,0	1164,0	1290,0	1287,0	1044,0	1071,0	1170,0	1193,0	1448,0	1590,0
	E,U	A	854,0	918,0	953,0	1108,0	1161,0	1279,0	1283,0	1056,0	1090,0	1176,0	1205,0	-	-
	N	A	866,0	943,0	972,0	1133,0	1186,0	1298,0	1295,0	1076,0	-	-	-	-	-

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
Compressor											
Type	°,A,E,L,N,U	type					Screw				
Number	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type					R134a				
Refrigerant load circuit 1 (1)	°	kg	24,0	24,0	24,0	30,0	30,0	35,0	35,0 (2)	35,0	35,0
	A	kg	26,5	34,0 (2)	28,0	28,0	34,0	35,0	38,5	40,5	45,0
	E	kg	28,0	30,0	41,0 (2)	41,0 (2)	46,0 (2)	43,0	41,0	46,0	45,0
	L	kg	24,0	34,0 (2)	37,0 (2)	28,0	34,0	35,0	38,5	40,0	42,0 (2)
	N	kg	36,0 (2)	38,0 (2)	44,0 (2)	44,0 (2)	49,0 (2)	53,0 (2)	56,0 (2)	60,0 (2)	64,0 (2)
	U	kg	32,0 (2)	34,0 (2)	34,0	35,0	46,0 (2)	49,0 (2)	49,0	46,0 (2)	45,0 (2)
Refrigerant load circuit 2 (1)	°	kg	24,0	25,0	25,0	41,0	33,0	38,0	37,0 (2)	37,5	36,5
	A	kg	28,0	34,0 (2)	29,5	36,0	34,0	49,0	40,5	45,0	47,5
	E	kg	30,0	31,5	41,0 (2)	46,0 (2)	46,0 (2)	45,0	46,0	52,0	53,0
	L	kg	27,0	34,0 (2)	37,0 (2)	36,0	34,0	40,0	40,5	43,0	46,0 (2)
	N	kg	36,0 (2)	38,0 (2)	44,0 (2)	49,0 (2)	49,0 (2)	56,0 (2)	56,0 (2)	64,0 (2)	64,0 (2)
	U	kg	32,0 (2)	34,0 (2)	36,0	41,5	46,0 (2)	53,0 (2)	54,0	52,0 (2)	48,5 (2)
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-
System side heat exchanger											
Type	°,A,E,L,N,U	type					Shell and tube				
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) The refrigerant gas charge is approximate, for more information contact the office.

Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Compressor											
Type	°,A,E,L,N,U	type					Screw				
Number	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type					R134a				
Refrigerant load circuit 1 (1)	°	kg	40,0	46,0	42,5	44,5	51,0	52,0	55,0	55,0 (2)	63,0 (2)
	A	kg	44,0 (2)	47,0	52,0 (2)	55,0	74,0 (2)	62,0	67,0	67,0	70,0
	E	kg	45,0 (2)	57,0	54,0 (2)	74,0 (2)	60,0 (2)	70,0	89,0 (2)	80,0 (2)	100,0 (2)
	L	kg	44,0	47,0	52,0 (2)	54,0	56,0 (2)	62,0	67,0 (2)	67,0	70,0
	N	kg	64,0 (2)	55,0 (2)	72,0 (2)	81,0 (2)	85,0 (2)	92,0 (2)	99,0 (2)	110,0 (2)	114,0 (2)
	U	kg	60,0 (2)	54,5	58,0	58,0	60,0 (2)	70,0	89,0 (2)	80,0	85,0 (2)
Refrigerant load circuit 2 (1)	°	kg	50,0	48,0	46,0	46,0	59,0	59,0	64,0	64,0 (2)	70,0 (2)
	A	kg	52,0 (2)	50,0	55,0 (2)	60,0	81,0 (2)	70,0	78,0	78,0	82,0
	E	kg	53,0 (2)	59,0	59,0 (2)	74,0 (2)	77,0 (2)	85,0	96,0 (2)	90,0 (2)	110,0 (2)
	L	kg	52,0	50,0	55,0 (2)	58,0	72,0 (2)	70,0	79,0 (2)	78,0	82,0
	N	kg	69,0 (2)	57,0 (2)	77,0 (2)	81,0 (2)	92,0 (2)	92,0 (2)	107,0 (2)	110,0 (2)	124,0 (2)
	U	kg	65,0 (2)	59,0	62,0	63,0	77,0 (2)	85,0	96,0 (2)	90,0	103,0 (2)
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-
System side heat exchanger											
Type	°,A,E,L,N,U	type					Shell and tube				
Number	°,A,E,L,U	no.	1	1	1	1	1	1	1	1	1
	N	no.	1	1	1	1	1	1	2	2	2

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) The refrigerant gas charge is approximate, for more information contact the office.

Size			5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor											
Type	°,A,E,L,N,U	type					Screw				
Number	°,A,L	no.	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	3	-	-	-	-	-
Circuits	°,A,L	no.	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	3	-	-	-	-	-
Refrigerant	°,A,E,L,N,U	type					R134a				
Refrigerant load circuit 1 (1)	°	kg	65,0 (2)	62,0	70,0 (2)	67,0 (2)	55,0	78,0 (2)	62,0 (2)	99,0 (2)	112,0 (2)
	A	kg	106,0 (2)	82,0	82,0 (2)	74,0 (2)	81,0 (2)	85,0 (2)	70,0	106,0 (2)	80,0
	E	kg	113,0 (2)	86,0	95,0 (2)	77,0 (2)	89,0 (2)	89,0 (2)	100,0 (2)	-	-
	L	kg	106,0 (2)	82,0	82,0 (2)	74,0 (2)	81,0 (2)	85,0 (2)	70,0 (2)	106,0 (2)	80,0
	N	kg	128,0 (2)	128,0 (2)	138,0 (2)	85,0 (2)	-	-	-	-	-
	U	kg	113,0 (2)	86,0	95,0	77,0 (2)	89,0 (2)	89,0 (2)	100,0 (2)	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) The refrigerant gas charge is approximate, for more information contact the office.

Size			5602	6002	6402	6503	6703	6903	7203	8403	9603
Refrigerant load circuit 2 (1)	°	kg	71,0 (2)	73,0	80,0 (2)	74,0 (2)	61,0	85,0 (2)	70,0 (2)	99,0 (2)	112,0 (2)
	A	kg	106,0 (2)	99,0	99,0 (2)	81,0 (2)	81,0 (2)	92,0 (2)	75,0	106,0 (2)	95,0
	E	kg	113,0 (2)	98,0	97,0 (2)	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
	L	kg	106,0 (2)	99,0	99,0 (2)	81,0 (2)	81,0 (2)	92,0 (2)	75,0 (2)	106,0 (2)	95,0
	N	kg	128,0 (2)	138,0 (2)	138,0 (2)	92,0 (2)	-	-	-	-	-
	U	kg	113,0 (2)	98,0	97,0	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
Refrigerant load circuit 3 (1)	°	kg	-	-	-	74,0 (2)	65,0	85,0 (2)	80,0 (2)	99,0 (2)	112,0 (2)
	A	kg	-	-	-	81,0 (2)	81,0 (2)	92,0 (2)	75,0	106,0 (2)	85,0
	E,U	kg	-	-	-	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
	L	kg	-	-	-	81,0 (2)	81,0 (2)	92,0 (2)	75,0 (2)	106,0 (2)	85,0
	N	kg	-	-	-	92,0 (2)	-	-	-	-	-
System side heat exchanger											
Type	°,A,E,L,N,U	type	Shell and tube								
Number	°	no.	1	1	1	1	1	1	1	1	1
	A,L	no.	1	1	1	2	2	2	2	2	2
	E,U	no.	2	2	2	2	2	2	2	-	-
	N	no.	2	2	2	2	-	-	-	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) The refrigerant gas charge is approximate, for more information contact the office.

FANS DATA

Oversized

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
Fans: M											
Increased fan											
Type	°,A,E,L,N,U	type	axials								
Fan motor	°,A,U	type	Asynchronous								
	E,L,N	type	Asynchronous with phase cut								
Fan											
Number	°	no.	6	6	6	8	8	8	8	8	8
	A,L	no.	8	8	8	8	10	10	10	12	12
	E,U	no.	8	8	10	10	10	12	12	14	14
	N	no.	10	10	12	12	12	14	14	16	16
With static pressure											
Air flow rate	°	m^3/h	96000	96000	96000	128000	128000	128000	128000	144000	144000
	A	m^3/h	128000	128000	128000	128000	160000	160000	160000	192000	192000
	E	m^3/h	92000	92000	115000	115000	115000	138000	138000	161000	161000
	L	m^3/h	92000	92000	92000	92000	115000	115000	115000	138000	138000
	N	m^3/h	115000	115000	138000	138000	138000	161000	161000	184000	184000
	U	m^3/h	128000	128000	160000	160000	160000	192000	192000	224000	224000
High static pressure	°	Pa	50	50	50	50	50	50	50	-	-
	A,E,L,N,U	Pa	50	50	50	50	50	50	50	50	50
Without Static pressure											
Air flow rate	°	m^3/h	108000	108000	108000	144000	144000	144000	144000	144000	144000
	A	m^3/h	144000	144000	144000	144000	180000	180000	180000	216000	216000
	E	m^3/h	92000	92000	115000	115000	115000	138000	138000	161000	161000
	L	m^3/h	92000	92000	92000	92000	115000	115000	115000	138000	138000
	N	m^3/h	115000	115000	138000	138000	138000	161000	161000	184000	184000
	U	m^3/h	144000	144000	180000	180000	180000	216000	216000	252000	252000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0
With static pressure											
Sound power level	°	dB(A)	96,8	97,0	97,2	97,6	97,8	98,0	98,2	98,4	98,4
	A	dB(A)	97,3	97,4	97,8	97,9	98,2	98,3	98,4	98,8	98,9
	E	dB(A)	89,3	89,4	90,2	90,3	90,4	90,8	91,2	91,8	92,0
	L	dB(A)	88,9	89,0	89,1	89,2	90,3	90,5	90,6	90,8	90,9
	N	dB(A)	90,0	90,4	90,9	91,0	91,1	91,4	91,4	92,1	92,2
	U	dB(A)	97,0	97,4	98,0	98,2	98,4	98,8	98,8	99,0	99,1
Without Static pressure											
Sound power level	°	dB(A)	97,5	97,6	97,6	97,9	98,1	98,2	98,4	98,4	98,4
	A	dB(A)	98,2	98,2	98,6	98,7	99,1	99,2	99,2	99,7	99,8
	E	dB(A)	89,3	89,4	90,2	90,3	90,4	90,8	91,2	91,8	92,0
	L	dB(A)	88,9	89,0	89,1	89,2	90,3	90,5	90,6	90,8	90,9
	N	dB(A)	90,0	90,4	90,9	91,0	91,1	91,4	91,4	92,1	92,2
	U	dB(A)	97,9	98,2	98,9	99,1	99,2	99,7	99,7	100,0	100,1

Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Fans: M											
Increased fan											
Type	°,A,E,L,N,U	type	axials								
Fan motor	°,A,U	type	Asynchronous								
	E,L,N	type	Asynchronous with phase cut								

Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Fan											
Number	°	no.	10	10	10	10	12	12	14	14	16
	A,L	no.	12	12	14	14	16	16	18	18	18
	E,U	no.	14	14	16	16	18	20	20	22	22
	N	no.	16	16	18	20	22	22	26	28	30
With static pressure											
Air flow rate	°	m^3/h	180000	180000	180000	180000	216000	216000	252000	252000	288000
	A	m^3/h	192000	192000	224000	224000	256000	256000	288000	288000	324000
	E	m^3/h	161000	161000	184000	184000	207000	230000	230000	253000	253000
	L	m^3/h	138000	138000	161000	161000	184000	184000	207000	207000	234000
	N	m^3/h	184000	184000	207000	230000	253000	253000	299000	322000	345000
	U	m^3/h	224000	224000	256000	256000	288000	320000	320000	352000	352000
High static pressure	°	Pa	-	-	-	-	-	-	-	-	-
	A,L	Pa	50	50	50	50	50	50	50	50	-
	E,N,U	Pa	50	50	50	50	50	50	50	50	50
Without Static pressure											
Air flow rate	°	m^3/h	180000	180000	180000	180000	216000	216000	252000	252000	288000
	A	m^3/h	216000	216000	252000	252000	288000	288000	324000	324000	324000
	E	m^3/h	161000	161000	184000	184000	207000	230000	230000	253000	253000
	L	m^3/h	138000	138000	161000	161000	184000	184000	207000	207000	234000
	N	m^3/h	184000	184000	207000	230000	253000	253000	299000	322000	345000
	U	m^3/h	252000	252000	288000	288000	324000	360000	360000	396000	396000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0
With static pressure											
Sound power level	°	dB(A)	99,4	99,5	99,6	99,8	100,7	100,8	101,2	101,3	101,7
	A	dB(A)	99,0	99,1	99,3	99,4	100,1	100,2	100,4	100,8	101,5
	E	dB(A)	92,2	92,3	92,8	93,0	93,2	93,5	93,6	93,7	93,8
	L	dB(A)	91,0	91,1	91,3	91,4	92,4	92,5	93,0	93,1	93,2
	N	dB(A)	92,3	92,4	92,8	93,1	93,3	93,4	94,3	94,4	94,8
	U	dB(A)	99,2	99,3	99,9	100,0	100,4	100,7	101,0	101,3	101,6
Without Static pressure											
Sound power level	°	dB(A)	99,4	99,5	99,6	99,8	100,7	100,8	101,2	101,3	101,7
	A	dB(A)	99,9	100,0	100,2	100,3	101,0	101,1	101,3	101,7	101,5
	E	dB(A)	92,2	92,3	92,8	93,0	93,2	93,5	93,6	93,7	93,8
	L	dB(A)	91,0	91,1	91,3	91,4	92,4	92,5	93,0	93,1	93,2
	N	dB(A)	92,3	92,4	92,8	93,1	93,3	93,4	94,3	94,4	94,8
	U	dB(A)	100,2	100,2	100,8	100,9	101,3	101,7	101,9	102,2	102,5

Size			5602	6002	6402	6503	6703	6903	7203
Fans: M									
Increased fan									
Type	°,A,E,L,N,U	type	axials						
Fan motor	°,A,U	type	Asynchronous						
	E,L,N	type	Asynchronous with phase cut						
Fan									
Number	°	no.	16	16	18	18	18	20	22
	A,L	no.	20	22	22	24	24	28	28
	E,U	no.	24	26	28	28	30	30	32
	N	no.	32	32	32	34	-	-	-
With static pressure									
Air flow rate	°	m^3/h	288000	288000	324000	324000	324000	360000	396000
	A	m^3/h	360000	396000	396000	384000	384000	448000	448000
	E	m^3/h	276000	299000	322000	322000	345000	345000	368000
	L	m^3/h	260000	286000	286000	276000	276000	322000	322000
	N	m^3/h	368000	368000	368000	391000	-	-	-
	U	m^3/h	384000	416000	448000	448000	480000	480000	512000
High static pressure	°	Pa	-	-	-	-	-	-	-
	A,L	Pa	-	-	-	50	50	50	50
	E,U	Pa	50	50	50	50	50	50	50
	N	Pa	50	50	50	50	-	-	-
Without Static pressure									
Air flow rate	°	m^3/h	288000	288000	324000	324000	324000	360000	396000
	A	m^3/h	360000	396000	396000	432000	432000	504000	504000
	E	m^3/h	276000	299000	322000	322000	345000	345000	368000
	L	m^3/h	260000	286000	286000	276000	276000	322000	322000
	N	m^3/h	368000	368000	368000	391000	-	-	-
	U	m^3/h	432000	468000	504000	504000	540000	540000	576000
High static pressure	°,A,E,L,U	Pa	0	0	0	0	0	0	0
	N	Pa	0	0	0	0	-	-	-

Size			5602	6002	6402	6503	6703	6903	7203
With static pressure									
Sound power level	°	dB(A)	101,7	101,8	102,1	102,3	102,4	103,0	103,1
	A	dB(A)	101,7	101,9	102,0	102,0	102,1	102,3	102,4
	E	dB(A)	93,9	94,0	94,2	94,3	94,3	94,4	94,8
	L	dB(A)	93,7	93,9	94,0	94,2	94,2	94,3	94,3
	N	dB(A)	95,0	95,2	95,3	95,4	-	-	-
	U	dB(A)	102,0	102,1	102,2	102,2	102,3	102,4	102,4
Without Static pressure									
Sound power level	°	dB(A)	101,7	101,8	102,1	102,3	102,4	103,0	103,1
	A	dB(A)	101,7	101,9	102,0	102,9	103,0	103,2	103,3
	E	dB(A)	93,9	94,0	94,2	94,3	94,3	94,4	94,8
	L	dB(A)	93,7	93,9	94,0	94,2	94,2	94,3	94,3
	N	dB(A)	95,0	95,2	95,3	95,4	-	-	-
	U	dB(A)	102,9	103,0	103,2	103,2	103,3	103,4	103,4

Inverter

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
Fan											
Type	°,A,E,L,N,U	type					axials				
Fan motor	°,A,E,L,N,U	type					On-Off				
Number	°	no.	6	6	6	8	8	8	8	8	8
	A,L	no.	8	8	8	8	10	10	10	12	12
	E,U	no.	8	8	10	10	10	12	12	14	14
	N	no.	10	10	12	12	12	14	14	16	16
Inverter fan											
Air flow rate	°	m^3/h	96000	96000	96000	128000	128000	128000	128000	144000	144000
	A	m^3/h	12800	12800	12800	12800	16000	16000	160000	160000	160000
	E	m^3/h	92000	92000	115000	115000	115000	138000	138000	161000	161000
	L	m^3/h	115000	115000	115000	138000	138000	138000	138000	161000	161000
	N	m^3/h	15000	15000	18000	18000	18000	21000	21000	24000	24000
	U	m^3/h	128000	128000	160000	160000	160000	192000	192000	224000	224000
High static pressure	°	Pa	120	120	120	120	120	120	120	75	75
	A,E,L,N,U	Pa	120	120	120	120	120	120	120	120	120
Sound data calculated in cooling mode (1)											
Sound power level	°,A,E,L,N,U	dB(A)	-	-	-	-	-	-	-	-	-

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Fans: J											
Fan											
Type	°,A,E,L,N,U	type					axials				
Fan motor	°,A,E,L,N,U	type					Inverter				
Number	°	no.	10	10	10	10	12	12	14	14	16
	A,L	no.	12	12	14	14	16	16	18	18	18
	E,U	no.	14	14	16	16	18	20	20	22	22
	N	no.	16	16	18	20	22	22	26	28	30
Inverter fan											
Air flow rate	°	m^3/h	180000	180000	180000	180000	216000	216000	252000	252000	288000
	A	m^3/h	192000	192000	224000	224000	256000	256000	288000	288000	324000
	E	m^3/h	161000	161000	184000	184000	207000	230000	230000	253000	253000
	L	m^3/h	138000	138000	161000	161000	184000	184000	207000	207000	234000
	N	m^3/h	184000	184000	207000	230000	253000	253000	299000	322000	345000
	U	m^3/h	224000	224000	256000	256000	288000	320000	320000	352000	352000
High static pressure	°	Pa	75	75	75	75	75	75	75	75	75
	A,L	Pa	120	120	120	120	120	120	120	120	75
	E,N,U	Pa	120	120	120	120	120	120	120	120	120
Sound data calculated in cooling mode (1)											
Sound power level	°	dB(A)	99,4	99,5	99,6	99,8	100,7	100,8	101,2	101,3	101,7
	A	dB(A)	99,0	99,1	99,3	99,4	100,1	100,2	100,4	100,8	101,5
	E	dB(A)	92,2	92,3	92,8	93,0	93,2	93,5	93,6	93,7	93,8
	L	dB(A)	91,0	91,1	91,3	91,4	92,4	92,5	93,0	93,1	93,2
	N	dB(A)	92,3	92,4	92,8	93,1	93,3	93,4	94,3	94,4	94,8
	U	dB(A)	99,2	99,3	99,9	100,0	100,4	100,7	101,0	101,3	101,6

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

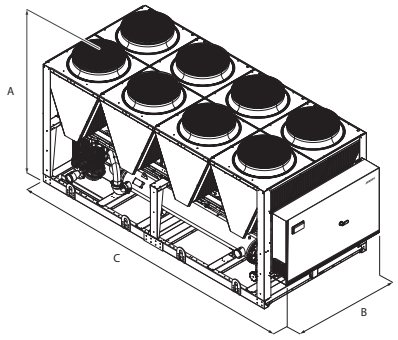
Size			5602	6002	6402	6503	6703	6903	7203
Fans: J									
Fan									
Type	°,A,E,L,N,U	type				axials			
Fan motor	°,A,E,L,N,U	type				Inverter			

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			5602	6002	6402	6503	6703	6903	7203
Number	°	no.	16	16	18	18	18	20	22
	A,L	no.	20	22	22	24	24	28	28
	E,U	no.	24	26	28	28	30	30	32
	N	no.	32	32	32	34	-	-	-
Inverter fan									
Air flow rate	°	m^3/h	288000	288000	324000	324000	324000	360000	396000
	A	m^3/h	360000	396000	396000	384000	384000	448000	448000
	E	m^3/h	276000	299000	322000	322000	345000	345000	368000
	L	m^3/h	260000	286000	286000	276000	276000	322000	322000
	N	m^3/h	368000	368000	368000	391000	-	-	-
	U	m^3/h	384000	416000	448000	448000	480000	480000	512000
High static pressure	°	Pa	75	75	75	75	75	75	75
	A,L	Pa	75	75	75	120	120	120	120
	E,U	Pa	120	120	120	120	120	120	120
	N	Pa	120	120	120	120	-	-	-
Sound data calculated in cooling mode (1)									
Sound power level	°	dB(A)	101,7	101,8	102,1	102,3	102,4	103,0	103,1
	A	dB(A)	101,7	101,9	102,0	102,0	102,1	102,3	102,4
	E	dB(A)	93,9	94,0	94,2	94,3	94,3	94,4	94,8
	L	dB(A)	93,7	93,9	94,0	94,2	94,2	94,3	94,3
	N	dB(A)	95,0	95,2	95,3	95,4	-	-	-
	U	dB(A)	102,0	102,1	102,2	102,2	102,3	102,4	102,4

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	3970	3970	3970	5160	5160	5160	5160	5160	5160	6350	6350	6350	6350	7140
	A,L	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330	9520
	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520	10710
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900	13090

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights															
A	°,A,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-	-
B	°,A,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-	-
C	°	mm	7140	8330	8330	9520	9520	9520	10710	11110	11110	11900	13090	13090	13090
	A,L	mm	9520	10710	10710	10710	11900	13090	13090	14280	14280	16660	16660	17850	20230
	E,U	mm	11900	11900	13090	13090	14280	15470	16660	16660	17850	17850	19040	-	-
	N	mm	13090	15470	16660	17850	19040	19040	19040	20230	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00																
Weights																
Empty weight	°	kg	3660	3702	3831	4670	5040	5053	5077	5273	5396	5922	5977	6410	6901	7477
	A,L	kg	4213	4249	4373	4699	5472	5488	5691	6228	6424	6477	6577	7656	8129	8647
	E,U	kg	4373	4394	4840	5431	5785	6333	6356	6805	6896	6914	6953	8149	8660	9431
	N	kg	4791	4812	5373	5965	6318	6741	6764	7254	7346	7416	7508	8882	9759	10383
Weight functioning	°	kg	3753	3790	3962	4801	5171	5202	5226	5548	5671	6244	6299	6732	7214	7790
	A,L	kg	4306	4337	4505	4848	5621	5637	5966	6503	6747	6799	6871	8173	8645	9152
	E,U	kg	4505	4543	4989	5753	6107	6655	6679	7118	7209	7279	7352	8718	9177	9936
	N	kg	4923	4962	5522	6287	6641	7063	7086	7567	7659	7729	7802	9399	10276	10888

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00															
Weights															
Empty weight	°	kg	7574	7993	8302	8826	8954	9017	9719	11612	11688	12216	12761	13047	13176
	A,L	kg	8710	9428	9481	9902	10433	11018	11060	13354	13417	14572	14625	15743	16934
	E,U	kg	9922	9983	10887	11013	11820	12261	12701	14514	15005	15119	16034	-	-
	N	kg	10456	11646	12355	12989	12721	13666	13709	16119	-	-	-	-	-
Weight functioning	°	kg	7868	8287	8819	9342	9471	9522	10224	12527	12603	13089	13633	13920	14048
	A,L	kg	9215	9922	9974	10795	11327	11898	11940	14121	14184	15328	15381	16950	18126
	E,U	kg	10427	10476	11781	11907	12446	12886	13327	15281	15772	15875	17190	-	-
	N	kg	10961	12171	12880	13564	14249	14292	14726	16937	-	-	-	-	-

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NSMI 1251-6102

Air-water chiller

Cooling capacity 285,6 ÷ 1342,6 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **Low electrical consumption**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Unit with 1 / 2 cooling circuits

Unit with 1–2 refrigerant circuits.
The single circuit units have the inverter compressor, while the dual-circuit have an asynchronous compressor on/off switch and an inverter, the combination provides both high efficiency at part load and full load.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

Low noise version

Silenced versions "E" feature a special compressor jacket which ensures a further noise reduction of approximately 4dB.

CONTROL PCO[5]

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
AER485P1	A,E	•	•	•												
AER485P1 x no. 2	A,E				•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•												
AERBACP x no. 2	A,E				•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Antivibration

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A	AVX991	AVX992	AVX993	AVX996	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX997	AVX998	AVX998	AVX998	AVX998
E	AVX991	AVX992	AVX994	AVX996	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX997	AVX998	AVX998	AVX998	AVX998

Heater exchangers

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A, E	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid kit

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A, E	GP4V	GP4V	GP5V	GP5V	GP6V	GP7V	GP7V	GP7V	GP8V	GP9V	GP10V	GP11V	GP11V	GP11V	GP11V

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3,4		**NSMI**
5,6,7,8		**Size** 1251, 1601, 1801, 2352, 2652, 2802, 3202, 3402, 3802, 4102, 4402, 4802, 5202, 5702, 6102
9		**Model**
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (1)
	T	With total recovery
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400V~3 50Hz with fuses
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (2)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (2)
		Kit with 2 pumps
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (2)

(1) Minimum water temperature of 35 °C must always be ensured at heat exchanger inlet if working with low temperatures of water produced in the primary circuit.
(2) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NSMI - A/E

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Cooling performance 12 °C / 7 °C (1)																	
Cooling capacity		kW	285,6	382,0	464,0	519,1	605,4	659,4	725,2	802,4	842,6	948,0	1008,8	1110,4	1204,3	1253,0	1342,6
Input power		kW	91,3	120,2	149,5	167,1	194,3	212,3	232,7	257,5	269,9	304,8	324,7	356,2	397,4	415,9	454,6
Cooling total input current		A	155,0	200,0	245,0	293,0	337,0	360,0	393,0	431,0	443,0	517,0	547,0	619,0	665,0	728,0	761,0
EER		W/W	3,13	3,18	3,10	3,11	3,12	3,11	3,12	3,12	3,12	3,11	3,11	3,12	3,03	3,01	2,95
Water flow rate system side		l/h	49130	65700	79773	89247	104092	113376	124682	137945	144852	162983	173442	190903	207040	215409	230815
Pressure drop system side		kPa	45	15	21	18	25	28	33	27	30	39	45	38	44	49	55

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size				1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
SEER - 12/7 (EN14825:2018) with standard fans (1)																		
SEER		A,E	W/W	4,75	4,82	4,78	4,90	4,92	4,90	4,91	4,93	4,93	4,90	4,88	4,90	4,85	4,70	4,69
Seasonal efficiency		A,E	%	186,8%	189,7%	188,0%	193,1%	193,9%	193,0%	193,3%	194,2%	194,3%	192,8%	192,2%	192,9%	191,0%	185,1%	184,7%
SEER - (EN14825:2018) 12/7 with inverter fans (1)																		
SEER		A,E	W/W	4,95	5,04	5,00	5,01	5,03	5,01	5,02	5,04	5,04	5,00	4,99	5,00	4,96	4,81	4,80
Seasonal efficiency		A,E	%	194,9%	198,4%	196,8%	197,3%	198,1%	197,2%	197,6%	198,5%	198,5%	197,1%	196,4%	197,1%	195,3%	189,2%	188,8%
SEPR - (EN14825: 2018) High temperature with standard fans (2)																		
SEPR		A,E	W/W	5,70	5,62	5,59	6,56	6,43	6,42	6,77	6,94	7,21	6,96	7,47	6,88	7,21	6,69	7,01
SEPR - (EN14825: 2018) High temperature with inverter fans (2)																		
SEPR		A,E	W/W	5,70	5,62	5,59	6,56	6,43	6,42	6,77	6,94	7,21	6,96	7,47	6,88	7,21	6,69	7,01

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size				1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Electric data																		
Maximum current (FLA)		A,E	A	251,3	291,3	377,7	442,0	473,0	519,4	519,4	567,4	653,8	708,1	753,5	874,8	917,2	1002,2	1036,2
Peak current (LRA)		A,E	A	51,3	51,3	57,7	571,7	605,0	651,4	651,4	775,4	861,8	989,1	1059,4	1180,2	1335,2	1420,2	1532,2

GENERAL TECHNICAL DATA

Size				1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Compressor																		
Type		A,E	type	Screw														
Compressor regulation		A,E	Type	I	I	I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I
Number		A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Circuits		A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant		A,E	type	R134a														
Refrigerant charge (1)		A,E	kg	28,0	28,0	30,0	81,0	92,0	110,0	114,0	107,0	131,0	146,0	163,0	183,0	183,0	195,0	195,0
System side heat exchanger																		
Type		A,E	type	Shell and tube														
Number		A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																		
Connections (in/out)		A,E	Type	Grooved joints														
Sizes (in/out)		A,E	Ø	5"	6"	6"	6"	6"	6"	6"	8"	8"	8"	8"	10"	10"	10"	10"

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Fans

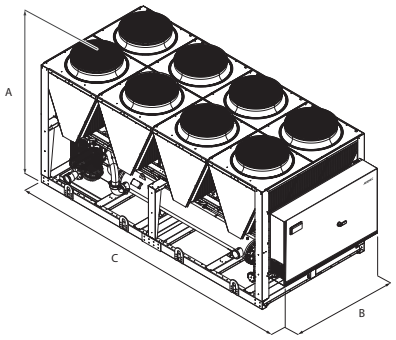
Size				1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Fans: °																		
Fan																		
Type		A,E	type	Axial														
Fan motor		A,E	type	Asynchronous with phase cut														
Number		A,E	no.	8	8	10	10	12	14	14	14	16	18	20	22	22	22	22
Air flow rate		A,E	m^3/h	128000	128000	160000	160000	192000	224000	224000	224000	256000	288000	320000	396000	396000	396000	396000

Sound data

Size				1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Sound data calculated in cooling mode (1)																		
Sound power level		A	dB(A)	97,2	98,6	98,6	98,6	98,8	99,9	99,9	100,3	100,3	100,4	101,0	102,9	103,2	102,9	103,2
		E	dB(A)	92,9	95,8	95,9	94,7	95,1	96,1	96,1	97,3	97,4	97,7	98,0	99,9	99,9	99,9	99,9
Sound pressure level (10 m)		A	dB(A)	64,8	66,2	66,1	66,1	66,2	67,1	67,1	67,5	67,5	67,4	67,9	69,7	69,9	69,7	69,9
		E	dB(A)	60,6	63,4	63,4	62,1	62,5	63,3	63,3	64,6	64,5	64,7	64,8	66,7	66,7	66,7	66,7

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Dimensions and weights																	
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	4760	4760	5950	6400	7140	8330	8330	8330	9520	10710	11900	13090	13090	13090	13090

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00																	
Dimensions and weights																	
Empty weight	A	kg	3752	4162	4578	6039	6447	6896	6987	7635	8103	8872	9324	10798	10888	10918	10991
	E	kg	4054	4464	4880	6642	7050	7499	7590	8239	8706	9475	9928	11637	11727	11757	11830
Weight functioning	A	kg	3832	4416	4832	6360	6768	7206	7275	8165	8632	9389	9841	11730	11819	11835	11908
	E	kg	4134	4718	5134	6964	7371	7809	7878	8768	9236	9993	10445	12568	12658	12674	12747

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NS

Reversible air/water heat pump

Cooling capacity 251 ÷ 731 kW – Heating capacity 281 ÷ 786 kW

- **High efficiency also at partial loads**
- **Electronic expansion valve**

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -10 °C outside air temperature in winter, and up to 48°C in summer. Hot water production up to 55°C (for more details refer to the technical documentation).

Bi-tri circuit unit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP_M: Anti-intrusion grid.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
KRS: Electric heater for the heat exchanger
AK: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
AER485P1	A,E	•	•		•		•											
AER485P1 x no. 2	A,E			•		•		•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•		•		•											
AERBACP x no. 2	A,E			•		•		•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Condensation control temperature

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202
A	DCPX69	DCPX69	DCPX68	DCPX69	DCPX68	DCPX69	DCPX68	DCPX73	DCPX73
E	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Ver	2352	2502	2652	2802	3002	3202	3402	3602
A	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73
E	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Anti-intrusion grid

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202
A, E	GP300M	GP300M	GP300B	GP300M	GP300B	GP400M	GP400B	GP500B	GP500B

Ver	2352	2502	2652	2802	3002	3202	3402	3602
A, E	GP500B	GP500B	GP500B	GP500B	GP300M+300M	GP300M+300M	GP300M+400M	GP400M+400M

Antivibration

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Integrated hydronic kit: 00																	
A, E	AVX536	AVX536	AVX537	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX549	AVX551	AVX551	AVX554	AVX556	AVX557	AVX559
Integrated hydronic kit: PA																	
A, E	AVX536	AVX536	AVX537	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX550	AVX551	AVX551	AVX553	AVX553	AVX557	AVX559
Integrated hydronic kit: PC, PE, PG, PJ																	
A, E	AVX536	AVX536	AVX538	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX550	AVX551	AVX551	AVX553	AVX555	AVX557	AVX559

Heater exchangers

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E	KRS11	KRS11	KRS19	KRS11	KRS19	KRS11	KRS19	KRS19	KRS19	KRS19	KRS19	KRS19	KRS19	KRS14	KRS14	KRS14	KRS14

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202
A, E	RIFNSH1251	RIFNSH1401	RIFNSH1402	RIFNSH1601	RIFNSH1602	RIFNSH1801	RIFNSH1802	RIFNSH2002	RIFNSH2202

A grey background indicates the accessory must be assembled in the factory

Ver	2352	2502	2652	2802	3002	3202	3402	3602
A, E	RIFNSH2352	RIFNSH2502	RIFNSH2652	RIFNSH2802	RIFNSH3002	RIFNSH3202	RIFNSH3402	RIFNSH3602

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2	**NS**
3,4,5,6	**Size** 1251, 1401, 1402, 1601, 1602, 1801, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602
7	**Operating field**
X	Electronic thermostatic expansion valve
8	**Model**
H	Heat pump
9	**Heat recovery**
D	With desuperheater
°	Without heat recovery
10	**Version**
A	High efficiency
E	Silenced high efficiency
11	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
12	**Fans**
J	Inverter
°	Standard
13	**Power supply**
8	400V~3 50Hz with magnet circuit breakers
°	400V~3 50Hz with fuses
14,15	**Integrated hydronic kit**
	Without hydronic kit
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A
PC	Pump C
PE	Pump E
PG	Pump G
PJ	Pump J (1)

(1) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NS - HA

Size		1251	1401	1402	1601	1602	1801	1802	2002	2202
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	262,7	281,7	257,7	309,7	315,6	365,6	365,6	384,6	414,5
Input power	kW	86,9	95,0	94,9	107,8	108,3	128,3	125,3	132,5	138,8
Cooling total input current	A	149,0	164,0	168,0	185,0	186,0	215,0	216,0	227,0	233,0
EER	W/W	3,02	2,96	2,72	2,87	2,91	2,85	2,92	2,90	2,99
Water flow rate system side	l/h	45186	48451	44327	53262	54292	62883	62883	66147	71302
Pressure drop system side	kPa	38	41	36	27	50	43	43	47	53
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	281,4	297,4	281,4	332,3	342,5	393,5	395,5	412,5	450,6
Input power	kW	88,2	94,2	93,2	104,0	106,8	126,7	123,7	133,9	141,3
Heating total input current	A	150,0	163,0	165,0	180,0	182,0	212,0	213,0	229,0	236,0
COP	W/W	3,19	3,16	3,02	3,20	3,21	3,11	3,20	3,08	3,19
Water flow rate system side	l/h	48838	51618	48838	57701	59439	68303	68651	71605	78210
Pressure drop system side	kPa	47	49	47	33	64	54	54	58	67

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		2352	2502	2652	2802	3002	3202	3402	3602
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	454,6	499,5	524,5	547,5	591,5	619,6	675,5	731,4
Input power	kW	158,4	173,5	186,7	195,9	202,6	215,4	235,9	256,4
Cooling total input current	A	268,0	295,0	318,0	335,0	349,0	370,0	400,0	430,0
EER	W/W	2,87	2,88	2,81	2,80	2,92	2,88	2,86	2,85
Water flow rate system side	l/h	78174	85906	90201	94153	101712	106523	116144	125766
Pressure drop system side	kPa	37	38	40	43	34	27	35	43
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	502,5	541,5	563,6	585,6	629,5	664,5	725,6	786,7
Input power	kW	157,9	171,0	177,1	185,4	198,0	207,8	230,4	253,1
Heating total input current	A	267,0	292,0	303,0	318,0	342,0	359,0	391,0	423,0
COP	W/W	3,18	3,17	3,18	3,16	3,18	3,20	3,15	3,11
Water flow rate system side	l/h	87247	94025	97849	101673	109320	115403	126004	136606
Pressure drop system side	kPa	49	47	49	53	41	33	43	54

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NS - HE

Size		1251	1401	1402	1601	1602	1801	1802	2002	2202
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	250,7	266,7	242,7	292,7	301,6	343,6	349,6	366,6	394,5
Input power	kW	91,8	101,9	100,8	115,7	116,2	136,1	132,2	140,3	146,5
Cooling total input current	A	161,0	178,0	181,0	202,0	202,0	234,0	233,0	246,0	254,0
EER	W/W	2,73	2,62	2,41	2,53	2,60	2,52	2,65	2,61	2,69
Water flow rate system side	l/h	43125	45874	41750	50341	51887	59103	60134	63055	67865
Pressure drop system side	kPa	32	37	33	24	46	38	39	43	48
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	281,4	297,4	281,4	332,3	342,5	393,5	395,5	412,5	450,6
Input power	kW	88,2	94,2	93,2	104,0	106,8	126,7	123,7	133,9	141,3
Heating total input current	A	150,0	163,0	165,0	180,0	182,0	212,0	213,0	229,0	236,0
COP	W/W	3,19	3,16	3,02	3,20	3,21	3,11	3,20	3,08	3,19
Water flow rate system side	l/h	48838	51618	48838	57701	59439	68303	68651	71605	78210
Pressure drop system side	kPa	47	49	47	33	64	54	54	58	67

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		2352	2502	2652	2802	3002	3202	3402	3602
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	435,6	487,6	506,5	517,5	559,6	585,6	636,5	687,5
Input power	kW	169,3	192,4	202,5	210,6	217,4	231,2	251,6	272,0
Cooling total input current	A	293,0	333,0	349,0	365,0	380,0	403,0	436,0	468,0
EER	W/W	2,57	2,53	2,50	2,46	2,57	2,53	2,53	2,53
Water flow rate system side	l/h	74910	83844	87108	88998	96214	100681	109444	118206
Pressure drop system side	kPa	34	35	37	39	30	24	31	38
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	502,5	541,5	563,6	585,6	629,5	664,5	725,6	786,7
Input power	kW	157,9	171,0	177,1	185,4	198,0	207,8	230,4	253,1
Heating total input current	A	267,0	292,0	303,0	318,0	342,0	359,0	391,0	423,0
COP	W/W	3,18	3,17	3,18	3,16	3,18	3,20	3,15	3,11
Water flow rate system side	l/h	87247	94025	97849	101673	109320	115403	126004	136606
Pressure drop system side	kPa	49	47	49	53	41	33	43	54

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size				1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)																				
Pdesignh	A,E	kW		185	195	185	218	225	259	260	271	297	330	356	370	385	325	342	374	400
SCOP	A,E	W/W		3,33	3,28	3,23	3,33	3,33	3,23	3,33	3,20	3,30	3,30	3,30	3,33	3,30	3,35	3,40	3,33	3,28
ηsh	A,E	%		130.0%	128.0%	126.0%	130.0%	130.0%	126.0%	130.0%	125.0%	129.0%	129.0%	129.0%	130.0%	129.0%	131.0%	133.0%	130.0%	128.0%
SEER - 12/7 (EN14825:2018) with standard fans (2)																				
SEER	A	W/W		3,88	3,81	3,46	3,76	3,68	3,71	3,73	3,70	3,80	3,72	3,74	3,66	3,64	3,81	3,76	3,73	3,72
	E	W/W		3,41	3,28	3,00	3,19	3,23	3,19	3,32	3,28	3,37	3,28	3,23	3,18	3,12	3,30	3,25	3,23	3,23
Seasonal efficiency	A	%		152.1%	149.4%	135.2%	147.4%	144.2%	145.2%	146.0%	145.0%	149.0%	145.7%	146.6%	143.5%	142.5%	149.5%	147.5%	146.1%	145.8%
	E	%		133.4%	128.1%	116.8%	124.4%	126.2%	124.7%	129.7%	128.2%	131.8%	128.1%	126.3%	124.3%	121.7%	129.1%	126.9%	126.1%	126.2%

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

ELECTRIC DATA

Size			1251	1401	1402	1601	1602	1801	1802	2002	2202
Electric data											
Maximum current (FLA)	A,E	A	209,0	242,0	276,0	258,0	276,0	316,0	325,0	352,0	370,0
Peak current (LRA)	A,E	A	327,0	387,0	251,0	431,0	251,0	472,0	305,0	313,0	350,0

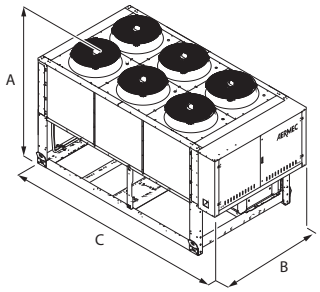
Size			2352	2502	2652	2802	3002	3202	3402	3602
Electric data										
Maximum current (FLA)	A,E	A	390,0	410,0	443,0	476,0	500,0	516,0	574,0	631,0
Peak current (LRA)	A,E	A	365,0	436,0	461,0	521,0	534,0	578,0	612,0	653,0

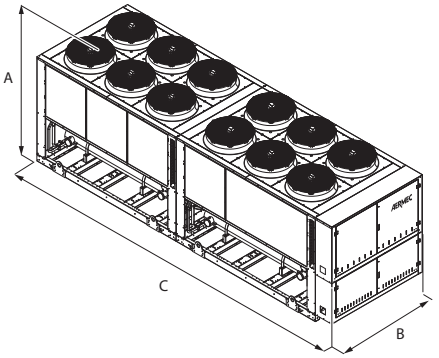
GENERAL TECHNICAL DATA

Size			1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Compressor																			
Type	A,E	type									Screw								
Compressor regulation	A,E	Type									On/Off								
Number	A,E	no.	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2
Partialisation of the unit with	A	%	40-100	40-100	20-100	40-100	20-100	40-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100
electronic thermostatic expansion valve	E	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigerant	A,E	type									R134a								
Refrigerant load circuit 1 (1)	A	kg	90,0	92,0	43,0	100,0	57,0	138,0	57,0	55,0	80,0	80,0	85,0	-	97,0	92,0	-	110,0	138,0
	E	kg	90,0	92,0	43,0	118,0	57,0	138,0	57,0	55,0	80,0	80,0	85,0	-	97,0	92,0	118,0	110,0	138,0
Refrigerant load circuit 2 (1)	A	kg	-	-	45,0	-	57,0	-	57,0	75,0	102,0	85,0	85,0	-	97,0	100,0	-	145,0	138,0
	E	kg	-	-	45,0	-	57,0	-	57,0	75,0	102,0	85,0	85,0	-	97,0	118,0	118,0	145,0	138,0
Total oil charge	A,E	kg	22,0	19,0	30,0	19,0	30,0	35,0	30,0	30,0	30,0	37,0	44,0	41,0	38,0	38,0	38,0	54,0	70,0
System side heat exchanger																			
Type	A,E	type									Shell and tube								
Number	A,E	no.	1	1	2	1	2	1	2	2	1	1	1	1	1	2	2	2	2
Minimum water flow rate	A	l/h	22593	24226	22164	26631	27146	31442	31442	33074	35651	39087	42953	45101	47077	50856	53262	58072	62883
	E	l/h	21563	22937	20875	25171	25944	29552	30067	31528	33933	37455	41922	43554	44499	48107	50341	54722	59103
Maximum water flow rate	A	l/h	75310	80752	73878	88770	90487	104805	104805	110245	118837	130290	143177	150335	156922	169520	177538	193573	209610
	E	l/h	71875	76457	69583	83902	86478	98505	100223	105092	113108	124850	139740	145180	148330	160357	167802	182407	197010
Water content	A,E	l	96,0	101,2	96,0	98,1	101,2	132,9	132,9	132,9	159,8	159,8	149,9	220,7	220,7	199,3	196,2	231,0	265,8
System side hydraulic connections																			
Connections (in/out)	A,E	Type									Grooved joints								
Sizes (in/out)	A,E	Ø									6"								
Sound data calculated in cooling mode (2)																			
Sound power level	A	dB(A)	93,5	93,5	94,0	94,5	95,0	96,0	96,0	96,5	96,5	96,5	97,0	97,0	97,0	97,0	97,5	98,3	99,0
	E	dB(A)	88,5	88,5	89,0	89,5	90,0	91,0	91,0	91,5	91,5	91,5	92,0	92,0	92,0	92,0	92,5	93,3	94,0
Sound pressure level (10 m)	A	dB(A)	61,3	61,3	61,8	62,3	62,8	63,6	63,6	64,0	64,0	64,0	64,5	64,5	64,5	64,4	64,9	65,6	66,2
	E	dB(A)	56,3	56,3	56,8	57,3	57,8	58,6	58,6	59,0	59,0	59,0	59,5	59,5	59,5	57,4	59,9	60,6	61,2
Sound pressure level (1 m)	A	dB(A)	73,8	73,8	74,3	74,8	75,3	75,8	75,8	75,9	75,9	75,9	76,4	76,4	76,4	75,8	76,3	76,8	77,2
	E	dB(A)	68,8	68,8	69,3	69,8	70,3	70,8	70,8	70,9	70,9	70,9	71,4	71,4	71,4	70,8	71,3	71,8	72,2

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS





Size			1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Dimensions and weights																			
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3780	3780	3780	3780	3780	4770	4770	5750	5750	5750	5750	5750	5750	7160	7160	8150	9140

Size			1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Integrated hydronic kit: 00																			
Dimensions and weights																			
Empty weight	A,E	kg	3245	3280	3570	3435	3835	4115	4005	4385	4570	4940	5265	5470	5610	6540	6745	7425	8105
Weight functioning	A,E	kg	3340	3380	3665	3535	3935	4250	4140	4520	4730	5100	5415	5690	5830	6740	6940	7655	8370

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NSG

Air-water chiller

Cooling capacity 228 ÷ 1580 kW

- **Microchannel coil**
- **High efficiency also at partial loads**
- **Night mode**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:
da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430; with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

Bi-tri circuit unit

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO_5

Units include 1 control board for each compressor.
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.
— Possibility to control two units in a Master-Slave configuration (from size 1402 to 6402)

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERSET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1 x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•						
AER485P1 x no. 3	°,A,L								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERBACP x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•						
AERBACP x no. 3	°,A,L								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERNET	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
AERSET	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
MULTICHILLER-EVO	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
PRV3	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					

Condensation control temperature

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002
Fans: M										
°	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX111	DCPX111	DCPX112
A	DCPX111	DCPX111	DCPX111	DCPX111	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX113
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX111	DCPX111	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX114	DCPX114

Ver	3202	3402	3602	3902	4202	4502	4802	5202	5602	6002
Fans: M										
°	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX115
A	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX116	DCPX116	DCPX116	DCPX117	DCPX118
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX114	DCPX115	DCPX115	DCPX116	DCPX117	DCPX117	DCPX118	DCPX119	DCPX130	DCPX131

Ver	6402	6503	6703	6903	7203	8403	9603
Fans: M							
°	DCPX116	DCPX135+DCPX113	DCPX135+DCPX113	DCPX125+DCPX114	DCPX114+DCPX136	DCPX114+DCPX136	DCPX114+DCPX136
A	DCPX118	DCPX115+DCPX136	DCPX115+DCPX136	DCPX116+DCPX136	DCPX116+DCPX136	DCPX117+DCPX136	-
E, N	As standard	As standard	As standard	As standard	As standard	-	-
L	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX132	DCPX116+DCPX137	DCPX117+DCPX137	DCPX117+DCPX137	DCPX118+DCPX137	-	-

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00														
°	AVX962	AVX962	AVX962	AVX963	AVX963	AVX963	AVX963	AVX968	AVX968	AVX966	AVX966	AVX966	AVX966	AVX965
A, L	AVX963	AVX963	AVX963	AVX963	AVX964	AVX964	AVX966	AVX965	AVX965	AVX970	AVX965	AVX967	AVX967	AVX969
E, U	AVX963	AVX963	AVX964	AVX966	AVX966	AVX965	AVX965	AVX967	AVX967	AVX967	AVX967	AVX969	AVX969	AVX971
N	AVX964	AVX964	AVX987	AVX965	AVX965	AVX967	AVX967	AVX969	AVX969	AVX969	AVX969	AVX971	AVX961	AVX972

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00													
°	AVX965	AVX967	AVX967	AVX969	AVX969	AVX969	AVX971	AVX978	AVX978	AVX983	AVX984	AVX984	AVX984
A, L	AVX969	AVX971	AVX971	AVX971	AVX961	AVX972	AVX972	AVX979	AVX979	AVX980	AVX980	AVX986	AVX981
E, U	AVX961	AVX961	AVX972	AVX972	AVX976	AVX973	AVX974	AVX980	AVX982	AVX982	AVX985	-	-
N	AVX972	AVX973	AVX974	AVX975	AVX977	AVX977	AVX977	AVX981	-	-	-	-	-

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
°, A, E, L, N, U	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
°, A, L	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)
E, U	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	-	-
N	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	-	-	-	-	-

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
°	GP3V	GP3V	GP3V	GP4V	GP4V	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP5V	GP6V
A	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
E, U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP7V	GP7V	GP8V	GP8V	GP9V
L	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP8V	GP9V	GP10V	GP11V

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
°	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP11V
A, L	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP5V+GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E, U	GP10V	GP10V	GP11V	GP11V	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V	GP8V+GP8V	GP8V+GP8V	GP8V+GP8V	GP6V+GP11V	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002
°, A, L	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23
E, N, U	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	3202	3402	3602	3902	4202	4502	4802	5202	5602	6002
°	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24
A, L	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
E, U	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23
N	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	6402	6503	6703	6903	7203	8403	9603
°	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
A, L	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E, U	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
N	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSG**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403, 9603
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	0	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	M	Oversized
14		**Power supply**
	2	230V~3 50Hz with fuses (5)
	4	230V~3 50Hz with magnet circuit breakers (5)
	5	500V~3 50Hz with fuses (6)
	8	400V~3 50Hz with magnet circuit breakers
	9	500V~3 50Hz with magnet circuit breakers (6)
	°	400V~3 50Hz with fuses

Field		Description
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (7)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (7)
		Kit with 2 pumps
	TF	Double pump F (8)
	TG	Double pump G (8)
	TH	Double pump H (8)
	TI	Double pump I (8)
	TJ	Double pump J (8)

(1) Water produced from 0 °C ÷ 23 °C
(2) Water produced from 8 °C ÷ -10 °C; incompatible whit D and T
(3) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(4) The temperature of the water in the heat exchanger inlet must never drop below 35°C. The units from 1402° - 1602° - 1802° with total recovery are not configurable. For all other sizes and versions it is to be evaluated at the order stage.
(5) Only for sizes from 1402 to 2202
(6) Only for sizes from 1402 to 3202
(7) For all configurations including pump J please contact the factory.
(8) The unit from 5603 to 9603 can only have hydronic kit "TF - TG - TH- TI - TJ"

PERFORMANCE SPECIFICATIONS

NSG - °

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	228,6	261,3	297,8	334,1	358,6	389,8	402,8	443,7	462,6	506,3	531,6	566,5	623,6	676,0
Input power	kW	74,3	85,8	100,4	108,3	119,9	129,9	138,2	151,6	162,6	167,0	175,7	193,9	214,9	228,2
Cooling total input current	A	138,0	156,0	174,0	192,0	214,0	233,0	248,0	271,0	289,0	297,0	309,0	332,0	359,0	390,0
EER	W/W	3,08	3,05	2,97	3,08	2,99	3,00	2,91	2,93	2,85	3,03	3,02	2,92	2,90	2,96
Water flow rate system side	l/h	39316	44954	51218	57461	61665	67027	69255	76286	79541	87045	91392	97398	107202	116226
Pressure drop system side	kPa	14	18	16	21	24	20	22	18	19	17	19	21	24	29

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	739,5	792,4	835,2	874,9	897,0	942,5	989,1	1060,2	1095,1	1215,2	1268,8	1333,1	1410,0
Input power	kW	251,7	263,0	281,6	288,8	302,5	320,8	329,9	355,3	375,5	407,7	419,3	461,7	512,0
Cooling total input current	A	434,0	454,0	482,0	500,0	524,0	558,0	581,0	609,0	649,0	701,0	728,0	805,0	900,0
EER	W/W	2,94	3,01	2,97	3,03	2,97	2,94	3,00	2,98	2,92	2,98	3,03	2,89	2,75
Water flow rate system side	l/h	127152	136250	143578	150403	154212	162036	170045	182263	188254	208871	218093	229141	242359
Pressure drop system side	kPa	33	38	28	31	33	38	42	29	31	20	22	25	28

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSG - L

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	227,7	261,7	298,7	335,0	373,6	386,8	415,2	446,3	476,8	498,0	546,8	602,0	645,3	707,0
Input power	kW	72,7	84,0	98,1	112,6	120,1	128,4	138,3	144,3	155,8	165,4	179,1	193,2	212,5	231,2
Cooling total input current	A	131,0	148,0	165,0	192,0	208,0	224,0	242,0	252,0	270,0	284,0	303,0	318,0	342,0	375,0
EER	W/W	3,13	3,12	3,04	2,97	3,11	3,01	3,00	3,09	3,06	3,01	3,05	3,12	3,04	3,06
Water flow rate system side	l/h	39167	45014	51371	57614	64237	66506	71390	76738	81966	85616	94000	103492	110929	121547
Pressure drop system side	kPa	15	18	17	15	19	20	16	19	16	17	19	15	18	22

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	743,5	806,3	841,6	893,3	933,8	982,7	1023,0	1083,7	1120,2	1222,9	1269,4	1383,5	1517,2 (2)
Input power	kW	252,4	266,7	283,5	297,7	306,0	315,5	334,5	357,8	379,1	402,0	421,5	465,5	504,7
Cooling total input current	A	416,0	437,0	465,0	490,0	507,0	533,0	563,0	583,0	623,0	670,0	699,0	763,0	848,0
EER	W/W	2,95	3,02	2,97	3,00	3,05	3,12	3,06	3,03	2,96	3,04	3,01	2,97	3,01
Water flow rate system side	l/h	127821	138615	144692	153568	160522	168943	175872	186277	192550	210223	218211	237808	260789
Pressure drop system side	kPa	24	31	33	24	26	31	33	22	24	31	33	26	32

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Unit not Eurovent certified because it exceeds 1500 kW

NSG - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	233,0	267,3	306,8	346,4	383,4	397,6	429,0	458,6	491,7	511,7	561,1	619,9	669,1	731,1
Input power	kW	73,5	83,8	96,7	109,8	118,4	126,0	134,9	142,3	152,7	160,7	171,9	187,9	206,4	224,9
Cooling total input current	A	139,0	155,0	170,0	195,0	214,0	229,0	246,0	260,0	276,0	287,0	303,0	322,0	344,0	380,0
EER	W/W	3,17	3,19	3,17	3,15	3,24	3,16	3,18	3,22	3,22	3,18	3,26	3,30	3,24	3,25
Water flow rate system side	l/h	40072	45975	52777	59582	65922	68370	73757	78851	84535	87974	96463	106561	115027	125681
Pressure drop system side	kPa	15	19	18	16	20	22	17	20	16	18	20	16	19	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	770,4	833,7	872,2	923,2	961,9	1011,0	1053,8	1121,6	1160,9	1263,4	1313,4	1432,8	1580,6 (2)
Input power	kW	243,7	258,6	273,6	291,5	301,9	312,6	330,2	347,1	365,9	390,3	408,0	451,1	495,6
Cooling total input current	A	417,0	440,0	466,0	502,0	524,0	554,0	583,0	588,0	625,0	676,0	701,0	769,0	866,0
EER	W/W	3,16	3,22	3,19	3,17	3,19	3,23	3,19	3,23	3,17	3,24	3,22	3,18	3,19
Water flow rate system side	l/h	132447	143336	149960	158709	165357	173799	181161	192795	199561	217184	225782	246285	271702
Pressure drop system side	kPa	26	33	36	26	28	33	35	24	26	33	36	27	35

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Unit not Eurovent certified because it exceeds 1500 kW

NSG - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	243,5	281,0	317,4	359,0	387,6	413,2	428,5	471,9	494,2	514,3	550,0	608,1	654,7	714,4
Input power	kW	73,6	86,3	96,5	111,1	122,0	126,7	133,3	144,0	153,3	160,2	172,1	188,9	204,8	222,5
Cooling total input current	A	133,0	152,0	163,0	189,0	211,0	222,0	237,0	251,0	267,0	279,0	293,0	310,0	334,0	368,0
EER	W/W	3,31	3,26	3,29	3,23	3,18	3,26	3,21	3,28	3,22	3,21	3,20	3,22	3,20	3,21
Water flow rate system side	l/h	41877	48309	54578	61723	66638	71045	73675	81134	84968	88414	94560	104538	112548	122817
Pressure drop system side	kPa	12	11	14	9	11	12	13	15	16	18	19	16	18	23

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	764,3	813,2	877,0	900,7	944,8	1000,3	1028,9	1101,9	1151,7	1242,8	1300,9	-	-
Input power	kW	236,0	255,6	273,4	283,8	292,9	310,2	318,7	343,0	357,9	392,1	407,8	-	-
Cooling total input current	A	399,0	428,0	450,0	475,0	495,0	519,0	544,0	572,0	599,0	656,0	673,0	-	-
EER	W/W	3,24	3,18	3,21	3,17	3,23	3,22	3,23	3,21	3,22	3,17	3,19	-	-
Water flow rate system side	l/h	131397	139814	150755	154839	162399	171941	176857	189402	197982	213642	223617	-	-
Pressure drop system side	kPa	26	32	24	25	16	16	19	23	26	32	24	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSG - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	249,3	288,6	324,9	369,0	399,5	423,8	440,0	483,4	507,1	526,0	564,2	623,1	674,9	735,2
Input power	kW	74,1	85,8	96,9	110,1	120,0	126,0	132,1	143,6	152,2	157,5	167,5	185,9	201,2	218,7
Cooling total input current	A	141,0	158,0	172,0	196,0	217,0	231,0	246,0	263,0	277,0	287,0	298,0	319,0	342,0	377,0
EER	W/W	3,36	3,36	3,35	3,35	3,33	3,36	3,33	3,37	3,33	3,34	3,37	3,35	3,35	3,36
Water flow rate system side	l/h	42866	49623	55869	63446	68694	72874	75659	83113	87181	90438	96990	107116	116011	126384
Pressure drop system side	kPa	13	11	14	10	11	13	14	16	17	18	20	17	20	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	784,5	837,2	901,8	927,6	971,1	1026,7	1054,7	1133,1	1182,5	1280,2	1339,0	-	-
Input power	kW	232,3	250,1	268,3	277,9	288,3	306,2	315,5	337,3	352,2	383,1	399,1	-	-
Cooling total input current	A	411,0	437,0	461,0	486,0	509,0	536,0	564,0	586,0	617,0	668,0	689,0	-	-
EER	W/W	3,38	3,35	3,36	3,34	3,37	3,35	3,34	3,36	3,36	3,34	3,36	-	-
Water flow rate system side	l/h	134866	143931	155027	159459	166915	176480	181297	194780	203262	220062	230162	-	-
Pressure drop system side	kPa	28	34	25	27	17	17	20	24	28	34	25	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSG - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	245,2	283,6	318,2	364,5	394,3	417,2	432,9	475,2	498,1	517,4	552,6	613,0	669,6	727,4
Input power	kW	73,4	84,4	95,3	107,6	118,7	124,5	130,7	141,2	149,3	156,7	165,7	182,9	200,4	216,0
Cooling total input current	A	132,0	149,0	162,0	185,0	207,0	219,0	234,0	249,0	264,0	274,0	287,0	306,0	324,0	359,0
EER	W/W	3,34	3,36	3,34	3,39	3,32	3,35	3,31	3,37	3,34	3,30	3,34	3,35	3,34	3,37
Water flow rate system side	l/h	42156	48766	54716	62663	67797	71743	74443	81707	85643	88946	95006	105378	115107	125049
Pressure drop system side	kPa	13	11	15	9	11	13	14	15	17	18	20	16	20	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	766,9	834,2	880,8	925,4	961,2	1003,2	1036,3	1120,4	-	-	-	-	-
Input power	kW	230,1	248,2	261,5	275,0	286,5	296,1	311,6	333,3	-	-	-	-	-
Cooling total input current	A	395,0	413,0	435,0	458,0	480,0	509,0	537,0	557,0	-	-	-	-	-
EER	W/W	3,33	3,36	3,37	3,36	3,35	3,39	3,33	3,36	-	-	-	-	-
Water flow rate system side	l/h	131846	143411	151421	159089	165211	172435	178132	192584	-	-	-	-	-
Pressure drop system side	kPa	27	23	29	29	17	17	20	24	-	-	-	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: M																
SEER - 12/7 (EN14825: 2018) (1)																
SEER	°,A,E,L,N,U	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEPR - (EN 14825: 2018) (3)																
SEPR	°	W/W	5,32	5,40	5,30	5,46	5,46	5,50	5,52	5,51	5,51	5,51	5,54	5,53	5,51	5,52
	A	W/W	5,53	5,59	5,47	5,51	5,59	5,56	5,55	5,56	5,57	5,51	5,53	5,59	5,57	5,58
	E	W/W	5,69	5,72	5,77	5,64	5,58	5,71	5,65	5,72	5,67	5,65	5,67	5,64	5,66	5,68
	L	W/W	5,46	5,56	5,43	5,53	5,54	5,52	5,52	5,52	5,55	5,55	5,75	5,61	5,52	5,52
	N	W/W	5,75	5,77	5,89	5,69	5,58	5,66	5,62	5,68	5,61	5,59	5,63	5,64	5,64	5,65
	U	W/W	5,73	5,78	5,81	5,70	5,65	5,76	5,71	5,77	5,72	5,70	5,72	5,70	5,72	5,74

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: M															
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,A,E,L,N,U	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEPR - (EN 14825: 2018) (3)															
SEPR	°	W/W	5,53	5,52	5,52	5,52	5,52	5,51	5,52	5,53	5,52	5,52	5,55	5,52	5,52
	A	W/W	5,51	5,56	5,55	5,52	5,55	5,56	5,52	5,65	5,59	5,69	5,66	5,60	5,65
	E	W/W	5,69	5,64	5,69	5,56	5,56	5,56	5,69	5,81	5,86	5,67	5,72	-	-
	L	W/W	5,53	5,51	5,52	5,51	5,54	5,54	5,54	5,63	5,59	5,66	5,65	5,62	5,66
	N	W/W	5,61	5,62	5,64	5,69	5,57	5,60	5,56	5,71	-	-	-	-	-
	U	W/W	5,76	5,71	5,75	5,64	5,63	5,63	5,74	5,86	5,89	5,73	5,77	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: J																
SEER - 12/7 (EN14825: 2018) (1)																
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,43	4,40	4,48	4,54	4,51	4,54	4,56	4,56	4,56	4,56	4,57	4,57	4,56	4,57
	E	W/W	4,46	4,47	4,55	4,55	4,55	4,58	4,57	4,59	4,57	4,58	4,58	4,58	4,59	4,57
	L	W/W	4,41	4,38	4,47	4,51	4,50	4,54	4,56	4,56	4,56	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,51	4,48	4,57	4,55	4,56	4,60	4,60	4,61	4,60	4,60	4,61	4,61	4,60	4,60
	U	W/W	4,48	4,47	4,56	4,57	4,56	4,58	4,57	4,59	4,58	4,59	4,59	4,59	4,60	4,58
SEPR - (EN 14825: 2018) (3)																
SEPR	°	W/W	5,32	5,40	5,30	5,46	5,46	5,50	5,52	5,51	5,51	5,51	5,54	5,53	5,51	5,52
	A	W/W	5,50	5,60	5,50	5,50	5,60	5,60	5,60	5,60	5,60	5,50	5,50	5,60	5,60	5,60
	E	W/W	5,70	5,70	5,80	5,60	5,60	5,70	5,70	5,70	5,70	5,70	5,70	5,60	5,70	5,70
	L	W/W	5,50	5,60	5,40	5,50	5,50	5,50	5,50	5,50	5,60	5,60	5,80	5,60	5,50	5,50
	N	W/W	5,80	5,80	5,90	5,70	5,60	5,70	5,60	5,70	5,60	5,60	5,60	5,60	5,60	5,70
	U	W/W	5,70	5,80	5,80	5,70	5,70	5,80	5,70	5,80	5,70	5,70	5,70	5,70	5,70	5,70

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: J															
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,57	4,57	4,56	4,56	4,56	4,57	4,56	4,57	4,57	4,58	4,57	4,57	4,58
	E	W/W	4,58	4,56	4,59	4,57	4,59	4,57	4,58	4,60	4,61	4,58	4,60	-	-
	L	W/W	4,56	4,56	4,55	4,56	4,56	4,56	4,55	4,57	4,56	4,57	4,57	4,56	4,57
	N	W/W	4,60	4,59	4,61	4,60	4,60	4,59	4,60	4,62	-	-	-	-	-
	U	W/W	4,59	4,57	4,59	4,57	4,59	4,58	4,59	4,61	4,61	4,58	4,60	-	-
SEPR - (EN 14825: 2018) (3)															
SEPR	°	W/W	5,53	5,52	5,52	5,52	5,52	5,51	5,52	5,53	5,52	5,52	5,55	5,52	5,52
	A	W/W	5,50	5,60	5,60	5,50	5,60	5,60	5,50	5,70	5,60	5,70	5,70	5,60	5,70
	E	W/W	5,70	5,60	5,70	5,60	5,60	5,60	5,70	5,80	5,90	5,70	5,70	-	-
	L	W/W	5,50	5,50	5,50	5,50	5,50	5,50	5,50	5,60	5,60	5,70	5,70	5,60	5,70
	N	W/W	5,60	5,60	5,60	5,70	5,60	5,60	5,60	5,70	-	-	-	-	-
	U	W/W	5,80	5,70	5,80	5,60	5,60	5,60	5,70	5,90	5,90	5,70	5,80	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
Maximum current (FLA)	°	A	223,7	241,3	264,3	300,3	327,4	346,4	365,4	386,4	407,4	431,3	446,3	470,3	494,3	543,1
	A,L	A	232,6	250,2	273,2	300,3	336,3	355,3	374,3	404,1	425,1	440,1	455,1	488,0	512,0	560,9
	E,U	A	232,6	250,2	282,1	309,2	336,3	364,1	383,1	413,0	434,0	449,0	464,0	496,9	520,9	569,8
	N	A	241,5	259,1	290,9	318,0	345,1	373,0	392,0	421,9	442,9	457,9	472,9	505,8	538,7	593,4
Peak current (LRA)	°	A	252,0	287,1	329,4	376,3	395,0	442,0	459,0	486,0	493,7	597,6	636,2	665,2	661,2	791,0
	A,L	A	260,9	296,0	338,3	376,3	403,9	450,9	467,9	503,7	511,4	606,4	645,0	682,9	678,9	808,8
	E,U	A	260,9	296,0	347,2	385,2	403,9	459,7	476,7	512,6	520,3	615,3	653,9	691,8	687,8	817,7
	N	A	269,8	304,9	356,0	394,0	412,7	468,6	485,6	521,5	529,2	624,2	662,8	700,7	705,6	841,3

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Electric data															
Maximum current (FLA)	°	A	583,1	625,0	658,0	697,9	728,9	760,9	801,8	831,8	871,8	946,7	994,4	1087,4	1183,4
	A,L	A	600,9	642,8	675,8	706,8	746,7	793,4	825,4	864,3	904,3	988,1	1021,1	1122,9	1236,7
	E,U	A	618,7	651,7	699,4	730,4	770,3	811,2	852,1	882,1	930,9	996,9	1038,8	-	-
	N	A	633,4	684,2	726,1	765,9	805,8	837,8	869,8	908,7	-	-	-	-	-
Peak current (LRA)	°	A	821,3	894,2	914,2	1078,1	1097,9	1209,9	1249,8	993,9	1024,2	1117,1	1151,8	1346,4	1520,4
	A,L	A	839,1	912,0	932,0	1087,0	1115,7	1242,4	1273,4	1026,4	1056,7	1158,5	1178,5	1381,9	1573,7
	E,U	A	856,9	920,9	955,6	1110,6	1139,3	1260,2	1300,1	1044,2	1083,3	1167,3	1196,2	-	-
	N	A	871,6	953,4	982,3	1146,1	1174,8	1286,8	1317,8	1070,8	-	-	-	-	-

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Compressor																
Type	°,A,E,L,N,U	type	Screw													
Number	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type	R1234ze													

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Refrigerant load circuit 1 (1)	°	kg	24,0	24,0	23,0	30,0	30,0	35,0	35,0	35,0	35,0	40,0	46,0	42,5	44,5	51,0
	A	kg	26,5	34,0	28,0	30,5	34,0	35,0	38,5	40,5	45,0	43,0	47,0	52,0	55,0	74,0
	E	kg	29,0	30,0	41,0	34,0	40,0	43,0	43,0	46,0	45,0	45,0	57,0	54,0	74,0	60,0
	L	kg	24,0	26,0	37,0	28,0	34,0	35,0	38,5	40,0	42,0	44,0	47,0	52,0	54,0	56,0
	N	kg	36,0	38,0	34,0	44,0	49,0	53,0	56,0	60,0	64,0	64,0	55,0	72,0	81,0	85,0
	U	kg	32,0	34,0	34,0	35,0	46,0	49,0	49,0	46,0	45,0	60,0	54,5	58,0	58,0	75,0
Refrigerant load circuit 2 (1)	°	kg	24,0	25,0	25,0	41,0	33,0	38,0	37,0	37,5	35,0	50,0	48,0	46,0	46,0	59,0
	A	kg	28,0	34,0	29,5	36,0	34,0	49,0	40,5	45,0	47,5	48,0	50,0	55,0	60,0	81,0
	E	kg	29,0	31,5	41,0	40,0	40,0	45,0	45,0	52,0	53,0	53,0	59,0	59,0	74,0	77,0
	L	kg	27,0	28,0	37,0	36,0	34,0	40,0	40,5	43,0	46,0	52,0	50,0	55,0	58,0	72,0
	N	kg	36,0	38,0	34,0	49,0	49,0	56,0	56,0	64,0	64,0	69,0	57,0	77,0	81,0	92,0
	U	kg	32,0	34,0	36,0	41,5	46,0	53,0	54,0	52,0	48,5	65,0	59,0	62,0	63,0	90,0
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
System side heat exchanger																
Type	°,A,E,L,N,U	type	Shell and tube													
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor															
Type	°,A,E,L,N,U	type	Screw												
Number	°,A,L	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Circuits	°,A,L	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	°,A,E,L,N,U	type	R1234ze												
Refrigerant load circuit 1 (1)	°	kg	52,0	55,0	55,0	63,0	65,0	62,0	70,0	67,0	55,0	78,0	62,0	99,0	112,0
	A,L	kg	62,0	67,0	67,0	70,0	106,0	82,0	82,0	74,0	81,0	85,0	70,0	106,0	80,0
	E	kg	70,0	89,0	80,0	100,0	113,0	86,0	95,0	77,0	89,0	89,0	100,0	-	-
	N	kg	92,0	99,0	110,0	114,0	128,0	128,0	138,0	85,0	-	-	-	-	-
	U	kg	70,0	89,0	80,0	85,0	113,0	86,0	95,0	77,0	89,0	89,0	100,0	-	-
Refrigerant load circuit 2 (1)	°	kg	59,0	64,0	64,0	70,0	71,0	73,0	80,0	74,0	61,0	85,0	70,0	99,0	112,0
	A	kg	70,0	78,0	78,0	82,0	106,0	99,0	99,0	81,0	81,0	92,0	75,0	106,0	95,0
	E	kg	85,0	96,0	90,0	110,0	113,0	98,0	97,0	85,0	89,0	96,0	100,0	-	-
	L	kg	70,0	79,0	78,0	82,0	106,0	99,0	99,0	81,0	81,0	92,0	75,0	106,0	95,0
	N	kg	92,0	107,0	110,0	124,0	128,0	138,0	138,0	92,0	-	-	-	-	-
	U	kg	85,0	96,0	90,0	103,0	113,0	98,0	97,0	85,0	89,0	96,0	100,0	-	-
Refrigerant load circuit 3 (1)	°	kg	-	-	-	-	-	-	-	74,0	65,0	85,0	80,0	99,0	112,0
	A,L	kg	-	-	-	-	-	-	-	81,0	81,0	92,0	75,0	106,0	85,0
	E,U	kg	-	-	-	-	-	-	-	85,0	89,0	96,0	100,0	-	-
	N	kg	-	-	-	-	-	-	-	92,0	-	-	-	-	-
System side heat exchanger															
Type	°,A,E,L,N,U	type	Shell and tube												
Number	°	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
	A,L	no.	1	1	1	1	1	1	1	2	2	2	2	2	2
	E,U	no.	1	1	1	1	2	2	2	2	2	2	2	-	-
	N	no.	1	2	2	2	2	2	2	2	-	-	-	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

FANS DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fan																
Type	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	°	no.	6	6	6	8	8	8	8	8	8	10	10	10	10	12
	A,L	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fan															
Type	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	°	no.	12	14	14	16	16	16	18	18	18	20	22	22	22
	A,L	no.	16	18	18	18	20	22	22	24	24	28	28	30	34
	E,U	no.	20	20	22	22	24	26	28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	32	32	34	-	-	-	-	-

Oversized

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: M																
Increased fan																
Fan motor	°,A,U	type	Asynchronous													
	E,L,N	type	Asynchronous with phase cut													
Without Static pressure																
Air flow rate	°	m^3/h	108000	108000	108000	144000	144000	144000	144000	144000	144000	180000	180000	180000	180000	216000
	A	m^3/h	144000	144000	144000	144000	180000	180000	180000	216000	216000	216000	216000	252000	252000	288000
	E	m^3/h	92000	92000	115000	115000	115000	138000	138000	161000	161000	161000	161000	184000	184000	207000
	L	m^3/h	92000	92000	92000	92000	115000	115000	115000	138000	138000	138000	138000	161000	161000	184000
	N	m^3/h	115000	115000	138000	138000	138000	161000	161000	184000	184000	184000	184000	207000	230000	253000
	U	m^3/h	144000	144000	180000	180000	180000	216000	216000	252000	252000	252000	252000	288000	288000	324000
Sound power level	°	dB(A)	98,0	98,0	98,0	98,0	98,0	98,0	98,0	98,0	98,0	99,0	99,0	100,0	100,0	101,0
	A	dB(A)	98,0	98,0	99,0	99,0	99,0	99,0	99,0	100,0	100,0	100,0	100,0	100,0	100,0	101,0
	E	dB(A)	89,0	89,0	90,0	90,0	90,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
	L	dB(A)	89,0	89,0	89,0	89,0	90,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	92,0
	N	dB(A)	90,0	90,0	91,0	91,0	91,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
	U	dB(A)	98,0	98,0	99,0	99,0	99,0	100,0	100,0	100,0	100,0	100,0	100,0	101,0	101,0	101,0

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: M															
Increased fan															
Fan motor	°,A,U	type	Asynchronous												
	E,L,N	type	Asynchronous with phase cut												
Without Static pressure															
Air flow rate	°	m^3/h	216000	252000	252000	288000	288000	288000	324000	324000	324000	360000	396000	396000	396000
	A	m^3/h	288000	324000	324000	324000	360000	396000	396000	432000	432000	504000	504000	540000	612000
	E	m^3/h	230000	230000	253000	253000	276000	299000	322000	322000	345000	345000	368000	-	-
	L	m^3/h	184000	207000	207000	234000	260000	286000	286000	276000	276000	322000	322000	345000	442000
	N	m^3/h	253000	299000	322000	345000	368000	368000	368000	391000	-	-	-	-	-
	U	m^3/h	360000	360000	396000	396000	432000	468000	504000	504000	540000	540000	576000	-	-
Sound power level	°	dB(A)	101,0	101,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	103,0	103,0	103,0	103,0
	A	dB(A)	101,0	101,0	102,0	101,0	102,0	102,0	102,0	103,0	103,0	103,0	103,0	104,0	104,0
	E	dB(A)	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	95,0	-	-
	L	dB(A)	93,0	93,0	93,0	93,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	95,0
	N	dB(A)	93,0	94,0	94,0	95,0	95,0	95,0	95,0	95,0	-	-	-	-	-
	U	dB(A)	102,0	102,0	102,0	102,0	103,0	103,0	103,0	103,0	103,0	103,0	103,0	-	-

Inverter

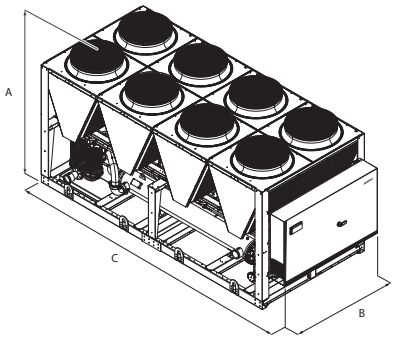
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: J																
Inverter fan																
Fan motor	°,A,E,L,N,U	type	Inverter													
Air flow rate	°	m^3/h	96000	96000	96000	128000	128000	128000	128000	144000	144000	180000	180000	180000	180000	216000
	A	m^3/h	128000	128000	128000	128000	160000	160000	160000	192000	192000	192000	192000	224000	224000	256000
	E	m^3/h	92000	92000	115000	115000	115000	138000	138000	161000	161000	161000	161000	184000	184000	207000
	L	m^3/h	92000	92000	92000	92000	115000	115000	115000	138000	138000	138000	138000	161000	161000	184000
	N	m^3/h	115000	115000	138000	138000	138000	161000	161000	184000	184000	184000	184000	207000	230000	253000
	U	m^3/h	128000	128000	160000	160000	160000	192000	192000	224000	224000	224000	224000	256000	256000	288000
Sound data calculated in cooling mode (1)																
Sound power level	°	dB(A)	97,0	97,0	97,0	98,0	98,0	98,0	98,0	98,0	98,0	99,0	100,0	100,0	100,0	101,0
	A	dB(A)	97,0	97,0	98,0	98,0	98,0	98,0	98,0	99,0	99,0	99,0	99,0	99,0	99,0	100,0
	E	dB(A)	89,0	89,0	90,0	90,0	90,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
	L	dB(A)	89,0	89,0	89,0	89,0	90,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	92,0
	N	dB(A)	90,0	90,0	91,0	91,0	91,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
	U	dB(A)	97,0	97,0	98,0	98,0	98,0	99,0	99,0	99,0	99,0	99,0	99,0	100,0	100,0	100,0

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: J															
Inverter fan															
Fan motor	°,A,E,L,N,U	type							Inverter						
Air flow rate	°	m^3/h	216000	252000	252000	288000	288000	288000	324000	324000	324000	360000	396000	396000	396000
	A	m^3/h	256000	288000	288000	324000	360000	396000	396000	384000	384000	448000	448000	480000	612000
	E	m^3/h	230000	230000	253000	253000	276000	299000	322000	322000	345000	345000	368000	-	-
	L	m^3/h	184000	207000	207000	234000	260000	286000	286000	276000	276000	322000	322000	345000	442000
	N	m^3/h	253000	299000	322000	345000	368000	368000	368000	391000	-	-	-	-	-
	U	m^3/h	320000	320000	352000	352000	384000	416000	448000	448000	480000	480000	512000	-	-
Sound data calculated in cooling mode (1)															
Sound power level	°	dB(A)	101,0	101,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	103,0	103,0	103,0	103,0
	A	dB(A)	100,0	100,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	103,0	104,0
	E	dB(A)	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	95,0	-	-
	L	dB(A)	93,0	93,0	93,0	93,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	95,0
	N	dB(A)	93,0	94,0	94,0	95,0	95,0	95,0	95,0	95,0	-	-	-	-	-
	U	dB(A)	101,0	101,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	-	-

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	3970	3970	3970	5160	5160	5160	5160	5160	5160	6350	6350	6350	6350	7540
	A,L	mm	5160	5160	5160	5160	6350	6350	6350	7540	7540	7540	7540	8730	8730	9920
	E,U	mm	5160	5160	6350	6350	6350	7540	7540	8730	8730	8730	8730	9920	9920	11110
	N	mm	6350	6350	7540	7540	7540	8730	8730	9920	9920	9920	9920	11110	12300	13490

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights															
A	°,A,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-	-
B	°,A,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-	-
C	°	mm	7540	8730	8730	9920	9920	9920	11110	11110	11110	12300	13490	13490	13490
	A,L	mm	9920	11110	11110	11110	12300	13490	13490	15080	15080	17460	17460	18650	21030
	E,U	mm	12300	12300	13490	13490	15080	16270	17460	17460	18650	18650	19840	-	-
	N	mm	13490	16270	17460	18650	19840	19840	19840	21030	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00																
Single module unit																
Empty weight	°	kg	4108	4153	4275	5137	5468	5476	5485	5680	5690	6659	7153	7163	7188	7854
	A	kg	4637	4684	4806	5137	5882	5890	6085	6696	6782	7261	7806	8486	8501	9029
	E	kg	4768	4800	5220	5814	6145	6755	6763	7198	7213	7707	7806	8940	8950	9719
	L	kg	4637	4684	4806	5137	5882	5890	6085	6696	6782	7261	8223	8486	8501	9029
	N	kg	5179	5214	5822	6415	6746	7163	7177	7649	7659	8161	8223	9630	10062	10682
	U	kg	4768	4800	5220	5814	6145	6755	6763	7198	7213	7707	8672	8940	8950	9719
Weight functioning	°	kg	4186	4225	4393	5256	5586	5614	5622	5953	5962	6982	7475	7485	7501	8166
	A	kg	4714	4757	4925	5275	6019	6028	6357	6968	7105	7583	8098	9016	9030	9547
	E	kg	4887	4937	5358	6137	6467	7077	7086	7510	7525	8019	8098	9470	9480	10237
	L	kg	4714	4757	4925	5275	6019	6028	6357	6968	7105	7583	8515	9016	9030	9547
	N	kg	5298	5352	5959	6738	7069	7486	7500	7961	7971	8474	8515	10160	10592	11199
	U	kg	4887	4937	5358	6137	6467	7077	7086	7510	7525	8019	8964	9470	9480	10237

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00															
Single module unit															
Empty weight	°	kg	7947	8389	8704	9252	9347	9405	10170	11843	11931	12488	13081	13400	13552
	A,L	kg	9090	9829	9892	10315	10836	11441	11519	-	-	-	-	-	-
	E,U	kg	10203	10282	11194	11284	-	-	-	-	-	-	-	-	-
	N	kg	10748	-	-	-	-	-	-	-	-	-	-	-	-
Weight functioning	°	kg	8239	8681	9234	9781	9877	9922	10687	12797	12885	13398	13990	14309	14462
	A,L	kg	9608	10334	10397	11247	11767	12358	12437	-	-	-	-	-	-
	E,U	kg	10720	10787	12125	12215	-	-	-	-	-	-	-	-	-
	N	kg	11265	-	-	-	-	-	-	-	-	-	-	-	-
Bimodule unit															
Empty weight module 1	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	9029	9090	9829	9892	10836	11519
	E,U	kg	-	-	-	-	6276	6276	6741	9719	10203	10282	11194	-	-
	N	kg	-	6084	6517	6517	7126	7126	7190	10880	-	-	-	-	-

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Empty weight module 2	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	5068	5068	5512	5512	5675	6265
	E,U	kg	-	-	-	-	6207	6671	6671	5482	5482	5512	5512	-	-
	N	kg	-	6448	6448	7056	7056	7120	7120	6014	-	-	-	-	-
Total empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	14098	14159	15342	15405	16511	17784
	E,U	kg	-	-	-	-	12483	12948	13412	15202	15685	15795	16706	-	-
	N	kg	-	12531	12965	13573	14182	14246	14310	16894	-	-	-	-	-
Weight functioning module 1	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	9547	9608	10334	10397	11767	12437
	E,U	kg	-	-	-	-	6589	6589	7053	10237	10720	10787	12125	-	-
	N	kg	-	6342	6776	6776	7438	7438	7502	11398	-	-	-	-	-
Weight functioning module 2	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	5327	5327	5771	5771	5987	6577
	E,U	kg	-	-	-	-	6519	6984	6984	5741	5741	5771	5771	-	-
	N	kg	-	6706	6706	7369	7369	7433	7433	6273	-	-	-	-	-
Total weight functioning	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	14874	14935	16105	16168	17755	19014
	E,U	kg	-	-	-	-	13108	13572	14037	15978	16461	16558	17896	-	-
	N	kg	-	13049	13482	14144	14807	14871	14935	17670	-	-	-	-	-

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

TBA 1300-4325

Air-water chiller

Cooling capacity 328 ÷ 1404 kW

- **High efficiency also at partial loads**
- **Microchannel coil**
- **Low peak current (only 6 Amps!)**
- **Evaporator with low refrigerant charge**
- **Available also with R513A (XP10) refrigerant**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.
These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers.
The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 43°C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Units mono or dual-circuit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.

Compressor features:
— Operates without oil as bearings are magnetic levitation type
— Continuous load modulation by varying rpm (from 30% to 100%)
— Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO[5]

Units include 1 control board for each circuit.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Further features:
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

XLATB: This kit allows to extend the working range of the unit from 0 °C to -10 °C ambient temperature, thanks to an additional electric heater and a special insulating material for the heat exchanger.
GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
AER485P1	A,E,N,U	•	•	•		•	•		•	•	
AER485P1 x no. 2	A,E,N,U				•			•			•
AERBACP	A,E,N,U	•	•	•		•	•		•	•	
AERBACP x no. 2	A,E,N,U				•			•			•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•

Antivibration

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ										
A, E	AVX. (1)	AVX500	AVX588	AVX592	AVX589	AVX. (1)	AVX593	AVX. (1)	AVX. (1)	AVX. (1)
N, U	AVX. (1)	AVX500	AVX592	AVX589	AVX. (1)	AVX593	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Kit low temperature

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
A, E	XLATB1	XLATB3	XLATB5	XLATB6	XLATB7	XLATB6	XLATB7	XLATB7	XLATB8	XLATB8
N, U	XLATB2	XLATB5	XLATB5	XLATB5	XLATB7	XLATB6	XLATB6	XLATB7	XLATB8	XLATB8

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
A, E	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP10T	GP11T
N, U	GP3T	GP4T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**TBA**
4,5,6,7		**Size** 1300, 1350, 2300, 2325, 2350, 3300, 3320, 3340, 3350, 4325
8		**Model**
	°	Cooling only
9		**Heat recovery**
	°	Without heat recovery
10		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
11		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Aluminium microchannel
12		**Fans**
	J	Inverter
13		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
14,15		**Integrated hydronic kit**
	00	Without hydronic kit
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (1)
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (1)
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	II	Pump I equipped with inverter device to work at fixed speed
	IJ	Pump J equipped with inverter device to work at fixed speed (1)
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (1)
	KF	Doble pump F with inverter device to work at fixed speed
	KG	Doble pump G with inverter device to work at fixed speed
	KH	Doble pump H with inverter device to work at fixed speed
	KI	Doble pump I with inverter device to work at fixed speed
	KJ	Doble pump J with inverter device to work at fixed speed (1)
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (1)
16		**Refrigerant gas**
	G	R513A (XP10)
	°	R134a

(1) For all configurations including pump J please contact the factory

PERFORMANCE SPECIFICATIONS

TBA - (A)

Size		1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	330,7	437,3	633,9	741,5	871,9	974,8	1087,0	1155,9	1256,9	1404,1
Input power	kW	95,3	125,9	183,0	214,9	254,8	279,5	314,9	334,9	369,1	413,3
Cooling total input current	A	150,7	200,9	286,2	346,4	416,6	446,9	502,1	547,3	592,3	667,6
EER	W/W	3,47	3,47	3,46	3,45	3,42	3,49	3,45	3,45	3,41	3,40
Water flow rate system side	l/h	56903	75228	109011	127504	149890	167604	186876	198728	216075	241381
Pressure drop system side	kPa	60	55	48	42	30	52	45	54	36	42

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBA - (E)

Size		1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	330,7	437,3	633,9	741,5	871,9	974,8	1087,0	1155,9	1256,9	1404,1
Input power	kW	95,3	125,9	183,0	214,9	254,8	279,5	314,9	334,9	369,1	413,3
Cooling total input current	A	150,7	200,9	286,2	346,4	416,6	446,9	502,1	547,3	592,3	667,6
EER	W/W	3,47	3,47	3,46	3,45	3,42	3,49	3,45	3,45	3,41	3,40
Water flow rate system side	l/h	56903	75228	109011	127504	149890	167604	186876	198728	216075	241381
Pressure drop system side	kPa	60	55	48	42	30	52	45	54	36	42

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBA - (U)

Size		1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	328,1	443,8	633,5	758,5	876,4	985,0	1088,0	1154,9	1256,9	1342,4
Input power	kW	92,3	124,4	178,8	213,2	245,5	275,4	306,8	326,3	358,1	386,6
Cooling total input current	A	145,7	200,9	281,4	341,6	401,9	437,1	487,3	522,6	582,6	627,6
EER	W/W	3,56	3,57	3,54	3,56	3,57	3,58	3,55	3,54	3,51	3,47
Water flow rate system side	l/h	56452	76308	108940	130424	150669	169356	187070	198556	216075	230760
Pressure drop system side	kPa	51	25	49	50	30	53	56	53	36	38

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBA - (N)

Size		1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	328,1	443,8	633,5	758,5	876,4	985,0	1088,0	1154,9	1256,9	1342,4
Input power	kW	92,3	124,4	178,8	213,2	245,5	275,4	306,8	326,3	358,1	386,6
Cooling total input current	A	145,7	200,9	281,4	341,6	401,9	437,1	487,3	522,6	582,6	627,6
EER	W/W	3,56	3,57	3,54	3,56	3,57	3,58	3,55	3,54	3,51	3,47
Water flow rate system side	l/h	56452	76308	108940	130424	150669	169356	187070	198556	216075	230760
Pressure drop system side	kPa	51	25	49	50	30	53	56	53	36	38

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
SEER - (EN14825:2018) 12/7 with inverter fans (1)												
SEER	A,E	W/W	5,15	5,23	5,48	5,25	5,54	5,54	5,51	5,49	5,57	5,35
	N,U	W/W	5,35	5,41	5,60	5,48	5,76	5,80	5,62	5,71	5,73	5,62
Seasonal efficiency	A,E	%	203,1%	206,0%	216,0%	206,8%	218,4%	218,4%	217,5%	216,5%	219,8%	211,0%
	N,U	%	211,0%	213,5%	221,0%	216,1%	227,3%	229,1%	221,9%	225,4%	226,3%	221,6%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)												
SEPR	A,E	W/W	6,31	6,65	6,11	6,32	6,41	6,13	6,26	6,33	6,28	6,12
	N,U	W/W	6,47	6,61	6,52	6,80	6,49	6,62	6,57	6,50	6,47	6,40

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Electric data												
Maximum current (FLA)	A,E	A	165,0	249,0	319,0	404,0	488,0	483,0	568,0	727,0	727,0	797,0
	N,U	A	165,0	249,0	329,0	413,0	498,0	493,0	577,0	737,0	737,0	797,0
Peak current (LRA)	A,E	A	36,0	45,0	200,0	210,0	305,0	374,0	470,0	565,0	565,0	720,0
	N,U	A	36,0	45,0	210,0	305,0	315,0	384,0	479,0	575,0	575,0	720,0

GENERAL TECHNICAL DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Compressor												
Type	A,E,N,U	type	Centrifugal									
Compressor regulation	A,E,N,U	Type	Inverter									
Number	A,E,N,U	no.	1	1	2	2	2	3	3	3	3	4
Circuits	A,E,N,U	no.	1	1	1	2	1	1	2	1	1	2
Refrigerant	A,E,N,U	type	R134a									
Refrigerant charge (1)	A,E	kg	81,0	166,0	152,0	243,0	285,0	264,0	306,0	317,0	387,0	398,0
	N,U	kg	81,0	166,0	163,0	254,0	296,0	275,0	317,0	328,0	398,0	398,0
System side heat exchanger												
Type	A,E,N,U	type	Shell and tube									
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E,N,U	Type	Grooved joints									
Sizes (in/out)	A,E	Ø	3″	4″	6″	6″	6″	6″	6″	6″	8″	8″
	N,U	Ø	6″	6″	6″	6″	6″	6″	6″	6″	8″	8″
Fan												
Type	A,E,N,U	type	axials									
Fan motor	A,E,N,U	type	Inverter									
Number	A,E	no.	6	8	10	12	14	16	18	20	20	22
	N,U	no.	6	8	12	14	16	18	20	22	22	22
Air flow rate	A,E	m^3/h	112920	150560	188200	225840	263480	301120	338760	376400	376400	414040
	N,U	m^3/h	112920	150560	225840	263480	301120	338760	376400	414040	414040	414040

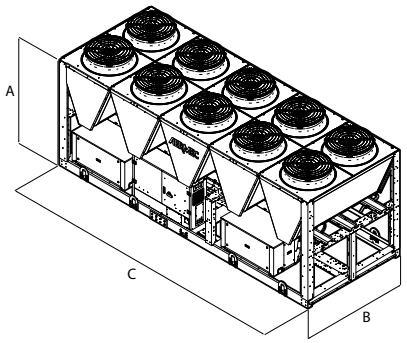
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	88,3	89,9	90,8	92,5	93,0	92,8	93,9	95,3	95,3	95,3
	E	dB(A)	82,3	83,9	84,8	86,5	87,0	86,8	87,9	89,3	89,3	89,3
	N	dB(A)	82,3	84,0	85,3	86,8	87,1	87,1	88,1	89,5	89,5	89,3
	U	dB(A)	88,3	90,0	91,3	92,8	93,1	93,1	94,1	95,5	95,5	95,3
Sound pressure level (10 m)	A	dB(A)	56,1	57,5	58,3	59,9	60,2	59,9	60,9	62,2	62,2	62,1
	E	dB(A)	50,1	51,5	52,3	53,9	54,2	53,9	54,9	56,2	56,2	56,1
	N	dB(A)	50,1	51,6	52,7	54,0	54,2	54,1	55,0	56,3	56,3	56,1
	U	dB(A)	56,1	57,6	58,7	60,0	60,2	60,1	61,0	62,3	62,3	62,1

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ												
Dimensions and weights												
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3570	4760	5950	7140	8330	9520	10710	11900	11900	13090
	N,U	mm	3570	4760	7140	8330	9520	10710	11900	13090	13090	13090

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Integrated hydronic kit: 00												
Weights												
Empty weight	A	kg	2770	3480	4500	5550	6390	6760	7950	8240	8600	9700
	E	kg	2850	3590	4630	5720	6580	6980	8190	8510	8870	10000
	N	kg	2880	3810	5120	5950	7060	7430	8200	8950	9320	10000
	U	kg	2800	3700	4950	5760	6840	7180	7920	8650	9010	9700
Weight functioning	A	kg	2840	3560	4630	5730	6650	6960	8210	8500	8940	9990
	E	kg	2920	3670	4760	5900	6840	7180	8450	8770	9210	10290
	N	kg	2960	3940	5250	6100	7320	7630	8410	9210	9660	10290
	U	kg	2880	3830	5080	5910	7100	7380	8130	8910	9350	9990

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www.aermec.com

TBG 1230-4310

Air-water chiller

Cooling capacity 200 ÷ 1165 kW

- **High efficiency also at partial loads**
- **Microchannel coil**
- **Low peak current (only 6 Amps!)**
- **Evaporator with low refrigerant charge**

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Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.
Compressor features:
— Operates without oil as bearings are magnetic levitation type
— Continuous load modulation by varying rpm (from 30% to 100%)
— Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:
da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430;
with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

CONTROL PCO[5]

Units include 1 control board for each circuit.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Further features:
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

XLATB: This kit allows to extend the working range of the unit from 0 °C to -10 °C ambient temperature, thanks to an additional electric heater and a special insulating material for the heat exchanger.
GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
AER485P1	A,E,N,U	•	•	•		•		•	•		
AER485P1 x no. 2	A,E,N,U				•		•			•	•
AERBACP	A,E,N,U	•	•	•		•		•	•		
AERBACP x no. 2	A,E,N,U				•		•			•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•

Antivibration

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ										
A, E	AVX596	AVX. (1)	AVX597	AVX588	AVX592	AVX. (1)	AVX. (1)	AVX593	AVX. (1)	AVX. (1)
N, U	AVX. (1)	AVX500	AVX588	AVX592	AVX589	AVX. (1)	AVX593	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

XLATB: Kit for low temperature

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A, E, N, U	XLATB1	XLATB3	XLATB4	XLATB5	XLATB5	XLATB6	XLATB6	XLATB6	XLATB7	XLATB7

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A, E	GP2T	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T
N, U	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**TBG**
4,5,6,7	**Size** 1230, 1310, 2230, 2270, 2310, 3270, 3280, 3310, 4270, 4310
8	**Model**
°	Cooling only
9	**Heat recovery**
°	Without heat recovery
10	**Version**
A	High efficiency
E	Silenced high efficiency
N	Silenced very high efficiency
U	Very high efficiency
11	**Coils**
I	Copper-aluminium
O	Coated aluminium microchannel
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Aluminium microchannel
12	**Fans**
J	Inverter
13	**Power supply**
°	400V ~ 3 50Hz with magnet circuit breakers
14,15	**Integrated hydronic kit**
00	Without hydronic kit
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (1)
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (1)
IA	Pump A equipped with inverter device to work at fixed speed
IB	Pump B equipped with inverter device to work at fixed speed
IC	Pump C equipped with inverter device to work at fixed speedr
ID	Pump D equipped with inverter device to work at fixed speed
IE	Pump E equipped with inverter device to work at fixed speed
IF	Pump F equipped with inverter device to work at fixed speed
IG	Pump G equipped with inverter device to work at fixed speed
IH	Pump H equipped with inverter device to work at fixed speed
II	Pump I equipped with inverter device to work at fixed speed
IJ	Pump J equipped with inverter device to work at fixed speed (1)
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (1)
KF	Doble pump F with inverter device to work at fixed speed
KG	Doble pump G with inverter device to work at fixed speed
KH	Doble pump H with inverter device to work at fixed speed
KI	Doble pump I with inverter device to work at fixed speed
KJ	Doble pump J with inverter device to work at fixed speed (1)
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J (1)

(1) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

TBG - (A)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	199,9	296,6	417,6	502,3	600,1	687,0	791,4	900,3	1033,3	1165,3
Input power	kW	57,7	86,1	121,5	146,6	174,8	199,1	231,3	262,2	305,7	345,1
Cooling total input current	A	95,5	140,7	200,9	241,2	291,4	326,6	386,9	437,1	502,3	577,6
EER	W/W	3,46	3,45	3,44	3,43	3,43	3,45	3,42	3,43	3,38	3,38
Water flow rate system side	l/h	34397	51028	71817	86370	103190	118120	136075	154785	177653	200332
Pressure drop system side	kPa	28	43	29	32	37	36	38	40	41	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBG - (E)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	199,9	296,6	417,6	502,3	600,1	687,0	791,4	900,3	1033,3	1165,3
Input power	kW	57,7	86,1	121,5	146,6	174,8	199,1	231,3	262,2	305,7	345,1
Cooling total input current	A	95,5	140,7	200,9	241,2	291,4	326,6	386,9	437,1	502,3	577,6
EER	W/W	3,46	3,45	3,44	3,43	3,43	3,45	3,42	3,43	3,38	3,38
Water flow rate system side	l/h	34397	51028	71817	86370	103190	118120	136075	154785	177653	200332
Pressure drop system side	kPa	28	43	29	32	37	36	38	40	41	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBG - (U)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	230,7	324,2	439,6	511,1	604,5	709,0	807,9	906,9	1011,3	1112,5
Input power	kW	65,3	91,2	124,4	143,9	170,1	201,3	230,6	257,3	290,2	323,2
Cooling total input current	A	105,7	150,9	206,2	236,4	276,6	331,9	392,1	427,3	477,6	537,6
EER	W/W	3,53	3,55	3,53	3,55	3,55	3,52	3,50	3,52	3,49	3,44
Water flow rate system side	l/h	39688	55753	75597	87882	103946	121900	138909	155919	173873	191260
Pressure drop system side	kPa	37	32	32	33	38	39	39	41	39	42

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBG - (N)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	230,7	324,2	439,6	511,1	604,5	709,0	807,9	906,9	1011,3	1112,5
Input power	kW	65,3	91,2	124,4	143,9	170,1	201,3	230,6	257,3	290,2	323,2
Cooling total input current	A	105,7	150,9	206,2	236,4	276,6	331,9	392,1	427,3	477,6	537,6
EER	W/W	3,53	3,55	3,53	3,55	3,55	3,52	3,50	3,52	3,49	3,44
Water flow rate system side	l/h	39688	55753	75597	87882	103946	121900	138909	155919	173873	191260
Pressure drop system side	kPa	37	32	32	33	38	39	39	41	39	42

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
SEER - (EN14825:2018) 12/7 with inverter fans (1)												
SEER	A,E	W/W	5,44	5,52	5,76	5,44	5,85	5,70	5,77	5,78	5,61	5,60
	N,U	W/W	5,63	6,03	5,97	5,71	6,04	5,80	5,89	5,93	5,81	5,71
Seasonal efficiency	A,E	%	214,6%	217,6%	227,5%	214,6%	231,1%	225,1%	227,6%	228,3%	221,5%	220,8%
	N,U	%	222,3%	238,0%	235,9%	225,2%	238,7%	229,0%	232,5%	234,0%	229,2%	225,5%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)												
SEPR	A,E	W/W	6,34	5,98	5,99	6,54	6,35	6,60	6,05	6,07	5,98	5,97
	N,U	W/W	6,47	6,21	6,18	6,78	6,56	6,73	6,20	6,23	6,17	6,09

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Electric data												
Maximum current (FLA)	A,E	A	115,0	180,0	229,0	294,0	359,0	408,0	528,0	538,0	587,0	707,0
	N,U	A	125,0	189,0	239,0	304,0	368,0	418,0	538,0	547,0	597,0	707,0
Peak current (LRA)	A,E	A	26,0	36,0	151,0	220,0	230,0	180,0	249,0	424,0	209,0	608,0
	N,U	A	36,0	45,0	161,0	230,0	239,0	190,0	259,0	433,0	219,0	608,0

GENERAL TECHNICAL DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Compressor												
Type	A,E,N,U	type	Centrifugal									
Compressor regulation	A,E,N,U	Type	Inverter									
Number	A,E,N,U	no.	1	1	2	2	2	3	3	3	3	4
Circuits	A,E,N,U	no.	1	1	1	2	1	2	1	1	2	2
Refrigerant	A,E,N,U	type	R1234ze									
Refrigerant charge (1)	A,E	kg	71,0	110,0	142,0	177,0	188,0	254,0	265,0	307,0	318,0	328,0
	N,U	kg	82,0	121,0	153,0	188,0	198,0	265,0	276,0	286,0	328,0	328,0
System side heat exchanger												
Type	A,E,N,U	type	Shell and tube									
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E,N,U	Type	Grooved joints									
Sizes (in/out)	A,E,N,U	Ø	3"	4"	5"	6"	6"	6"	6"	6"	6"	6"
Fan												
Type	A,E,N,U	type	axials									
Fan motor	A,E,N,U	type	Inverter									
Number	A,E	no.	4	6	8	10	12	14	16	18	20	22
	N,U	no.	6	8	10	12	14	16	18	20	22	22
Air flow rate	A,E	m^3/h	75280	112920	150560	188200	225840	263480	301120	338760	376400	414040
	N,U	m^3/h	112920	150560	188200	225840	263480	301120	338760	376400	414040	414040

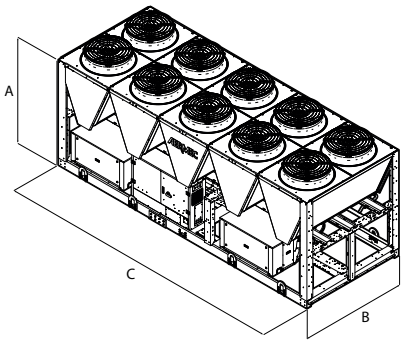
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	85,2	88,4	88,2	90,1	91,4	91,3	92,9	93,1	93,1	94,2
	E	dB(A)	82,2	85,4	85,2	87,1	88,4	88,3	89,9	90,1	90,1	91,2
	N	dB(A)	83,3	85,9	85,8	87,5	88,7	88,6	90,1	90,3	90,3	91,2
	U	dB(A)	86,3	88,9	88,8	90,5	91,7	91,6	93,1	93,3	93,3	94,2
Sound pressure level (10 m)	A	dB(A)	53,3	56,5	55,8	57,6	58,8	58,5	60,0	60,1	60,0	61,0
	E	dB(A)	50,3	53,5	52,8	54,6	55,8	55,5	57,0	57,1	57,0	58,0
	N	dB(A)	51,1	53,5	53,3	54,9	55,9	55,7	57,1	57,2	57,1	58,0
	U	dB(A)	54,1	56,5	56,3	57,9	58,9	58,7	60,1	60,2	60,1	61,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00												
Dimensions and weights												
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	2780	3970	5160	5950	7140	8330	9520	10710	11900	13090
	N,U	mm	3570	4760	5950	7140	8330	9520	10710	11900	13090	13090

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ												
Dimensions and weights												
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3970	5160	5160	5950	7140	8330	9520	10710	11900	13090
	N,U	mm	3570	4760	5950	7140	8330	9520	10710	11900	13090	13090

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00												
Weights												
Empty weight	A	kg	2470	2980	4020	4800	5250	6490	6950	7440	8900	9510
	E	kg	2520	3060	4130	4940	5410	6680	7170	7690	9170	9810
	N	kg	2840	3590	4560	5420	5890	7150	7620	8130	9610	9800
	U	kg	2760	3480	4430	5250	5700	6930	7370	7850	9310	9500
Weight functioning	A	kg	2540	3050	4110	4930	5390	6670	7150	7650	9160	9780
	E	kg	2590	3130	4220	5070	5550	6860	7370	7900	9430	10080
	N	kg	2910	3670	4650	5550	6030	7330	7820	8340	9870	10070
	U	kg	2830	3560	4520	5380	5840	7110	7570	8060	9570	9770

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AIR / WATER CHILLERS WITH FREE COOLING

When the cooling of the room is requested throughout the year, even during the winter season, such as in modern communication centers or in industrial applications, it is a waste to consume energy to produce cooling capacity. To meet these needs, Aermec offers a range of chillers capable of exploiting, free of charge, the external cold air to cool the liquid with a considerable energy saving.

AIR / WATER CHILLERS WITH FREECOOLING

		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
Units with scroll compressors					
NRG 0282-0754 F	Air-water chiller with free-cooling	-	58-190	-	622
NRG 0800-2400-F	Air-water chiller with free-cooling	-	224-717	-	627
NRG 0800-2400-B	Air-water chiller with free-cooling glycol free	-	224-717	-	634
NRB 0800-2406 F	Air-water chiller with free-cooling	-	211-680	-	641
NRB 0800-2406 B	Air-water chiller with free-cooling glycol free		211-680	-	649
NRV 0550 F	Air-water chiller with free-cooling	-	99,9-105,4	-	656
Units with screw compressors					
NSM 1402-9603 F	Air-water chiller with free-cooling	-	306-2028	-	660
NSM 1402-9603 B	Air-water chiller with free-cooling glycol free	-	305,8-2028,1	-	673
NSM-HWT-1402-9603-F	Air-water chiller with free-cooling	-	306-2001	-	684
NSM-HWT-1402-9603-B	Air-water chiller with free-cooling glycol free	-	306-1991	-	693
NSMI 1251-6102 F	Air-water chiller with free-cooling and Inverter screw compressors	-	286-1280	-	702
TBA 1300-3350 F	Air-water chiller with free-cooling	-	317,2-1223,6	-	707
TBG 1230-4310 F	Air-water chiller with free-cooling	-	238-1110	-	712

NRG 0282-0754 F

Air-water chiller with free-cooling

Cooling capacity 58 ÷ 190 kW

- **High efficiency also at partial loads**
- **Low refrigerant charge**
- **Compact dimensions**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas.
Condensing coil with copper pipes and aluminium louvers, plate heat exchanger.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 48°C external air temperature. Unit can produce chilled water up to -10 °C.
For more information refer to the selection program and to to the dedicated documentation.

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 (A2L) refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed pumps also inverter.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater

acoustic comfort but always guarantees performance even at peak load times.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
AER485P1	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
AERNET	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
PGD1	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
SGD	E	•	•	•								

Remote panel

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
PR4	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Integrated hydronic kit: 00, I3, I4, P3, P4											
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22	VT22
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT22	VT22	VT22
Integrated hydronic kit: 03, 04, K3, K4											
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT22	VT22	VT22

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
E	GP4	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy
The accessory cannot be fitted on the configurations indicated with -

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A	-	-	-	-	DRENRG502FC	DRENRG552FC	DRENRG554	DRENRG604	DRENRG654	DRENRG704	DRENRG754
E	DRENRG282FC	DRENRG302FC	DRENRG332FC	DRENRG352FC	DRENRG502FC	DRENRG552FC	DRENRG554	DRENRG604	DRENRG654	DRENRG704	DRENRG754

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A	-	-	-	-	RIFNRG502FC	RIFNRG552FC	RIFNRG554	RIFNRG604	RIFNRG654	RIFNRG704	RIFNRG754
E	RIFNRG282FC	RIFNRG302FC	RIFNRG332FC	RIFNRG352FC	RIFNRG502FC	RIFNRG552FC	RIFNRG554	RIFNRG604	RIFNRG654	RIFNRG704	RIFNRG754

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A, E	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**NRG**
4,5,6,7	**Size** 0282, 0302, 0332, 0352, 0502, 0552, 0554, 0604, 0654, 0704, 0754
8	**Operating field**
X	Electronic thermostatic expansion valve
Z	Low temperature electronic thermostatic valve
9	**Model**
F	Free-cooling
S	Free-cooling with special 3-way valve
10	**Heat recovery**
D	With desuperheater
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency (1)
12	**Coils / free-cooling coils**
R	Copper-copper/Copper-copper
S	Copper-Tinned copper / Copper -Tinned copper
V	Copper-painted alumimium / Copper-painted alumimium
°	Copper-aluminium / Copper-aluminium
13	**Fans**
J	Inverter (2)
°	Standard
14	**Power supply**
°	400V ~ 3N 50Hz with magnet circuit breakers
15,16	**Integrated hydronic kit**
00	Without hydronic kit
	Kit with storage tank and pump/s
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
I3	Single high head pump + fixed speed inverter
I4	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump

(1) The size 0282-0302-0332-0352 only available in low noise versions.
(2) As standard in sizes fom 0282 to 0352

PERFORMANCE SPECIFICATIONS

NRG - A

Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Cooling performance chiller operation (1)													
Cooling capacity	kW		-	-	-	-	100,8	111,4	116,9	134,7	148,5	168,3	190,0
Input power	kW		-	-	-	-	31,5	35,1	38,4	43,2	49,0	58,5	67,0
Cooling total input current	A		-	-	-	-	60,0	63,0	63,0	83,0	94,0	114,0	123,0
EER	W/W		-	-	-	-	3,20	3,18	3,05	3,12	3,03	2,88	2,84
Water flow rate system side	l/h		-	-	-	-	17316	19137	20081	23139	25509	28916	32647
Pressure drop system side	kPa		-	-	-	-	43	52	44	60	72	84	85
Cooling performances with free-cooling (2)													
Cooling capacity	kW		-	-	-	-	73,2	75,6	76,6	89,6	92,2	95,1	97,5
Input power	kW		-	-	-	-	3,7	3,7	3,8	5,6	5,6	5,6	5,6
Free cooling total input current	A		-	-	-	-	7,0	6,6	6,3	11,0	11,0	11,0	10,0
EER	W/W		-	-	-	-	19,94	20,59	20,14	16,15	16,62	17,14	17,56
Water flow rate system side	l/h		-	-	-	-	17316	19137	20081	23139	25509	28916	32647
Pressure drop system side	kPa		-	-	-	-	63	76	71	65	78	90	93

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRG - E

Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Cooling performance chiller operation (1)													
Cooling capacity	kW		58,5	64,5	71,8	81,3	98,0	108,0	112,6	131,2	144,0	162,0	181,4
Input power	kW		18,7	22,1	24,7	30,4	32,0	36,0	39,7	44,1	50,1	60,7	70,5
Cooling total input current	A		33,0	44,0	50,0	62,0	58,0	62,0	63,0	80,0	91,0	113,0	123,0
EER	W/W		3,13	2,92	2,91	2,67	3,06	3,00	2,83	2,98	2,87	2,67	2,57
Water flow rate system side	l/h		10057	11082	12338	13965	16843	18547	19341	22540	24736	27830	31164
Pressure drop system side	kPa		20	24	29	28	40	49	41	57	68	78	77
Cooling performances with free-cooling (2)													
Cooling capacity	kW		39,2	44,0	48,8	51,0	73,2	75,6	76,6	89,6	92,2	95,1	97,5
Input power	kW		0,8	0,8	1,1	1,1	3,7	3,7	3,8	5,6	5,6	5,6	5,6
Free cooling total input current	A		1,5	1,7	2,2	2,2	6,6	6,3	6,1	10,0	10,0	10,0	9,7
EER	W/W		46,65	52,31	45,70	47,80	19,94	20,59	20,14	16,15	16,62	17,14	17,56
Water flow rate system side	l/h		10057	11082	12338	13965	16843	18547	19341	22540	24736	27830	31164
Pressure drop system side	kPa		35	31	40	41	59	71	66	61	74	84	85

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY DATA BY TYPE OF FAN

Size				0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
SEPR - (EN14825: 2018) High temperature with standard fans (1)														
SEPR	A	W/W		-	-	-	-	6,43	6,30	7,50	7,56	7,17	6,57	6,34
	E	W/W		7,11	6,66	6,65	6,21	6,34	6,14	7,16	7,24	7,02	6,39	6,12

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size				0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Electric data														
Maximum current (FLA)	A	A		-	-	-	-	73,5	79,1	80,5	100,1	111,4	132,7	144,0
	E	A		42,3	50,7	58,0	68,7	73,5	79,1	80,5	100,1	111,4	132,7	144,0
Peak current (LRA)	A	A		-	-	-	-	276,8	282,5	200,8	224,2	226,7	287,7	353,0
	E	A		162,7	174,8	173,3	223,7	276,8	282,5	200,8	224,2	226,7	287,7	353,0

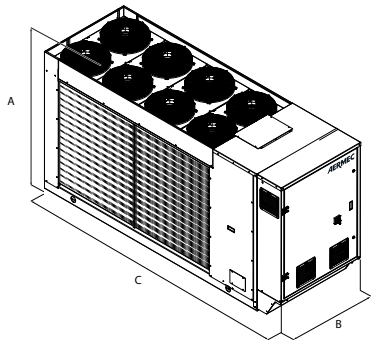
■ *Data calculated without hydronic kit and accessories.*

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Compressor													
Type	A,E	type						Scroll					
Compressor regulation	A,E	Type						On/Off					
Number	A,E	no.	2	2	2	2	2	2	4	4	4	4	4
Circuits	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type						R32					
System side heat exchanger													
Type	A,E	type						Brazed plate					
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections													
Sizes (in/out)	A,E	Ø						2"1/2					
Fan													
Type	A,E	type						Axial					
Number	A	no.	-	-	-	-	2	2	2	3	3	3	3
	E	no.	6	6	8	8	2	2	2	3	3	3	3
Air flow rate	A	m^3/h	-	-	-	-	36079	36079	36079	54481	54481	54481	54481
	E	m^3/h	23294	22734	26915	26915	27483	27483	27483	41449	41449	41449	41449
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	-	-	-	-	85,1	85,6	84,2	86,4	86,4	86,4	86,4
	E	dB(A)	73,0	73,9	74,3	74,5	81,3	82,1	76,1	77,5	77,5	77,5	77,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Dimensions and weights													
A	A	mm	-	-	-	-	1907	1907	1907	1900	1900	1900	1900
	E	mm	1658	1658	1658	1658	1907	1907	1907	1900	1900	1900	1900
B	A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100
	E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	A	mm	-	-	-	-	3567	3567	3567	4467	4467	4467	4467
	E	mm	3317	3317	3317	3317	3567	3567	3567	4467	4467	4467	4467

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NRG-0800-2400-F

Air-water chiller with free-cooling

Cooling capacity 224 ÷ 717 kW

- **Microchannel coil**
- **Night mode**
- **High efficiency also at partial loads**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas axial fan, microchannel batteries and plate exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 49 °C external air temperature. Unit can produce chilled water up to -10,0 °C.
For more information refer to the selection program and to to the dedicated documentation.

Refrigerant HFC R32

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).
The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed pumps also inverter.

CONTROL PCO_5

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	F	Free-cooling
10		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	I	Copper-aluminium / Copper-aluminium
	O	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	M	Oversized with DCPX
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A (4)
	AB	Storage tank and pump B (4)
	AC	Storage tank and pump C (4)
	AD	Storage tank and pump D (4)
	AE	Storage tank and pump E (4)
	AF	Storage tank and pump F (4)
	AG	Storage tank and pump G (4)
	AH	Storage tank and pump H (4)
	AI	Storage tank and pump I (4)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump (4)
	BB	Storage tank with pump B + stand-by pump (4)
	BC	Storage tank with pump C + stand-by pump (4)
	BD	Storage tank with pump D + stand-by pump (4)
	BE	Storage tank with pump E + stand-by pump (4)
	BF	Storage tank with pump F + stand-by pump (4)
	BG	Storage tank with pump G + stand-by pump (4)
	BH	Storage tank with pump H + stand-by pump (4)
	BI	Storage tank with pump I + stand-by pump (4)
		Kit with n° 1 inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	II	Pump I equipped with inverter device to work at fixed speed
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
		Kit with storage tank and n° 1 inverter pump to fixed speed
	CA	Buffer tank + pump A, equipped with inverter to work at fixed speed (4)
	CB	Buffer tank + pump B, equipped with inverter to work at fixed speed (4)
	CC	Buffer tank + pump C, equipped with inverter to work at fixed speed (4)
	CD	Buffer tank + pump D, equipped with inverter to work at fixed speed (4)
	EC	Buffer tank + pump E, equipped with inverter to work at fixed speed (4)
	CF	Buffer tank + pump F, equipped with inverter to work at fixed speed (4)
	CG	Buffer tank + pump G, equipped with inverter to work at fixed speed (4)
	CH	Buffer tank + pump H, equipped with inverter to work at fixed speed (4)
	CI	Buffer tank + pump I, equipped with inverter to work at fixed speed (4)
		Kit with storage tank and n° 1 pump + stand-by pump to fixed speed
	KA	Buffer tank+pump A+stand-by pump, both with inverter to work at fixed speed (4)
	KB	Buffer tank+pump B+stand-by pump, both with inverter to work at fixed speed (4)
	KC	Buffer tank+pump C+stand-by pump, both with inverter to work at fixed speed (4)
	KD	Buffer tank+pump D+stand-by pump, both with inverter to work at fixed speed (4)
	KE	Buffer tank+pump E+stand-by pump, both with inverter to work at fixed speed (4)
	KF	Buffer tank+pump F+stand-by pump, both with inverter to work at fixed speed (4)
	KG	Buffer tank+pump G+stand-by pump, both with inverter to work at fixed speed (4)
	KH	Buffer tank+pump H+stand-by pump, both with inverter to work at fixed speed (4)
	KI	Buffer tank+pump I+stand-by pump, both with inverter to work at fixed speed (4)

(1) Water produced from 4 °C ÷ 20 °C
(2) Water produced from 8 °C ÷ -10 °C
(3) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program. Desuperheater is not compatible with the hydronic kit with storage tank (AA-AI, BA-BI,CA-CI e KA-KI) on the unit 1400-2400°, 1100-1800 E/U, 0800-1600N.
(4) Additional module needed to contain the hydronic kit with "accumulation" option in sizes: 0800 A - 0900 A

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
AER485P1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
PR4	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00											
A	AVX1277	AVX1277	AVX1278	AVX1278	AVX1278	AVX1282	AVX1282	AVX1287	AVX1287	AVX1289	AVX1289
E, U	AVX1278	AVX1278	AVX1278	AVX1282	AVX1282	AVX1286	AVX1286	AVX1289	AVX1294	AVX1294	AVX1296
N	AVX1282	AVX1282	AVX1282	AVX1286	AVX1286	AVX1286	AVX1289	AVX1294	AVX1296	AVX1296	AVX1299
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, BA, BB, BC, BD, BE, BF, BG, BH, BI, CA, CB, CC, CD, CE, CF, CG, CH, CI, KA, KB, KC, KD, KE, KF, KG, KH, KI											
A	AVX1281	AVX1281	AVX1281	AVX1281	AVX1281	AVX1284	AVX1284	AVX1293	AVX1293	AVX1290	AVX1290
E, U	AVX1281	AVX1281	AVX1281	AVX1284	AVX1284	AVX1288	AVX1288	AVX1290	AVX1295	AVX1295	AVX1298
N	AVX1284	AVX1284	AVX1284	AVX1288	AVX1288	AVX1288	AVX1290	AVX1295	AVX1298	AVX1298	AVX1300
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI											
A	AVX1277	AVX1277	AVX1279	AVX1279	AVX1279	AVX1283	AVX1283	AVX1292	AVX1292	AVX1289	AVX1289
E, U	AVX1279	AVX1279	AVX1279	AVX1282	AVX1282	AVX1286	AVX1286	AVX1289	AVX1294	AVX1294	AVX1297
N	AVX1282	AVX1282	AVX1282	AVX1286	AVX1286	AVX1286	AVX1289	AVX1294	AVX1297	AVX1297	AVX1299

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1800	2000	2200	2400
A, E, N, U	DRENRG1600	DRENRG1800	DRENRG2000	DRENRG2200	DRENRG2400

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1800	2000	2200	2400
A, E, N, U	RIFNRG1600	RIFNRG1800	RIFNRG2000	RIFNRG2200	RIFNRG2400

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
A, E, N, U	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS2	T6NRGLS3	T6NRGLS3	T6NRGLS3

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
A	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G
E, U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

NRG - A

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	223,9	245,3	284,1	324,7	368,2	419,0	462,1	535,9	599,5	654,7	692,5
Input power	kW	73,0	82,9	91,3	106,0	122,2	134,8	152,7	172,3	197,6	212,9	230,2
Cooling total input current	A	129,0	146,0	160,0	184,0	209,0	229,0	254,0	293,0	337,0	356,0	381,0
EER	W/W	3,07	2,96	3,11	3,06	3,01	3,11	3,03	3,11	3,03	3,07	3,01
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	60	72	83	101	115	80	77	98	113	88	76
Cooling performances with free-cooling (2)												
Cooling capacity	kW	136,0	137,7	198,2	202,9	206,4	269,0	273,1	337,6	343,1	406,3	409,7
Input power	kW	7,5	7,5	11,2	11,2	11,2	15,0	15,0	18,7	18,7	22,4	22,4
Free cooling total input current	A	13,0	13,0	20,0	20,0	19,0	25,0	25,0	32,0	32,0	38,0	37,0
EER	W/W	18,20	18,42	17,67	18,09	18,40	17,99	18,27	18,06	18,36	18,11	18,26
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	109	129	123	152	178	124	138	157	187	143	137

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRG - E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	251,9	274,9	324,9	370,2	416,7	456,6	531,6	606,0	638,0	691,8
Input power	kW	72,4	82,1	92,0	106,0	123,9	136,5	153,7	175,2	197,7	215,9	227,8
Cooling total input current	A	122,0	139,0	156,0	176,0	201,0	220,0	245,0	284,0	319,0	346,0	363,0
EER	W/W	3,12	3,07	2,99	3,06	2,99	3,05	2,97	3,03	3,07	2,95	3,04
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	62	65	74	103	72	65	76	92	116	66	72
Cooling performances with free-cooling (2)												
Cooling capacity	kW	158,4	161,9	164,2	214,5	219,3	269,7	273,4	326,8	379,6	383,0	434,0
Input power	kW	7,9	7,9	7,9	10,6	10,6	13,2	13,2	15,8	18,5	18,5	21,1
Free cooling total input current	A	13,0	13,0	13,0	18,0	17,0	21,0	21,0	26,0	30,0	30,0	34,0
EER	W/W	20,02	20,46	20,75	20,33	20,78	20,45	20,73	20,65	20,56	20,74	20,57
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	89	97	112	149	129	103	121	141	170	109	115

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRG - U

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	233,1	260,7	285,8	336,2	385,1	431,6	474,7	552,3	627,9	664,0	717,7
Input power	kW	72,7	81,3	90,2	105,2	121,2	135,0	151,0	173,5	195,9	212,0	225,5
Cooling total input current	A	129,0	145,0	160,0	183,0	206,0	228,0	250,0	291,0	330,0	353,0	374,0
EER	W/W	3,21	3,20	3,17	3,19	3,18	3,20	3,14	3,18	3,21	3,13	3,18
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	68	72	83	111	78	69	82	99	125	72	78
Cooling performances with free-cooling (2)												
Cooling capacity	kW	188,5	194,2	198,5	256,7	265,2	323,5	330,2	393,9	456,3	462,7	522,1
Input power	kW	11,2	11,2	11,2	15,0	15,0	18,7	18,7	22,4	26,2	26,2	29,9
Free cooling total input current	A	20,0	20,0	20,0	26,0	25,0	32,0	31,0	38,0	44,0	44,0	50,0
EER	W/W	16,81	17,32	17,70	17,17	17,74	17,31	17,66	17,56	17,44	17,68	17,46
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	95	104	121	159	139	110	130	152	182	118	123

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRG - N

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)													
Cooling capacity		kW	232,6	258,9	286,6	334,6	383,1	422,5	473,7	546,9	617,8	658,1	707,5
Input power		kW	71,7	81,1	90,4	104,8	120,5	134,5	150,6	174,0	195,5	210,5	225,7
Cooling total input current		A	121,0	136,0	152,0	173,0	195,0	221,0	238,0	277,0	314,0	338,0	357,0
EER		W/W	3,24	3,19	3,17	3,19	3,18	3,14	3,14	3,14	3,16	3,13	3,14
Water flow rate system side		l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side		kPa	69	73	85	109	77	62	77	96	121	69	75
Cooling performances with free-cooling (2)													
Cooling capacity		kW	195,9	202,9	208,3	255,5	264,7	270,1	319,5	371,9	423,9	429,3	478,8
Input power		kW	10,6	10,6	10,6	13,2	13,2	13,2	15,8	18,5	21,1	21,1	23,7
Free cooling total input current		A	18,0	18,0	18,0	22,0	21,0	22,0	25,0	29,0	34,0	34,0	38,0
EER		W/W	18,57	19,23	19,74	19,37	20,07	20,48	20,19	20,14	20,09	20,34	20,17
Water flow rate system side		l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side		kPa	94	104	121	150	128	101	117	141	171	108	114

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J													
SEPR - (EN 14825: 2018) (1)													
SEPR	A	W/W	6,63	6,37	6,71	6,69	6,49	6,93	6,95	7,05	6,79	7,02	6,87
	E	W/W	7,12	6,91	6,90	6,94	6,79	7,41	7,34	7,24	7,19	7,28	7,30
	N	W/W	7,61	7,39	7,29	7,29	7,22	7,63	7,68	7,53	7,43	7,56	7,60
	U	W/W	7,27	7,12	7,02	7,09	6,96	7,33	7,39	7,27	7,14	7,34	7,36

(1) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: M													
SEPR - (EN 14825: 2018) (1)													
SEPR	A	W/W	6,39	6,16	6,50	6,53	6,33	6,89	6,86	6,96	6,69	6,86	6,70
	E	W/W	6,86	6,69	6,71	6,78	6,61	7,18	7,14	7,02	6,95	7,05	7,11
	N	W/W	7,38	7,16	7,09	7,12	7,04	7,39	7,47	7,30	7,18	7,33	7,40
	U	W/W	7,05	6,91	6,80	6,93	6,80	7,30	7,30	7,17	7,04	7,18	7,20

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Electric data													
Maximum current (FLA)	A	A	158,2	176,5	200,6	228,5	256,4	290,1	317,9	369,5	415,3	449,0	476,9
	E,U	A	164,0	182,3	200,6	234,3	262,2	295,9	323,7	375,3	426,9	454,8	488,5
	N	A	169,8	188,1	206,4	240,1	268,0	295,9	329,5	381,1	432,7	460,6	494,3
Peak current (LRA)	A	A	361,6	417,7	436,0	685,0	718,7	746,6	774,4	826,1	871,9	899,7	933,4
	E	A	361,6	417,7	441,8	690,8	718,7	752,4	780,2	831,9	877,7	911,3	939,2
	N	A	350,0	406,1	424,4	673,4	701,3	729,2	757,0	802,9	848,7	876,5	904,4
	U	A	367,4	423,5	441,8	696,6	724,5	758,2	786,0	837,7	889,3	917,1	950,8

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Compressor													
Type	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Type						Asynchronous					
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R32					
Potential global heating	A,E,N,U	GWP						675kgCO_2eq					
System side heat exchanger													
Type	A,E,N,U	type						Brazed plate					
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections without hydronic kit													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Sizes (in/out)	A	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″
	E,N,U	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″
Hydraulic connections with hydronic kit													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Sizes (in/out)	A	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″
	E,N,U	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

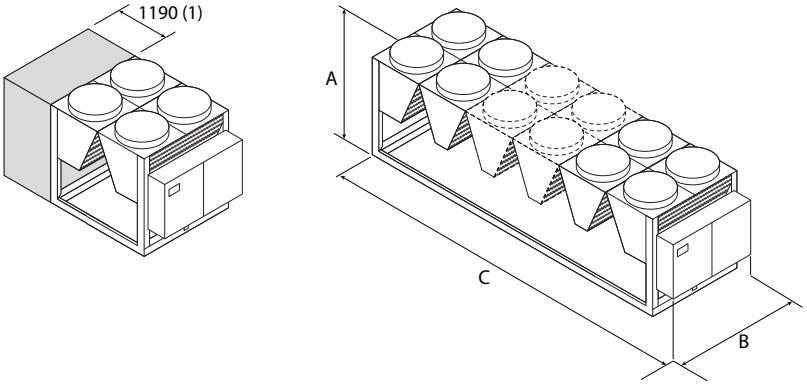
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M													
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	90,5	90,5	90,5	90,8	91,1	92,1	92,3	93,1	93,4	94,2	94,3
	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0	89,7	90,2
	N	dB(A)	85,3	85,4	85,4	86,9	87,6	88,1	89,0	89,4	89,8	90,5	91,0
	U	dB(A)	90,8	90,8	90,8	92,2	92,5	93,5	93,6	94,3	94,9	95,0	95,6
Sound pressure level (10 m)	A	dB(A)	58,4	58,4	58,2	58,6	58,9	59,7	59,9	60,5	60,9	61,5	61,7
	E	dB(A)	52,2	52,2	52,3	53,4	54,1	55,1	55,6	55,9	56,2	56,9	57,3
	N	dB(A)	52,9	53,0	53,0	54,4	55,0	55,6	56,3	56,6	56,9	57,6	58,0
	U	dB(A)	58,5	58,5	58,5	59,8	60,1	60,9	61,1	61,7	62,1	62,2	62,7

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M													
Fan													
Type	A,E,N,U	type						Axial					
Number	A	no.	4	4	6	6	6	8	8	10	10	12	12
	E,U	no.	6	6	6	8	8	10	10	12	14	14	16
	N	no.	8	8	8	10	10	10	12	14	16	16	18
Air flow rate	A	m^3/h	57976	57976	86965	86965	86965	115954	115953	144941	144941	173929	173929
	E	m^3/h	63933	63933	63933	85244	85244	106555	106555	127866	149177	149177	170487
	N	m^3/h	85244	85244	85244	106555	106555	106555	127866	149177	170488	170488	191798
	U	m^3/h	86963	86963	86963	115959	115959	144934	144934	173932	202921	202921	231902

DIMENSIONS



Key:
1 Additional module needed to contain the hydronic kit with "accumulation" option in sizes: 0800 A- 0900 A

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI													
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	2780	3970	3970	3970	5160	5160	6350	6350	7540	7540
	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, BA, BB, BC, BD, BE, BF, BG, BH, BI, CA, CB, CC, CD, CE, CF, CG, CH, CI, KA, KB, KC, KD, KE, KF, KG, KH, KI													
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	3970	3970	3970	3970	3970	5160	5160	6350	6350	7540	7540
	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00													
Weights													
Empty weight	A	kg	2545	2550	3090	3245	3390	4135	4345	5080	5295	6000	6095
	E,U	kg	3095	3110	3115	3890	4130	4755	4895	5630	6390	6580	7270
	N	kg	3720	3730	3735	4425	4680	4815	5440	6225	7000	7190	7825
Weight functioning	A	kg	2690	2695	3235	3390	3540	4360	4590	5355	5580	6360	6460
	E,U	kg	3230	3250	3260	4085	4370	5020	5165	5955	6755	6985	7720
	N	kg	3905	3920	3925	4645	4945	5090	5755	6585	7405	7635	8315

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NRG-0800-2400-B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 224 ÷ 717 kW

- **Microchannel coil**
- **Night mode**
- **High efficiency also at partial loads**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas axial fan, microchannel batteries and plate exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 49 °C external air temperature. Unit can produce chilled water up to -10,0 °C.
For more information refer to the selection program and to to the dedicated documentation.

Refrigerant HFC R32

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).
The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:
1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL PCO_5

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400
8		**Operating field**
	X	Electronic thermostatic expansion valve
	Z	Low temperature electronic thermostatic valve
9		**Model**
	B	Free-cooling glycol free
10		**Heat recovery**
	D	With desuperheater (1)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	I	Copper-aluminium / Copper-aluminium
	O	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	M	Oversized with DCPX
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
		Kit with n° 1 inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	II	Pump I equipped with inverter device to work at fixed speed
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed

(1) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program. For further information please contact the head office.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
AER485P1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
PR4	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00											
A	AVX1277	AVX1277	AVX1301	AVX1301	AVX1301	AVX1303	AVX1303	AVX1308	AVX1308	AVX1307	AVX1307
E, U	AVX1301	AVX1301	AVX1301	AVX1302	AVX1303	AVX1304	AVX1304	AVX1307	AVX1310	AVX1310	AVX1311
N	AVX1302	AVX1302	AVX1302	AVX1304	AVX1304	AVX1304	AVX1307	AVX1310	AVX1311	AVX1311	AVX1313
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI											
A	AVX1285	AVX1285	AVX1301	AVX1301	AVX1306	AVX1303	AVX1303	AVX1309	AVX1309	AVX1307	AVX1307
E, U	AVX1301	AVX1301	AVX1301	AVX1303	AVX1303	AVX1304	AVX1304	AVX1307	AVX1310	AVX1310	AVX1312
N	AVX1302	AVX1302	AVX1302	AVX1305	AVX1304	AVX1304	AVX1307	AVX1310	AVX1312	AVX1312	AVX1313

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1800	2000	2200	2400
A, E, N, U	DRENRG1600	DRENRG1800	DRENRG2000	DRENRG2200	DRENRG2400

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1800	2000	2200	2400
A, E, N, U	RIFNRG1600	RIFNRG1800	RIFNRG2000	RIFNRG2200	RIFNRG2400

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
A, E, N, U	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS2	T6NRGLS3	T6NRGLS3	T6NRGLS3

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00											
A	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G
E, U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI											
A	GP2VNA	GP2VNA	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G
E, U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

NRG - A

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	223,9	245,3	284,1	324,7	368,2	419,0	462,1	535,9	599,5	654,7	692,5
Input power	kW	73,0	82,9	91,3	106,0	122,2	134,8	152,7	172,3	197,6	212,9	230,2
Cooling total input current	A	129,0	146,0	160,0	184,0	209,0	229,0	254,0	293,0	337,0	356,0	381,0
EER	W/W	3,07	2,96	3,11	3,06	3,01	3,11	3,03	3,11	3,03	3,07	3,01
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	70	85	99	111	116	92	88	107	125	115	105
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	122,1	122,1	178,1	179,1	179,8	241,5	241,5	302,6	302,5	368,7	368,6
Input power	kW	9,9	9,9	14,4	14,4	14,5	19,3	19,3	24,5	24,4	32,3	32,3
Free cooling total input current	A	18,0	17,0	25,0	25,0	25,0	33,0	32,0	42,0	42,0	54,0	54,0
EER	W/W	12,32	12,32	12,36	12,41	12,44	12,54	12,54	12,37	12,37	11,40	11,40
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	70	85	99	111	116	92	88	107	125	115	105

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRG - E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	251,9	274,9	324,9	370,2	416,7	456,6	531,6	606,0	638,0	691,8
Input power	kW	72,4	82,1	92,0	106,0	123,9	136,5	153,7	175,2	197,7	215,9	227,8
Cooling total input current	A	122,0	139,0	156,0	176,0	201,0	220,0	245,0	284,0	319,0	346,0	363,0
EER	W/W	3,12	3,07	2,99	3,06	2,99	3,05	2,97	3,03	3,07	2,95	3,04
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	73	78	90	98	88	73	87	100	127	90	101
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	146,6	146,6	146,6	194,7	194,8	246,0	246,0	301,6	343,8	345,9	393,2
Input power	kW	11,1	11,1	11,1	14,8	14,8	18,9	18,9	25,6	29,3	29,7	32,5
Free cooling total input current	A	19,0	19,0	19,0	25,0	24,0	31,0	30,0	41,0	47,0	48,0	52,0
EER	W/W	13,20	13,20	13,20	13,18	13,18	13,00	13,00	11,79	11,73	11,64	12,12
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	73	78	90	98	88	73	87	100	127	90	101

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRG - U

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	233,1	260,7	285,8	336,2	385,1	431,6	474,7	552,3	627,9	664,0	717,7
Input power	kW	72,7	81,3	90,2	105,2	121,2	135,0	151,0	173,5	195,9	212,0	225,5
Cooling total input current	A	129,0	145,0	160,0	183,0	206,0	228,0	250,0	291,0	330,0	353,0	374,0
EER	W/W	3,21	3,20	3,17	3,19	3,18	3,20	3,14	3,18	3,21	3,13	3,18
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	77	84	97	105	96	78	94	107	136	98	109
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	178,1	178,1	178,1	235,6	235,8	301,9	301,8	364,5	420,7	427,1	481,5
Input power	kW	14,4	14,4	14,4	19,2	19,2	24,4	24,4	32,2	37,0	37,4	41,3
Free cooling total input current	A	26,0	26,0	26,0	33,0	33,0	41,0	40,0	54,0	62,0	62,0	68,0
EER	W/W	12,36	12,36	12,36	12,28	12,29	12,36	12,36	11,33	11,37	11,41	11,67
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	77	84	97	105	96	78	94	107	136	98	109

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRG - N

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)													
Cooling capacity		kW	232,6	258,9	286,6	334,6	383,1	422,5	473,7	546,9	617,8	658,1	707,5
Input power		kW	71,7	81,1	90,4	104,8	120,5	134,5	150,6	174,0	195,5	210,5	225,7
Cooling total input current		A	121,0	136,0	152,0	173,0	195,0	221,0	238,0	277,0	314,0	338,0	357,0
EER		W/W	3,24	3,19	3,17	3,19	3,18	3,14	3,14	3,14	3,16	3,13	3,14
Water flow rate system side		l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side		kPa	77	84	97	104	95	82	88	105	132	95	105
Cooling performances with free-cooling glycol-free (2)													
Cooling capacity		kW	193,3	193,3	193,3	241,1	241,3	245,3	301,4	343,8	390,1	393,2	439,7
Input power		kW	14,7	14,7	14,7	18,5	18,5	18,8	25,6	29,3	32,0	32,5	35,2
Free cooling total input current		A	25,0	25,0	25,0	30,0	30,0	31,0	40,0	47,0	51,0	52,0	56,0
EER		W/W	13,14	13,14	13,14	13,03	13,03	13,03	11,80	11,73	12,18	12,12	12,51
Water flow rate system side		l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side		kPa	77	84	97	104	95	82	88	105	132	95	105

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J													
SEPR - (EN 14825: 2018) (1)													
SEPR	A	W/W	6,11	5,92	6,30	6,21	6,11	6,51	6,56	6,49	6,43	6,41	6,31
	E	W/W	6,39	6,28	6,20	6,22	6,10	6,56	6,54	6,35	6,30	6,31	6,44
	N	W/W	6,64	6,46	6,47	6,44	6,34	6,77	6,72	6,56	6,44	6,54	6,61
	U	W/W	6,55	6,45	6,41	6,44	6,33	6,75	6,70	6,61	6,51	6,52	6,54

(1) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: M													
SEPR - (EN 14825: 2018) (1)													
SEPR	A	W/W	5,90	5,74	6,12	6,07	5,96	6,48	6,48	6,41	6,34	6,27	6,18
	E	W/W	6,17	6,09	6,04	6,09	5,95	6,37	6,38	6,17	6,10	6,13	6,28
	N	W/W	6,42	6,27	6,31	6,30	6,19	6,58	6,55	6,38	6,24	6,36	6,45
	U	W/W	6,34	6,27	6,22	6,30	6,19	6,72	6,63	6,53	6,43	6,39	6,40

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Electric data													
Maximum current (FLA)	A	A	158,2	176,5	200,6	228,5	256,4	290,1	317,9	369,5	415,3	449,0	476,9
	E,U	A	164,0	182,3	200,6	234,3	262,2	295,9	323,7	375,3	426,9	454,8	488,5
	N	A	169,8	188,1	206,4	240,1	268,0	295,9	329,5	381,1	432,7	460,6	494,3
Peak current (LRA)	A	A	361,6	417,7	436,0	685,0	718,7	746,6	774,4	826,1	871,9	899,7	933,4
	E	A	361,6	417,7	441,8	690,8	718,7	752,4	780,2	831,9	877,7	911,3	939,2
	N	A	350,0	406,1	424,4	673,4	701,3	729,2	757,0	802,9	848,7	876,5	904,4
	U	A	367,4	423,5	441,8	696,6	724,5	758,2	786,0	837,7	889,3	917,1	950,8

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Compressor													
Type	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Type						Asynchronous					
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R32					
Refrigerant load circuit 1 (1)	A	kg	11,3	10,9	11,0	15,0	15,8	18,0	21,0	20,6	24,0	24,4	26,3
	E,U	kg	15,4	15,0	16,1	19,5	19,9	24,0	23,3	25,9	28,1	33,8	30,8
	N	kg	16,0	16,0	17,3	24,2	26,3	26,3	30,8	30,0	37,5	34,1	34,1
Refrigerant load circuit 2 (1)	A	kg	11,3	10,9	11,0	15,0	15,8	20,5	22,5	20,6	24,0	24,4	26,3
	E,U	kg	15,4	15,0	16,1	20,5	19,9	25,5	23,3	25,9	28,1	33,8	30,8
	N	kg	16,0	16,0	18,8	25,4	26,3	26,3	30,8	30,0	37,5	34,1	34,1
Potential global heating	A,E,N,U	GWP						675kgCO_2eq					
System side heat exchanger													
Type	A,E,N,U	type						Brazed plate					
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections without hydronic kit													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Sizes (in/out)	A	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″
	E,N,U	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″
Hydraulic connections with hydronic kit													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Sizes (in/out)	A	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″
	E,N,U	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

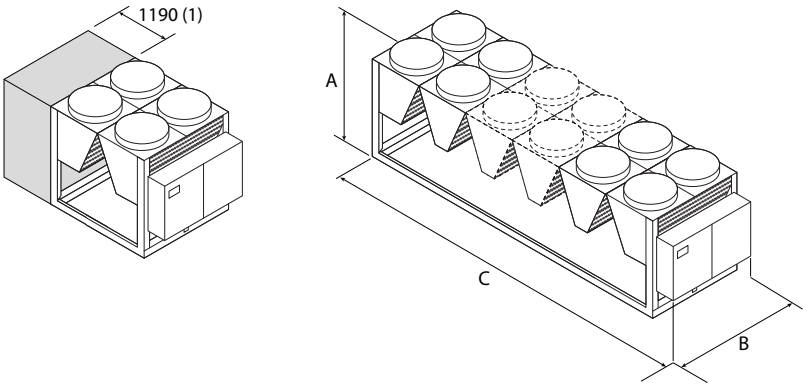
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M													
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	90,5	90,5	90,5	90,8	91,1	92,1	92,3	93,1	93,4	94,2	94,3
	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0	89,7	90,2
	N	dB(A)	85,3	85,4	85,4	86,9	87,6	88,1	89,0	89,4	89,8	90,5	91,0
	U	dB(A)	90,8	90,8	90,8	92,2	92,5	93,5	93,6	94,3	94,9	95,0	95,6
Sound pressure level (10 m)	A	dB(A)	58,4	58,4	58,2	58,6	58,9	59,7	59,9	60,5	60,9	61,5	61,7
	E	dB(A)	52,2	52,2	52,3	53,4	54,1	55,1	55,6	55,9	56,2	56,9	57,3
	N	dB(A)	52,9	53,0	53,0	54,4	55,0	55,6	56,3	56,6	56,9	57,6	58,0
	U	dB(A)	58,5	58,5	58,5	59,8	60,1	60,9	61,1	61,7	62,1	62,2	62,7

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M													
Fan													
Type	A,E,N,U	type						Axial					
Number	A	no.	4	4	6	6	6	8	8	10	10	12	12
	E,U	no.	6	6	6	8	8	10	10	12	14	14	16
	N	no.	8	8	8	10	10	10	12	14	16	16	18
Air flow rate	A	m^3/h	57976	57976	86965	86965	86965	115954	115953	144941	144941	173929	173929
	E	m^3/h	63933	63933	63933	85244	85244	106555	106555	127866	149177	149177	170487
	N	m^3/h	85244	85244	85244	106555	106555	106555	127866	149177	170488	170488	191798
	U	m^3/h	86963	86963	86963	115959	115959	144934	144934	173932	202921	202921	231902

DIMENSIONS



Key:
1 Additional module needed to contain the hydronic kit with "pumps" option in sizes: 0800 A- 0900 A

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00													
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	2780	3970	3970	3970	5160	5160	6350	6350	7540	7540
	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI													
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	3970	3970	3970	3970	3970	5160	5160	6350	6350	7540	7540
	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00													
Weights													
Empty weight	A	kg	2690	2695	3250	3425	3570	4395	4605	5400	5620	6355	6445
	E,U	kg	3250	3265	3275	4095	4340	5035	5180	5985	6760	6945	7660
	N	kg	3880	3900	3905	4655	4915	5045	5760	6595	7380	7565	8185
Weight functioning	A	kg	2895	2900	3460	3655	3805	4765	4990	5840	6070	6900	6995
	E,U	kg	3460	3475	3485	4385	4695	5445	5590	6480	7290	7530	8300
	N	kg	4135	4160	4165	4975	5290	5430	6220	7125	7955	8200	8855

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NRB 0800-2406 F

Air-water chiller with free-cooling

Cooling capacity 211 ÷ 680 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **High efficiency also at partial loads**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with scroll compressors, axial flow fans, micro-channel coil (source side), plate heat exchanger and thermostatic expansion valve (mechanical or electronic, depending on the model).
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Electronic expansion valve

The units from size 1805 to 2406 have an electronic expansion valve as standard.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve
	Z	Low temperature electronic thermostatic valve
	°	Standard mechanic thermostatic valve (2)
9		**Model**
	F	Free-cooling
	P	Free-cooling plus (3)
10		**Heat recovery**
	D	With desuperheater (4)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	I	Copper-aluminium / Copper-aluminium
	O	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400 V/3/50 Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (5)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (5)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
	AG	Storage tank and pump G
	AH	Storage tank and pump H
	AI	Storage tank and pump I
	AJ	Storage tank and pump J (5)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump
	BB	Storage tank with pump B + stand-by pump
	BC	Storage tank with pump C + stand-by pump
	BD	Storage tank with pump D + stand-by pump
	BE	Storage tank with pump E + stand-by pump
	BF	Storage tank with pump F + stand-by pump
	BG	Storage tank with pump G + stand-by pump
	BH	Storage tank with pump H + stand-by pump
	BI	Storage tank with pump I + stand-by pump
	BJ	Storage tank with pump J + stand-by pump (5)

(1) Electronic thermostatic as standard from size 1805÷2406.
(2) Water produced from 4 °C ÷ 18 °C
(3) Free cooling Plus models "P" are compatible only with "°" and "O" coils.
(4) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(5) For all configurations including pump J please contact the factory.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
A	AVX1066	AVX1066	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1074	AVX1074	AVX1052
E, U	AVX1070	AVX1070	AVX1070	AVX1072	AVX1072	AVX1072	AVX1074	AVX1052	AVX1052	AVX1054	AVX1054
N	AVX1072	AVX1072	AVX1072	AVX1074	AVX1074	AVX1074	AVX1052	AVX1054	AVX1054	AVX1057	AVX1057
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, BA, BB, BC, BD											
A	AVX1068	AVX1068	AVX1069	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1075	AVX1075	AVX1053
E, U	AVX1071	AVX1069	AVX1069	AVX1073	AVX1073	AVX1073	AVX1075	AVX1053	AVX1053	AVX1056	AVX1056
N	AVX1073	AVX1073	AVX1073	AVX1075	AVX1075	AVX1075	AVX1053	AVX1056	AVX1056	AVX1051	AVX1051
Integrated hydronic kit: AH, AI, BE, BF, BG											
A	AVX1068	AVX1068	AVX1069	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1075	AVX1075	AVX1053
E, U	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1073	AVX1075	AVX1053	AVX1053	AVX1056	AVX1056
N	AVX1073	AVX1073	AVX1073	AVX1075	AVX1075	AVX1075	AVX1053	AVX1056	AVX1056	AVX1051	AVX1051
Integrated hydronic kit: BH, BI											
A	AVX1069	AVX1069	AVX1069	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1075	AVX1075	AVX1053
E, U	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1073	AVX1075	AVX1053	AVX1053	AVX1056	AVX1056
N	AVX1073	AVX1073	AVX1073	AVX1075	AVX1075	AVX1075	AVX1053	AVX1078	AVX1056	AVX1051	AVX1051
Integrated hydronic kit: DA, DB, DC, DD, PA, PB, PC, PD, PE, PF, PG											
A	AVX1066	AVX1066	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1074	AVX1074	AVX1052
E, U	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1072	AVX1074	AVX1052	AVX1052	AVX1054	AVX1054
N	AVX1072	AVX1072	AVX1072	AVX1074	AVX1074	AVX1074	AVX1052	AVX1054	AVX1054	AVX1050	AVX1050
Integrated hydronic kit: DE, DF, DG, PH, PI											
A	AVX1066	AVX1066	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1074	AVX1074	AVX1052
E, U	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1072	AVX1076	AVX1052	AVX1052	AVX1054	AVX1054
N	AVX1072	AVX1072	AVX1072	AVX1074	AVX1074	AVX1074	AVX1052	AVX1055	AVX1054	AVX1050	AVX1050
Integrated hydronic kit: DH, DI											
A	AVX1067	AVX1067	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1079	AVX1076	AVX1052
E, U	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1072	AVX1076	AVX1052	AVX1052	AVX1055	AVX1055
N	AVX1072	AVX1072	AVX1072	AVX1076	AVX1076	AVX1076	AVX1052	AVX1077	AVX1055	AVX1050	AVX1050

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
A, E, N, U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E, U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
A	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2416
E, N, U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0800	0900	1000	1100	1200	1400
A	T6NRB13	T6NRB13	T6NRB14	T6NRB14	T6NRB15	T6NRB15
E, N, U	T6NRB14	T6NRB14	T6NRB14	T6NRB14	T6NRB15	T6NRB15

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
A	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB16
E, U	T6NRB15	T6NRB17	T6NRB16	T6NRB19	T6NRB19
N	T6NRB18	T6NRB19	T6NRB19	T6NRB20	T6NRB20

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A	GP2VN	GP2VN	GP3VNF	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4G	GP5G	GP5G	GP6V
E, U	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

Units 0800A and 0900A with the optional "storage tank" are 3970 mm long and must have the GP2VNA grids installed.

PERFORMANCE SPECIFICATIONS

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	211,8	234,3	273,4	307,1	335,9	373,3	432,0	474,2	542,2	584,4	655,6
Input power	kW	76,0	88,0	93,9	108,9	124,8	145,6	157,1	185,1	201,0	229,4	243,7
Cooling total input current	A	133,7	152,1	165,5	189,4	215,1	248,2	269,7	316,3	347,4	394,4	423,3
EER	W/W	2,79	2,66	2,91	2,82	2,69	2,56	2,75	2,56	2,70	2,55	2,69
Water flow rate system side	l/h	36397	40249	46968	52762	57713	64138	74217	81471	93153	100403	112635
Pressure drop system side	kPa	49	50	68	76	91	99	64	68	88	96	122
Cooling performances with free-cooling (2)												
Cooling capacity	kW	139,8	142,0	203,2	208,4	211,6	214,7	280,5	284,4	350,8	354,8	421,5
Input power	kW	7,5	7,5	11,2	11,2	11,2	11,2	15,0	15,0	18,7	18,7	22,5
Free cooling total input current	A	13,2	13,0	19,8	19,6	19,4	19,2	25,7	25,6	32,4	32,2	39,1
EER	W/W	18,64	18,94	18,07	18,53	18,81	19,09	18,71	18,97	18,72	18,93	18,74
Water flow rate system side	l/h	36397	40249	46968	52762	57713	64138	74217	81471	93153	100403	112635
Pressure drop system side	kPa	88	97	101	117	139	158	112	125	144	161	188

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	210,3	232,4	271,9	305,1	333,3	369,6	428,9	469,8	538,2	579,2	650,8
Input power	kW	76,8	89,2	94,8	110,0	126,2	147,6	158,7	187,5	203,2	232,3	246,6
Cooling total input current	A	134,8	153,7	166,7	190,9	217,2	251,0	272,1	319,8	350,6	398,7	427,3
EER	W/W	2,74	2,61	2,87	2,77	2,64	2,50	2,70	2,51	2,65	2,49	2,64
Water flow rate system side	l/h	36136	39921	46723	52411	57266	63506	73697	80717	92472	99510	111819
Pressure drop system side	kPa	48	49	67	75	89	97	63	66	87	95	120
Cooling performances with free-cooling (2)												
Cooling capacity	kW	149,8	152,0	217,8	223,3	226,6	229,5	300,5	304,3	375,9	379,8	451,6
Input power	kW	7,6	7,6	11,4	11,4	11,4	11,4	15,2	15,2	19,0	19,0	22,8
Free cooling total input current	A	13,4	13,1	20,1	19,8	19,7	19,4	26,1	26,0	32,8	32,7	39,6
EER	W/W	19,66	19,95	19,06	19,55	19,83	20,09	19,73	19,98	19,74	19,94	19,76
Water flow rate system side	l/h	36136	39921	46723	52411	57266	63506	73697	80717	92472	99510	111819
Pressure drop system side	kPa	86	95	100	116	137	155	110	123	142	158	185

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	220,6	242,6	265,3	310,3	344,7	379,2	438,5	498,2	546,9	610,1	652,9
Input power	kW	73,4	84,2	95,7	106,6	122,4	142,0	155,3	174,8	199,2	219,5	244,7
Cooling total input current	A	125,5	142,4	160,1	179,2	204,6	235,8	257,7	291,8	333,0	368,2	410,5
EER	W/W	3,00	2,88	2,77	2,91	2,82	2,67	2,82	2,85	2,75	2,78	2,67
Water flow rate system side	l/h	37902	41688	45573	53310	59226	65155	75344	85588	93960	104827	112169
Pressure drop system side	kPa	44	53	57	82	90	109	58	75	85	89	102
Cooling performances with free-cooling (2)												
Cooling capacity	kW	164,6	168,5	171,5	222,5	227,6	231,2	285,4	338,9	344,8	399,2	403,7
Input power	kW	7,9	7,9	7,9	10,5	10,5	10,5	13,1	15,8	15,8	18,4	18,4
Free cooling total input current	A	13,5	13,3	13,2	17,6	17,6	17,4	21,8	26,3	26,3	30,8	30,8
EER	W/W	20,90	21,39	21,78	21,18	21,67	22,02	21,74	21,51	21,89	21,72	21,97
Water flow rate system side	l/h	37902	41688	45573	53310	59226	65155	75344	85588	93960	104827	112169
Pressure drop system side	kPa	67	80	88	120	136	165	95	114	132	139	159

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	219,4	241,1	263,2	308,4	342,1	375,8	435,2	494,7	542,4	605,4	647,1
Input power	kW	74,1	85,1	96,8	107,7	123,7	143,8	157,0	176,7	201,6	222,1	247,8
Cooling total input current	A	126,4	143,5	161,5	180,6	206,5	238,4	260,0	294,4	336,3	371,8	415,0
EER	W/W	2,96	2,83	2,72	2,86	2,76	2,61	2,77	2,80	2,69	2,73	2,61
Water flow rate system side	l/h	37695	41419	45215	52979	58785	64562	74775	84990	93195	104013	111187
Pressure drop system side	kPa	44	53	56	81	89	107	57	74	84	88	100
Cooling performances with free-cooling (2)												
Cooling capacity	kW	175,0	179,4	182,7	236,7	242,4	246,2	304,0	360,9	367,2	425,1	429,9
Input power	kW	8,0	8,0	8,0	10,7	10,7	10,7	13,3	16,0	16,0	18,6	18,6
Free cooling total input current	A	13,6	13,5	13,3	17,9	17,8	17,7	22,1	26,6	26,7	31,2	31,2
EER	W/W	21,90	22,45	22,86	22,22	22,76	23,11	22,83	22,58	22,98	22,80	23,06
Water flow rate system side	l/h	37695	41419	45215	52979	58785	64562	74775	84990	93195	104013	111187
Pressure drop system side	kPa	66	79	87	118	134	162	94	113	130	137	156

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,3	250,9	275,8	320,4	357,9	396,3	455,4	515,9	569,2	633,7	680,9
Input power	kW	73,7	83,6	94,1	106,4	120,6	138,5	153,5	173,2	195,2	215,9	238,4
Cooling total input current	A	133,2	149,2	165,7	188,7	211,5	240,0	266,7	303,5	341,3	379,5	417,9
EER	W/W	3,08	3,00	2,93	3,01	2,97	2,86	2,97	2,98	2,92	2,94	2,86
Water flow rate system side	l/h	39046	43104	47382	55045	61497	68087	78245	88642	97793	108881	116982
Pressure drop system side	kPa	47	57	61	88	97	120	62	81	92	96	111
Cooling performances with free-cooling (2)												
Cooling capacity	kW	192,7	198,6	203,6	261,5	269,7	276,0	338,6	400,3	410,2	473,3	481,2
Input power	kW	11,2	11,2	11,2	15,0	15,0	15,0	18,7	22,5	22,5	26,2	26,2
Free cooling total input current	A	20,3	20,1	19,8	26,6	26,3	26,0	32,6	39,4	39,3	46,1	46,0
EER	W/W	17,13	17,66	18,11	17,44	17,99	18,41	18,07	17,80	18,24	18,04	18,34
Water flow rate system side	l/h	39046	43104	47382	55045	61497	68087	78245	88642	97793	108881	116982
Pressure drop system side	kPa	71	86	95	128	147	179	103	122	143	150	173

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	249,6	274,2	318,8	356,0	393,8	452,9	513,3	565,9	630,2	676,8
Input power	kW	74,4	84,4	95,0	107,4	121,8	139,9	154,8	174,8	197,2	218,0	240,9
Cooling total input current	A	134,1	150,2	166,9	189,9	213,2	242,0	268,6	305,7	344,0	382,4	421,4
EER	W/W	3,04	2,96	2,89	2,97	2,92	2,82	2,93	2,94	2,87	2,89	2,81
Water flow rate system side	l/h	38871	42893	47115	54781	61158	67658	77819	88186	97229	108280	116278
Pressure drop system side	kPa	46	57	60	87	96	118	62	80	91	95	110
Cooling performances with free-cooling (2)												
Cooling capacity	kW	205,9	212,7	218,2	279,8	289,0	295,9	362,9	428,9	439,8	507,3	515,9
Input power	kW	11,4	11,4	11,4	15,2	15,2	15,2	19,0	22,8	22,8	26,7	26,7
Free cooling total input current	A	20,6	20,3	20,1	26,9	26,7	26,4	33,0	40,0	39,9	46,8	46,6
EER	W/W	18,02	18,62	19,10	18,37	18,97	19,42	19,06	18,77	19,25	19,03	19,35
Water flow rate system side	l/h	38871	42893	47115	54781	61158	67658	77819	88186	97229	108280	116278
Pressure drop system side	kPa	70	85	94	126	145	177	102	121	141	148	171

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	228,3	252,4	278,0	320,3	358,3	397,2	454,4	510,9	563,3	628,5	675,3
Input power	kW	72,5	82,2	92,3	104,6	118,7	136,3	151,0	171,5	194,0	213,5	236,4
Cooling total input current	A	124,4	140,1	156,3	176,6	199,3	227,4	251,4	286,8	325,4	359,5	398,6
EER	W/W	3,15	3,07	3,01	3,06	3,02	2,91	3,01	2,98	2,90	2,94	2,86
Water flow rate system side	l/h	39222	43370	47761	55033	61559	68239	78074	87785	96785	107983	116017
Pressure drop system side	kPa	50	61	66	88	98	120	63	79	90	94	109
Cooling performances with free-cooling (2)												
Cooling capacity	kW	202,3	209,6	216,0	263,3	272,4	279,7	331,7	383,3	392,7	446,3	453,4
Input power	kW	10,5	10,5	10,5	13,1	13,1	13,1	15,8	18,4	18,4	21,0	21,0
Free cooling total input current	A	18,0	17,9	17,8	22,2	22,0	21,9	26,2	30,7	30,8	35,4	35,4
EER	W/W	19,26	19,96	20,57	20,06	20,75	21,30	21,06	20,85	21,37	21,25	21,59
Water flow rate system side	l/h	39222	43370	47761	55033	61559	68239	78074	87785	96785	107983	116017
Pressure drop system side	kPa	71	86	96	121	139	171	95	115	133	143	164

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,4	251,4	276,7	318,8	356,3	394,6	451,9	508,1	559,8	624,6	670,7
Input power	kW	73,1	82,8	93,1	105,5	119,8	137,7	152,4	173,0	195,9	215,7	239,0
Cooling total input current	A	125,1	140,9	157,2	177,7	200,7	229,3	253,2	289,0	328,0	362,5	402,2
EER	W/W	3,11	3,03	2,97	3,02	2,98	2,87	2,97	2,94	2,86	2,90	2,81
Water flow rate system side	l/h	39073	43187	47536	54768	61222	67801	77644	87290	96173	107317	115226
Pressure drop system side	kPa	50	60	65	87	97	119	62	78	89	93	108
Cooling performances with free-cooling (2)												
Cooling capacity	kW	213,1	221,8	229,3	278,7	289,4	297,7	352,9	407,4	418,1	475,0	482,9
Input power	kW	10,7	10,7	10,7	13,3	13,3	13,3	16,0	18,6	18,6	21,3	21,3
Free cooling total input current	A	18,2	18,1	18,0	22,4	22,3	22,2	26,6	31,1	31,2	35,8	35,8
EER	W/W	20,00	20,82	21,53	20,93	21,73	22,36	22,08	21,85	22,43	22,30	22,66
Water flow rate system side	l/h	39073	43187	47536	54768	61222	67801	77644	87290	96173	107317	115226
Pressure drop system side	kPa	70	86	96	120	138	169	94	114	132	141	162

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F													
SEPR - (EN14825: 2018) High temperature with standard fans (1)													
SEPR	A	W/W	6,24	5,77	6,03	6,11	5,82	5,27	6,09	5,55	5,79	5,55	5,70
	E	W/W	6,98	6,31	6,11	6,34	6,16	5,51	6,28	6,19	5,81	5,90	5,73
	N	W/W	7,33	7,13	6,84	6,84	6,70	6,12	6,70	6,57	6,21	6,29	6,07
	U	W/W	7,10	6,80	6,54	6,66	6,52	5,99	6,66	6,57	6,30	6,31	6,16
SEPR - (EN14825: 2018) High temperature with inverter fans (1)													
SEPR	A	W/W	6,24	5,77	6,03	6,11	5,82	5,27	6,09	5,55	5,79	5,55	5,70
	E	W/W	6,98	6,31	6,11	6,34	6,16	5,51	6,28	6,19	5,81	5,90	5,73
	N	W/W	7,33	7,13	6,84	6,84	6,70	6,12	6,70	6,57	6,21	6,29	6,07
	U	W/W	7,10	6,80	6,54	6,66	6,52	5,99	6,66	6,57	6,30	6,31	6,16

(1) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P													
SEPR - (EN14825: 2018) High temperature with standard fans (1)													
SEPR	A	W/W	6,09	5,62	5,91	5,97	5,68	5,13	5,95	5,51	5,65	5,51	5,57
	E	W/W	6,82	6,16	5,95	6,20	6,01	5,37	6,13	6,04	5,66	5,76	5,59
	N	W/W	7,22	6,98	6,71	6,69	6,54	5,98	6,55	6,42	6,07	6,14	5,92
	U	W/W	6,98	6,64	6,39	6,51	6,39	5,86	6,51	6,42	6,16	6,17	6,03
SEPR - (EN14825: 2018) High temperature with inverter fans (1)													
SEPR	A	W/W	6,09	5,62	5,91	5,97	5,68	5,13	5,95	5,51	5,65	5,51	5,57
	E	W/W	6,82	6,16	5,95	6,20	6,01	5,37	6,13	6,04	5,66	5,76	5,59
	N	W/W	7,22	6,98	6,71	6,69	6,54	5,98	6,55	6,42	6,07	6,14	5,92
	U	W/W	6,98	6,64	6,39	6,51	6,39	5,86	6,51	6,42	6,16	6,17	6,03

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	A	A	190,4	206,8	242,5	271,9	301,2	330,2	378,6	423,4	487,6	516,6	570,9
	E,U	A	209,8	226,2	242,5	291,3	320,6	349,6	398,0	468,1	512,9	561,3	590,3
	N	A	229,2	245,6	261,9	310,7	340,0	369,0	423,3	487,5	532,3	580,7	609,7
Peak current (LRA)	A	A	379,0	434,2	469,9	522,6	551,9	664,4	712,8	757,6	821,8	850,8	905,1
	E,U	A	398,4	453,6	469,9	542,0	571,3	683,8	732,2	802,3	847,1	895,5	924,5
	N	A	417,8	473,0	489,3	561,4	590,7	703,2	757,5	821,7	866,5	914,9	943,9

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Type						On-Off					
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R410A					
Refrigerant load circuit 1 (1)	A	kg	14,5	15,0	20,0	22,0	21,5	21,5	25,0	25,0	31,0	31,0	44,0
	E,U	kg	20,5	20,0	21,5	26,0	26,0	26,0	30,0	36,0	36,0	56,5	56,0
	N	kg	26,0	26,5	26,5	29,0	28,0	35,0	42,0	44,0	43,0	62,0	62,0
Refrigerant load circuit 2 (1)	A	kg	14,5	15,0	20,0	22,0	23,5	21,5	27,0	30,0	38,0	34,0	44,0
	E,U	kg	20,5	20,0	21,5	27,0	27,0	27,0	32,0	39,0	40,0	56,5	56,0
	N	kg	26,0	26,5	26,5	30,0	31,0	35,0	42,0	47,0	47,0	62,0	62,0
Potential global heating	A,E,N,U	GWP						2088kgCO_2eq					
System side heat exchanger													
Type	A,E,N,U	type						Brazed plate					
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Hydraulic connections without hydronic kit													
Sizes (in/out)	A,E,N,U	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"
Hydraulic connections with hydronic kit													
Sizes (in/out)	A,E,N,U	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	88,0	88,1	90,3	90,2	90,2	90,2	91,7	92,2	93,9	94,4	95,8
	E	dB(A)	85,0	85,1	85,1	86,5	86,5	86,5	87,7	89,2	89,7	91,0	91,5
	N	dB(A)	86,5	86,6	86,6	87,7	87,7	87,7	88,7	90,0	90,5	91,7	92,2
	U	dB(A)	90,2	90,3	90,3	91,7	91,7	91,7	92,9	94,4	94,9	96,2	96,7
Sound pressure level (10 m)	A	dB(A)	55,9	56,0	58,0	57,9	57,9	57,9	59,3	59,8	61,3	61,8	63,2
	E	dB(A)	52,7	52,8	52,8	54,2	54,2	54,2	55,2	56,5	57,0	58,2	58,7
	N	dB(A)	54,2	54,3	54,3	55,2	55,2	55,2	56,0	57,2	57,7	58,8	59,3
	U	dB(A)	57,9	58,0	58,0	59,3	59,3	59,3	60,4	61,7	62,2	63,4	63,9

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

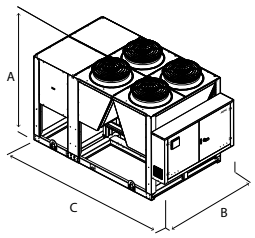
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F													
Fan													
Type	A,E,N,U	type						axials					
Number	A	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
Air flow rate	A	m^3/h	57600	57600	86400	86400	86400	86400	115200	115200	144000	144000	172800
	E	m^3/h	64800	64800	64800	86400	86400	86400	108000	129600	129600	151200	151200
	N	m^3/h	86400	86400	86400	108000	108000	108000	129600	151200	151200	172800	172800
	U	m^3/h	86400	86400	86400	115200	115200	115200	144000	172800	172800	201600	201600

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P													
Fan													
Type	A,E,N,U	type						axials					

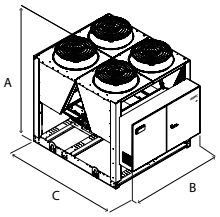
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Number	A	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
Air flow rate	A	m^3/h	54800	54800	82200	82200	82200	82200	109600	109600	137000	137000	164400
	E	m^3/h	61800	61800	61800	82400	82400	82400	103000	123600	123600	144200	144200
	N	m^3/h	82400	82400	82400	103000	103000	103000	123600	144200	144200	164800	164800
	U	m^3/h	82200	82200	82200	109600	109600	109600	137000	164400	164400	191800	191800

DIMENSIONS

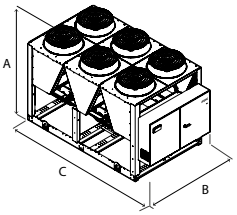
NRB 0800-0900 A (1)



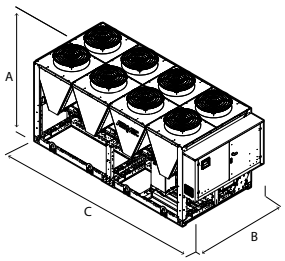
NRB 0800-0900 A



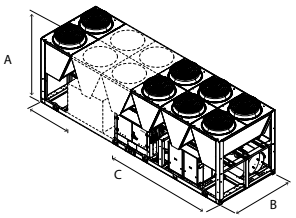
NRB 1000-1400 A
NRB 0800-1000 E-U



NRB 1805-2206 A



NRB 1600 A
NRB 2406 A
NRB 1100-2406 E-U
NRB 0800-2406 N



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
NRB 0800A, 0900A

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	2780	3970	3970	3970	3970	4760	5160	6350	6350	7140
	E,U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520

■ *Units 0800A and 0900A with the optional "storage tank" are 3970 mm long.*

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Free-cooling													
Empty weight	A	kg	2570	2620	3260	3330	3370	3420	4080	4290	5020	5100	5670
	E,U	kg	3080	3130	3290	3990	4060	4080	4660	5350	5570	6330	6390
	N	kg	3760	3800	3960	4530	4610	4630	5160	5940	6160	6870	6930
Free-cooling plus													
Empty weight	A	kg	2630	2680	3350	3420	3460	3510	4200	4410	5170	5250	5850
	E,U	kg	3170	3220	3380	4110	4180	4200	4810	5530	5750	6540	6600
	N	kg	3880	3920	4080	4680	4760	4780	5340	6150	6370	7110	7170

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

NRB 0800-2406 B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 211 ÷ 680 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **High efficiency also at partial loads**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with scroll compressors, axial flow fans, micro-channel coil (source side), plate heat exchanger and thermostatic expansion valve (mechanical or electronic, depending on the model).
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *If a higher output is needed in free cooling, there is also the "G" free cooling plus model with boosted water coil.*

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:
1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

The units from size 1805 to 2406 have an electronic expansion valve as standard.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00, DA, DB, DC, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
A, E	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	-	-	-	-	-
N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
N, U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E, U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
N, U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A	GP2VN	GP2VN	GP3VNF	GP3VNF	GP3VNF	GP3VNF	-	-	-	-	-
E	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	-	-	-	-	-
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V
U	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**NRB**
4,5,6,7	**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8	**Operating field**
X	Electronic thermostatic expansion valve
Y	Low temperature mechanic thermostatic valve
Z	Low temperature electronic thermostatic valve
°	Standard mechanic thermostatic valve
9	**Model**
B	Free-cooling glycol free
G	Free-cooling glycol free plus (1)
10	**Heat recovery**
D	With desuperheater (2)
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency
N	Silenced very high efficiency
U	Very high efficiency
12	**Coils / free-cooling coils**
I	Copper-aluminium / Copper-aluminium
O	Painted alluminium microchannel / Copper painted aluminium
R	Copper-copper/Copper-copper
S	Copper-Tinned copper / Copper -Tinned copper
V	Copper-painted alumimium / Copper-painted alumimium
°	Alluminium microchannel / Copper - aluminium
13	**Fans**
J	Inverter
°	Standard
14	**Power supply**
°	400V~3 50Hz with magnet circuit breakers
15,16	**Integrated hydronic kit**
00	Without hydronic kit
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (3)
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (3)

(1) The Free cooling Plus "G" models are only compatible with "°" and "O" coils.
(2) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(3) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	211,8	234,3	273,4	307,1	335,9	373,3	-	-	-	-	-
Input power	kW	76,0	88,0	93,9	108,9	124,8	145,6	-	-	-	-	-
Cooling total input current	A	133,7	152,1	165,5	189,4	215,1	248,2	-	-	-	-	-
EER	W/W	2,79	2,66	2,91	2,82	2,69	2,56	-	-	-	-	-
Water flow rate system side	l/h	36397	40249	46968	52762	57713	64138	-	-	-	-	-
Pressure drop system side	kPa	53	58	66	74	88	100	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	116,3	118,3	160,6	167,3	170,9	175,9	-	-	-	-	-
Input power	kW	9,8	9,8	14,3	14,3	14,4	14,4	-	-	-	-	-
Free cooling total input current	A	17,3	17,0	25,3	25,0	24,8	24,5	-	-	-	-	-
EER	W/W	11,84	12,04	11,21	11,66	11,89	12,22	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	210,3	232,4	271,9	305,1	333,3	369,6	-	-	-	-	-
Input power	kW	76,8	89,2	94,8	110,0	126,2	147,6	-	-	-	-	-
Cooling total input current	A	134,8	153,7	166,7	190,9	217,2	251,0	-	-	-	-	-
EER	W/W	2,74	2,61	2,87	2,77	2,64	2,50	-	-	-	-	-
Water flow rate system side	l/h	36136	39921	46723	52411	57266	63506	-	-	-	-	-
Pressure drop system side	kPa	53	57	65	73	87	98	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	121,7	123,8	166,9	174,2	178,1	183,6	-	-	-	-	-
Input power	kW	9,9	9,9	14,5	14,5	14,6	14,6	-	-	-	-	-
Free cooling total input current	A	17,4	17,1	25,5	25,2	25,0	24,8	-	-	-	-	-
EER	W/W	12,24	12,45	11,51	11,99	12,24	12,60	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	220,6	242,6	265,3	310,3	344,7	379,2	-	-	-	-	-
Input power	kW	73,4	84,2	95,7	106,6	122,4	142,0	-	-	-	-	-
Cooling total input current	A	125,5	142,4	160,1	179,2	204,6	235,8	-	-	-	-	-
EER	W/W	3,00	2,88	2,77	2,91	2,82	2,67	-	-	-	-	-
Water flow rate system side	l/h	37902	41688	45573	53310	59226	65155	-	-	-	-	-
Pressure drop system side	kPa	48	53	61	68	84	102	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	134,9	137,3	139,4	182,1	186,7	189,4	-	-	-	-	-
Input power	kW	11,0	11,0	11,0	14,6	14,6	14,6	-	-	-	-	-
Free cooling total input current	A	18,7	18,5	18,3	24,5	24,4	24,3	-	-	-	-	-
EER	W/W	12,31	12,53	12,72	12,50	12,78	12,97	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	219,4	241,1	263,2	308,4	342,1	375,8	-	-	-	-	-
Input power	kW	74,1	85,1	96,8	107,7	123,7	143,8	-	-	-	-	-
Cooling total input current	A	126,4	143,5	161,5	180,6	206,5	238,4	-	-	-	-	-
EER	W/W	2,96	2,83	2,72	2,86	2,76	2,61	-	-	-	-	-
Water flow rate system side	l/h	37695	41419	45215	52979	58785	64562	-	-	-	-	-
Pressure drop system side	kPa	47	52	61	67	83	100	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	140,0	142,6	144,8	189,1	194,0	196,9	-	-	-	-	-
Input power	kW	11,1	11,1	11,1	14,7	14,8	14,8	-	-	-	-	-
Free cooling total input current	A	18,9	18,7	18,5	24,7	24,6	24,5	-	-	-	-	-
EER	W/W	12,64	12,88	13,08	12,85	13,14	13,34	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,3	250,9	275,8	320,4	357,9	396,3	455,4	515,9	569,2	633,7	680,9
Input power	kW	73,7	83,6	94,1	106,4	120,6	138,5	153,5	173,2	195,2	215,9	238,4
Cooling total input current	A	133,2	149,2	165,7	188,7	211,5	240,0	266,7	303,5	341,3	379,5	417,9
EER	W/W	3,08	3,00	2,93	3,01	2,97	2,86	2,97	2,98	2,92	2,94	2,86
Water flow rate system side	l/h	39046	43104	47382	55045	61497	68087	78245	88642	97793	108881	116982
Pressure drop system side	kPa	51	56	66	72	90	111	75	92	112	133	126
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	154,8	158,0	160,8	209,0	215,3	219,0	275,7	335,8	350,8	397,2	401,3
Input power	kW	14,3	14,3	14,3	19,1	19,1	19,1	24,1	31,6	32,0	36,8	36,8
Free cooling total input current	A	25,9	25,6	25,2	33,8	33,5	33,1	41,8	55,3	56,0	64,6	64,4
EER	W/W	10,80	11,03	11,22	10,97	11,27	11,47	11,45	10,64	10,95	10,81	10,92

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	249,6	274,2	318,8	356,0	393,8	452,9	513,3	565,9	630,2	676,8
Input power	kW	74,4	84,4	95,0	107,4	121,8	139,9	154,8	174,8	197,2	218,0	240,9
Cooling total input current	A	134,1	150,2	166,9	189,9	213,2	242,0	268,6	305,7	344,0	382,4	421,4
EER	W/W	3,04	2,96	2,89	2,97	2,92	2,82	2,93	2,94	2,87	2,89	2,81
Water flow rate system side	l/h	38871	42893	47115	54781	61158	67658	77819	88186	97229	108280	116278
Pressure drop system side	kPa	50	56	66	72	89	109	74	91	111	132	125
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	160,6	164,1	167,1	216,9	223,8	227,8	287,0	350,1	367,2	414,5	419,0
Input power	kW	14,5	14,5	14,5	19,3	19,3	19,3	24,4	31,9	32,4	37,2	37,2
Free cooling total input current	A	26,2	25,8	25,5	34,1	33,8	33,5	42,3	55,8	56,5	65,2	65,0
EER	W/W	11,07	11,31	11,52	11,24	11,57	11,78	11,77	10,97	11,33	11,15	11,27

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	228,3	252,4	278,0	320,3	358,3	397,2	454,4	510,9	563,3	628,5	675,3
Input power	kW	72,5	82,2	92,3	104,6	118,7	136,3	151,0	171,5	194,0	213,5	236,4
Cooling total input current	A	124,4	140,1	156,3	176,6	199,3	227,4	251,4	286,8	325,4	359,5	398,6
EER	W/W	3,15	3,07	3,01	3,06	3,02	2,91	3,01	2,98	2,90	2,94	2,86
Water flow rate system side	l/h	39222	43370	47761	55033	61559	68239	78074	87785	96785	107983	116017
Pressure drop system side	kPa	46	50	60	72	91	103	71	90	110	131	124
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	168,7	172,6	176,0	212,0	218,8	228,0	284,9	321,4	337,3	375,3	379,1
Input power	kW	14,5	14,5	14,5	18,1	18,2	18,2	24,8	28,3	28,9	31,6	31,6
Free cooling total input current	A	25,0	24,8	24,6	30,6	30,5	30,4	41,3	47,3	48,5	53,2	53,3
EER	W/W	11,60	11,86	12,10	11,70	12,03	12,51	11,48	11,37	11,67	11,88	12,00

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,4	251,4	276,7	318,8	356,3	394,6	451,9	508,1	559,8	624,6	670,7
Input power	kW	73,1	82,8	93,1	105,5	119,8	137,7	152,4	173,0	195,9	215,7	239,0
Cooling total input current	A	125,1	140,9	157,2	177,7	200,7	229,3	253,2	289,0	328,0	362,5	402,2
EER	W/W	3,11	3,03	2,97	3,02	2,98	2,87	2,97	2,94	2,86	2,90	2,81
Water flow rate system side	l/h	39073	43187	47536	54768	61222	67801	77644	87290	96173	107317	115226
Pressure drop system side	kPa	46	50	59	72	90	101	71	89	108	130	123
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	174,6	178,8	182,6	219,5	226,9	236,7	296,4	333,9	351,1	390,3	394,4
Input power	kW	14,7	14,7	14,7	18,3	18,4	18,4	25,0	28,5	29,2	31,9	31,9
Free cooling total input current	A	25,2	25,0	24,8	30,8	30,8	30,7	41,6	47,6	48,8	53,6	53,7
EER	W/W	11,88	12,17	12,42	12,00	12,35	12,86	11,84	11,71	12,04	12,23	12,36

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

ENERGY DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B													
SEPR - (EN14825: 2018) High temperature with standard fans (1)													
SEPR	A	W/W	5,61	5,25	5,27	5,43	5,25	5,05	-	-	-	-	-
	E	W/W	6,07	5,58	5,44	5,59	5,50	5,13	-	-	-	-	-
	N	W/W	6,38	6,09	5,91	5,92	5,78	5,41	5,67	5,51	5,56	5,58	5,53
	U	W/W	6,22	5,87	5,69	5,84	5,71	5,56	5,73	5,52	5,60	5,58	5,53

(1) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G													
SEPR - (EN14825: 2018) High temperature with standard fans (1)													
SEPR	A	W/W	5,82	5,37	5,48	5,60	5,37	4,87	-	-	-	-	-
	E	W/W	6,42	5,83	5,62	5,85	5,69	5,10	-	-	-	-	-
	N,U	W/W	6,96	6,54	6,28	6,28	6,08	5,63	6,13	5,90	5,77	5,73	5,58

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	A	A	190,4	206,8	242,5	271,9	301,2	330,2	-	-	-	-	-
	E	A	209,8	226,2	242,5	291,3	320,6	349,6	-	-	-	-	-
	N	A	229,2	245,6	261,9	310,7	340,0	369,0	423,3	487,5	532,3	580,7	609,7
	U	A	209,8	226,2	242,5	291,3	320,6	349,6	398,0	468,1	512,9	561,3	590,3
Peak current (LRA)	A	A	379,0	434,2	469,9	522,6	551,9	664,4	-	-	-	-	-
	E	A	398,4	453,6	469,9	542,0	571,3	683,8	-	-	-	-	-
	N	A	417,8	473,0	489,3	561,4	590,7	703,2	757,5	821,7	866,5	914,9	943,9
	U	A	398,4	453,6	469,9	542,0	571,3	683,8	732,2	802,3	847,1	895,5	924,5

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Type						On-Off					
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R410A					
Refrigerant charge (1)	A	kg	32,0	32,0	48,0	48,0	48,0	48,0	64,0	64,0	80,0	80,0	96,0
	E,U	kg	48,0	48,0	48,0	64,0	64,0	64,0	80,0	96,0	96,0	112,0	112,0
	N	kg	64,0	64,0	64,0	80,0	80,0	80,0	96,0	112,0	112,0	128,0	128,0
Hydraulic connections													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Hydraulic connections without hydronic kit													
Sizes (in/out)	A,E,N,U	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″
Hydraulic connections with hydronic kit													
Sizes (in/out)	A,E,N,U	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	88,0	88,1	90,3	90,2	90,2	90,2	-	-	-	-	-
	E	dB(A)	85,0	85,1	85,1	86,5	86,5	86,5	-	-	-	-	-
	N	dB(A)	86,5	86,6	86,6	87,7	87,7	87,7	88,7	90,0	90,5	91,7	92,2
	U	dB(A)	90,2	90,3	90,3	91,7	91,7	91,7	92,9	94,4	94,9	96,2	96,7
Sound pressure level (10 m)	A	dB(A)	55,9	56,0	58,0	57,9	57,9	57,9	-	-	-	-	-
	E	dB(A)	52,9	53,0	52,8	54,3	54,3	54,3	-	-	-	-	-
	N	dB(A)	54,4	54,5	54,4	55,4	55,4	55,4	56,3	57,6	58,0	59,2	59,6
	U	dB(A)	58,0	58,1	58,0	59,4	59,4	59,4	60,5	62,0	62,4	63,7	64,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

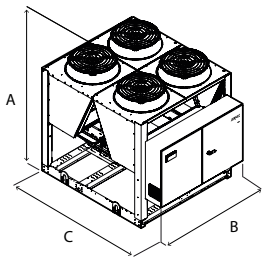
FANS DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B													
Fan													
Type	A,E	type	axials	axials	axials	axials	axials	axials	-	-	-	-	-
	N,U	type						axials					
Number	A	no.	4	4	6	6	6	6	-	-	-	-	-
	E	no.	6	6	6	8	8	8	-	-	-	-	-
	N	no.	8	8	8	10	10	10	12	14	14	16	16
	U	no.	6	6	6	8	8	8	10	12	12	14	14
Air flow rate	A	m^3/h	57600	57600	86400	86400	86400	86400	-	-	-	-	-
	E	m^3/h	64800	64800	64800	86400	86400	86400	-	-	-	-	-
	N	m^3/h	86400	86400	86400	108000	108000	108000	129600	151200	151200	172800	172800
	U	m^3/h	86400	86400	86400	115200	115200	115200	144000	172800	172800	201600	201600

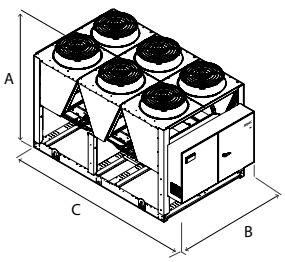
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G													
Fan													
Type	A,E	type	axials	axials	axials	axials	axials	axials	-	-	-	-	-
	N,U	type						axials					
Number	A	no.	4	4	6	6	6	6	-	-	-	-	-
	E	no.	6	6	6	8	8	8	-	-	-	-	-
	N	no.	8	8	8	10	10	10	12	14	14	16	16
	U	no.	6	6	6	8	8	8	10	12	12	14	14
Air flow rate	A	m^3/h	57600	57600	86400	86400	86400	86400	-	-	-	-	-
	E	m^3/h	64800	64800	64800	86400	86400	86400	-	-	-	-	-
	N	m^3/h	86400	86400	86400	108000	108000	108000	129600	151200	151200	172800	172800
	U	m^3/h	86400	86400	86400	115200	115200	115200	144000	172800	172800	201600	201600

DIMENSIONS

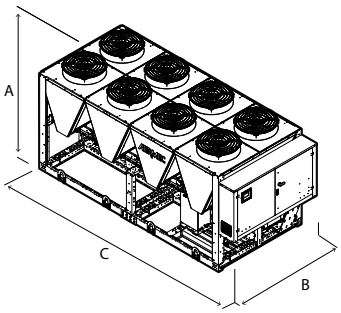
NRB 0800-0900 A



NRB 1000-1400 A
NRB 0800-1000 E-U



NRB 1100-1400 E-U
NRB 0800-1000 N



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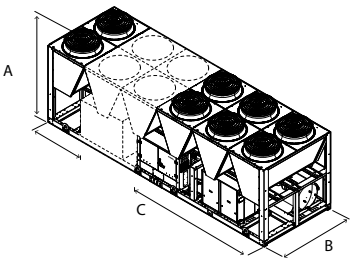
NRB 1600-2406 U



Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights													
A	A,E	mm	2450	2450	2450	2450	2450	2450	-	-	-	-	-
	N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	-	-	-	-	-
	N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	2780	3970	3970	3970	3970	-	-	-	-	-
	E	mm	3970	3970	3970	4760	4760	4760	-	-	-	-	-
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520
	U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330

■ *For the weights please contact the factory.*

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NRV 0550 F

Air-water chiller with free-cooling

Cooling capacity 99,9 ÷ 105,4 kW

- **Easy and quick to install compact**
- **Reliability and modularity**
- **Microchannel coils**

DESCRIPTION

NRV is comprised of independent 99.9 kW modules, that can be connected together up to a power of 900 kW. Each individual module is an outdoor chiller for the production of chilled water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to 4 °C.
Maximum yield at full load but even partial load, thanks to the partialisation steps that increase as the number of connected modules increases this ensures continuous adaptation to the actual system requirements.

Modularity

It is possible to couple up to 9 chillers designed to reduce the overall unit dimensions to a minimum.
The combination of the various chillers allows all the strengths of the individual module to be maintained.
Modularity allows you to adapt installation to the actual development needs of the system. This way the cooling capacity can be increased over time simply and affordably.
Modularity is essential when component redundancy is required, as it allows for a safer system design and increased reliability.

Microchannel coils

Microchannel heat exchanger that guarantees higher thermal exchange yield. Circuit that optimises the liquid distribution in the coil, which is arranged with V beam geometry with open angle.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Components

Already equipped with a water filter, differential pressure switch and butterfly check valves, useful to cut off the hydraulic circuit for maintenance; for instance, to clean the filter.
In the event of variable flow rate, the motorised hydronic valves can intercept one or more modules to reduce the flow rate in low heat load conditions.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Adjustment includes complete management of the alarms and their log.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS plat-

forms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
GPNYB_BACK: kit with 1 anti-intrusion grid for the short side of the unit.
GPNYB_SIDE: kit with 2 anti-intrusion grids for the long side of the unit.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
KNYB: Pair of caps with grooved joints assembled on the unit manifold.
KREC: Accessory kit to remote the electric power supply input to the back
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0550
AER485P1	A,E	•
AERBACP	A,E	•
AERLINK	A,E	•
FB1	A,E	•
GPNYB_BACK	A,E	•
GPNYB_SIDE	A,E	•
MULTICHILLER-EVO	A,E	•
PGD1	A,E	•

DRE: electronic device for peak current reduction

Ver	0550
A, E	DRE (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

KNYB: Pair of caps with grooved joints assembled on the unit manifold

Ver	0550
A, E	KNYB

A grey background indicates the accessory must be assembled in the factory

KREC: kit to remote the electric power supply input to the back

Ver	0550
A, E	KREC

A grey background indicates the accessory must be assembled in the factory

RIF: Power factor correction

Ver	0550
A, E	RIF (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRV**
4,5,6,7		**Size** 0550
8		**Operating field**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	F	Free-cooling
10		**Heat recovery**
	D	With desuperheater
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency

Field		Description
12		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit

(1) Water produced up to +4 °C

PERFORMANCE SPECIFICATIONS

NRV - FA/FE

Size			0550
Cooling performance chiller operation (1)			
Cooling capacity	A	kW	105,4
	E	kW	99,9
Input power	A	kW	36,6
	E	kW	38,2
Cooling total input current	A,E	A	65,0
EER	A	W/W	2,88
	E	W/W	2,61
Water flow rate system side	A	l/h	18104
	E	l/h	17164
Pressure drop system side	A	kPa	31
	E	kPa	27
Cooling performances with free-cooling (2)			
Cooling capacity	A	kW	69,3
	E	kW	57,7
Input power	A	kW	3,7
	E	kW	2,6
Free cooling total input current	A	A	6,7
	E	A	4,5
EER	A	W/W	18,48
	E	W/W	21,98
Water flow rate system side	A	l/h	18104
	E	l/h	17164
Pressure drop system side	A	kPa	73
	E	kPa	66

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0550
SEER - 23/18 (EN14825: 2018) with standard fans (1)			
Seasonal efficiency	A	%	184.2%
	E	%	181.3%
SEER	A	W/W	4,68
	E	W/W	4,61
SEER - 23/18 (EN14825: 2018) with inverter fans			
Seasonal efficiency	A	%	191.5%
	E	%	189.2%
SEER	A	W/W	4,86
	E	W/W	4,81
SEPR - (EN14825: 2018) High temperature with standard fans (1)			
SEPR	A	W/W	5,94
	E	W/W	5,60
SEPR - (EN14825: 2018) High temperature with inverter fans (1)			
SEPR	A	W/W	5,94
	E	W/W	5,60

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

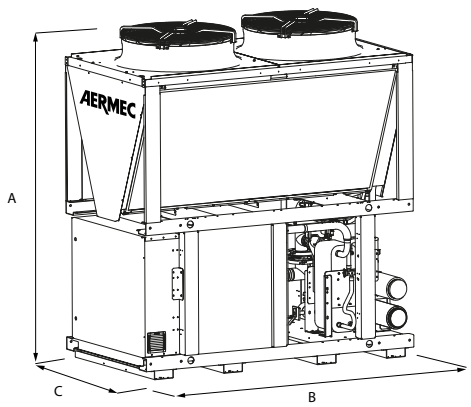
Size			0550
Electric data			
Maximum current (FLA)	A,E	A	95,6
Peak current (LRA)	A,E	A	280,6

GENERAL TECHNICAL DATA

Size			0550
Compressor			
Type	A,E	type	Scroll
Number	A,E	no.	2
Circuits	A,E	no.	1
Refrigerant	A,E	type	R410A
System side heat exchanger			
Type	A,E	type	Brazed plate
Number	A,E	no.	1
System side hydraulic connections			
Connections (in/out)	A,E	Type	Grooved joints
Sizes (in/out)	A,E	Ø	6"
Fan			
Type	A,E	type	axials
Fan motor	A,E	type	Asynchronous with phase cut
Number	A,E	no.	2
Air flow rate	A	m^3/h	28600
	E	m^3/h	22000
Sound data calculated in cooling mode (1)			
Sound power level	A	dB(A)	86,9
	E	dB(A)	81,8
Sound pressure level (10 m)	A	dB(A)	55,0
	E	dB(A)	49,9

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0550
Dimensions and weights			
A	A,E	mm	2480
B	A,E	mm	2200
C	A,E	mm	1190
Empty weight	A,E	kg	1389

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www.aermec.com

NSM 1402-9603 F

Air-water chiller with free-cooling

Cooling capacity 306 ÷ 2028 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **High efficiency also at partial loads**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Electronic expansion valve

Electronic thermostatic as standard from size 5202 to 6402 and from 8403 to 9603.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Units include 1 control board for each compressor.
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.
— Possibility to control two units in a Master-Slave configuration (from size 1402 to 6402)

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.

AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x no. 2	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP x no. 2	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1 x no. 2	A,E,N,U	•	•	•	•	•	•	•						
AER485P1 x no. 3	A								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERBACP x no. 2	A,E,N,U	•	•	•	•	•	•	•						
AERBACP x no. 3	A								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERNET	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
MULTICHILLER-EVO	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
PRV3	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					

Antivibration - NSM free - cooling

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00														
A	AVX929	AVX929	AVX929	AVX932	AVX933	AVX933	AVX933	AVX934	AVX937	AVX937	AVX937	AVX938	AVX938	AVX942
E, U	AVX929	AVX929	AVX930	AVX933	AVX933	AVX934	AVX934	AVX935	AVX935	AVX935	AVX935	AVX939	AVX939	AVX940
N	AVX930	AVX930	AVX931	AVX931	AVX934	AVX935	AVX935	AVX936	AVX936	AVX936	AVX936	AVX940	AVX941	AVX943

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00													
A	AVX942	AVX944	AVX944	AVX944	AVX945	AVX947	AVX947	AVX953	AVX953	AVX957	AVX954	AVX956	AVX955
E, U	AVX941	AVX945	AVX947	AVX947	AVX950	AVX952	AVX948	AVX954	AVX956	AVX956	AVX958	-	-
N	AVX943	AVX946	AVX948	AVX949	AVX951	AVX951	AVX951	AVX955	-	-	-	-	-

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
E, U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP7V	GP7V	GP8V	GP8V	GP9V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP8V	GP9V	GP10V	GP11V

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	GP8V	GP9V	GP9V	GP9V	-	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E, U	GP10V	GP10V	GP11V	GP11V	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V	GP8V+GP8V	GP8V+GP8V	GP8V	GP6V+GP11V	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24
E, N, U	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	KRS24	KRS24	KRS23	KRS23	KRS24	KRS24	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E, U	KRS24	KRS24	KRS23	KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
N	KRS24	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSM**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403, 9603
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (3)
9		**Model**
	F	Free-cooling
	P	Free-cooling plus (4)
10		**Heat recovery**
	D	With desuperheater
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	I	Copper-aluminium / Copper-aluminium
	O	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	2	230V ~ 3 50Hz with fuses (5)
	4	230V ~ 3 50Hz with magnet circuit breakers (5)
	8	400V ~ 3 50Hz with magnet circuit breakers
	°	400V ~ 3 50Hz with fuses
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (6)
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (6)
	TF	Double pump F (7)
	TG	Double pump G (7)
	TH	Double pump H (7)
	TI	Double pump I (7)
	TJ	Double pump J (7)

(1) Water produced from 4 °C ÷ 18 °C
(2) Water produced from 4 °C ÷ -6 °C
(3) Water produced from 4 °C ÷ 15 °C
(4) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"
(5) available only for size from 1402 to 2202
(6) For all configurations including pump J please contact the factory.
(7) The unit from 5603 to 9603 can only have hydronic kit "TF - TG - TH- TI - TJ"

PERFORMANCE SPECIFICATIONS

NSM - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	306,5	350,2	396,8	450,5	505,3	522,5	556,5	600,8	649,8	678,4	726,3	813,3	872,8	954,1
Input power	kW	102,8	117,6	136,7	158,3	168,9	180,5	194,5	203,0	220,4	235,0	252,8	269,7	295,6	317,9
Cooling total input current	A	182,3	206,2	230,6	268,0	291,3	311,4	335,2	351,3	378,4	400,0	426,5	450,9	486,5	530,4
EER	W/W	2,98	2,98	2,90	2,85	2,99	2,90	2,86	2,96	2,95	2,89	2,87	3,02	2,95	3,00
Water flow rate system side	l/h	52654	60163	68174	77407	86812	89765	95621	103224	111642	116561	124785	139737	149958	163932
Pressure drop system side	kPa	45	59	54	36	45	48	54	63	67	73	65	43	50	61
Cooling performances with free-cooling (2)															
Cooling capacity	kW	347,7	362,0	373,1	381,9	468,1	471,2	476,5	560,7	569,1	573,2	578,8	671,5	677,9	770,2
Input power	kW	15,0	15,0	15,0	15,0	18,7	18,7	18,7	22,5	22,5	22,5	22,5	26,2	26,2	30,0
Free cooling total input current	A	30,4	30,4	30,4	30,4	38,0	38,0	38,0	45,6	45,6	45,6	45,6	53,2	53,2	60,8
EER	W/W	23,18	24,14	24,88	25,47	24,97	25,14	25,42	24,93	25,30	25,48	25,73	25,59	25,83	25,68
Water flow rate system side	l/h	60230	68250	77490	86910	89860	95730	103340	111770	116690	124920	139890	150120	164110	171460
Pressure drop system side	kPa	66	86	85	76	78	84	95	98	107	116	113	87	99	107

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	305,8	349,3	395,0	447,3	502,1	519,1	552,6	597,2	645,4	674,3	721,9	807,8	865,0	946,8
Input power	kW	103,7	118,8	138,1	160,2	170,8	182,6	197,0	205,3	223,1	238,4	257,1	273,3	299,3	321,8
Cooling total input current	A	182,3	206,2	230,6	268,0	291,3	311,4	335,2	351,3	378,4	400,0	426,5	450,9	486,5	530,4
EER	W/W	2,95	2,94	2,86	2,79	2,94	2,84	2,81	2,91	2,89	2,83	2,81	2,96	2,89	2,94
Water flow rate system side	l/h	52546	60019	67864	76853	86266	89180	94948	102598	110891	115859	124023	138789	148609	162675
Pressure drop system side	kPa	45	59	54	36	45	48	54	63	67	73	65	43	50	61
Cooling performances with free-cooling (2)															
Cooling capacity	kW	371,8	388,1	400,1	409,1	501,9	505,2	510,5	601,2	610,0	614,2	619,7	719,2	725,2	824,6
Input power	kW	15,2	15,2	15,2	15,2	19,0	19,0	19,0	22,9	22,9	22,9	22,9	26,7	26,7	30,5
Free cooling total input current	A	30,7	30,7	30,7	30,7	38,4	38,4	38,4	46,1	46,1	46,1	46,1	53,7	53,7	61,4
EER	W/W	24,41	25,48	26,27	26,86	26,36	26,53	26,81	26,31	26,69	26,88	27,12	26,98	27,20	27,07
Water flow rate system side	l/h	52710	60230	68250	77490	86910	89860	95730	103340	111770	116690	124920	139890	150120	164110
Pressure drop system side	kPa	66	86	86	76	79	84	95	98	107	117	114	87	100	108

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - A

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	996,8	1082,3	1128,3	1167,3	1222,8	1304,9	1346,7	1459,2	1501,9	1659,0	1705,0	1838,1	2028,1
Input power	kW	346,1	365,7	391,9	422,5	438,9	452,7	472,4	492,1	520,2	557,2	583,3	659,0	704,1
Cooling total input current	A	581,4	614,0	654,6	703,8	733,3	761,1	795,9	821,1	872,1	945,1	985,8	1100,0	1197,7
EER	W/W	2,88	2,96	2,88	2,76	2,79	2,88	2,85	2,97	2,89	2,98	2,92	2,79	2,88
Water flow rate system side	l/h	171269	185947	193855	200561	210092	224201	231379	250713	258050	285029	292937	315803	348457
Pressure drop system side	kPa	66	81	88	75	82	96	102	61	66	81	88	82	102
Cooling performances with free-cooling (2)														
Cooling capacity	kW	774,7	867,5	872,2	875,9	966,0	1058,3	1062,8	1158,4	1162,7	1346,7	1351,7	1449,5	1636,8
Input power	kW	30,0	33,7	33,7	33,7	37,5	41,2	41,2	45,0	45,0	52,5	52,5	56,2	63,7
Free cooling total input current	A	60,8	68,4	68,4	68,4	76,0	83,6	83,6	91,2	91,2	106,4	106,4	114,0	129,2
EER	W/W	25,83	25,71	25,85	25,96	25,77	25,66	25,77	25,75	25,85	25,66	25,75	25,78	25,68
Water flow rate system side	l/h	186150	194070	200780	210330	224450	231640	250990	258340	285350	293260	316150	348840	348457
Pressure drop system side	kPa	117	130	141	131	134	145	154	107	117	130	141	134	154

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	988,7	1074,2	1119,1	1156,4	1212,7	1295,2	1336,2	1447,7	1489,6	1646,9	1691,9	1822,8	2013,1
Input power	kW	350,6	370,3	397,1	428,3	444,3	458,0	478,2	498,2	527,1	564,0	590,8	667,0	712,4
Cooling total input current	A	581,4	614,0	654,6	703,8	733,3	761,1	795,9	821,1	872,1	945,1	985,8	1100,0	1197,7
EER	W/W	2,82	2,90	2,82	2,70	2,73	2,83	2,79	2,91	2,83	2,92	2,86	2,73	2,83
Water flow rate system side	l/h	169873	184553	192278	198678	208362	222522	229577	248739	255936	282961	290686	313186	345875
Pressure drop system side	kPa	66	81	88	75	82	96	102	61	66	81	88	82	102
Cooling performances with free-cooling (2)														
Cooling capacity	kW	828,9	928,7	933,1	936,5	1033,8	1133,1	1137,4	1239,8	1243,9	1442,0	1446,8	1551,1	1752,4
Input power	kW	30,5	34,3	34,3	34,3	38,1	41,9	41,9	45,7	45,7	53,3	53,3	57,1	64,7
Free cooling total input current	A	61,4	69,1	69,1	69,1	76,8	84,5	84,5	92,1	92,1	107,5	107,5	115,2	130,5
EER	W/W	27,21	27,09	27,22	27,32	27,15	27,05	27,15	27,13	27,22	27,04	27,13	27,15	27,07
Water flow rate system side	l/h	171460	186150	194070	200780	210330	224450	231640	250990	258340	285350	293260	316150	348840
Pressure drop system side	kPa	117	130	141	131	134	146	155	108	117	130	141	134	155

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	319,8	365,8	417,7	473,0	509,1	549,8	568,8	618,6	646,3	675,1	715,5	796,7	851,7	929,6
Input power	kW	105,5	123,3	137,5	159,4	178,3	183,3	195,5	205,2	220,4	235,9	253,5	270,8	297,1	320,1
Cooling total input current	A	177,3	205,7	223,1	261,0	294,5	304,8	325,9	341,6	365,4	388,5	414,7	437,5	474,1	516,8
EER	W/W	3,03	2,97	3,04	2,97	2,85	3,00	2,91	3,01	2,93	2,86	2,82	2,94	2,87	2,90
Water flow rate system side	l/h	54946	62848	71763	81260	87462	94455	97732	106280	111041	115993	122937	136886	146332	159723
Pressure drop system side	kPa	33	37	32	37	43	50	54	53	58	64	64	43	49	60
Cooling performances with free-cooling (2)															
Cooling capacity	kW	308,8	317,5	389,9	399,1	403,2	476,4	479,1	552,1	556,5	560,4	564,7	643,3	648,3	727,0
Input power	kW	11,0	11,0	13,7	13,7	13,7	16,5	16,5	19,2	19,2	19,2	19,2	22,0	22,0	24,7
Free cooling total input current	A	15,9	15,9	19,9	19,9	19,9	23,9	23,9	27,9	27,9	27,9	27,9	31,8	31,8	35,8
EER	W/W	28,07	28,87	28,36	29,03	29,33	28,88	29,04	28,69	28,91	29,11	29,34	29,25	29,47	29,38
Water flow rate system side	l/h	55010	62920	71840	81350	87560	94560	97840	106400	111160	116120	123070	137040	146490	159900
Pressure drop system side	kPa	56	67	56	68	78	80	85	82	90	98	102	77	88	97

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	316,7	363,1	414,5	469,5	504,1	545,4	564,0	613,8	640,8	669,8	710,9	790,6	843,5	921,3
Input power	kW	106,6	124,7	138,6	161,1	181,0	185,4	197,8	207,6	223,1	239,2	257,8	274,6	301,1	324,4
Cooling total input current	A	177,3	205,7	223,1	261,0	294,5	304,8	325,9	341,6	365,4	388,5	414,7	437,5	474,1	516,8
EER	W/W	2,97	2,91	2,99	2,91	2,79	2,94	2,85	2,96	2,87	2,80	2,76	2,88	2,80	2,84
Water flow rate system side	l/h	54406	62391	71215	80666	86616	93710	96909	105464	110105	115087	122135	135840	144915	158291
Pressure drop system side	kPa	33	37	32	37	43	50	54	54	59	64	65	43	49	60
Cooling performances with free-cooling (2)															
Cooling capacity	kW	328,8	338,7	415,7	425,8	429,8	508,2	511,0	589,0	593,7	597,7	602,1	686,0	690,6	774,8
Input power	kW	11,2	11,2	13,9	13,9	13,9	16,7	16,7	19,5	19,5	19,5	19,5	22,3	22,3	25,1
Free cooling total input current	A	16,1	16,1	20,1	20,1	20,1	24,1	24,1	28,1	28,1	28,1	28,1	32,2	32,2	36,2
EER	W/W	29,48	30,36	29,81	30,53	30,82	30,37	30,54	30,17	30,41	30,62	30,84	30,75	30,95	30,87
Water flow rate system side	l/h	55010	62920	71840	81350	87560	94560	97840	106400	111160	116120	123070	137040	146490	159900
Pressure drop system side	kPa	57	67	57	68	78	80	86	83	90	98	103	77	88	98

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	995,2	1051,6	1137,0	1159,2	1217,3	1279,4	1341,6	1434,0	1499,6	1598,6	1684,0	-	-
Input power	kW	339,9	370,0	389,4	418,0	436,6	448,9	461,2	491,1	510,9	568,9	588,3	-	-
Cooling total input current	A	554,8	601,5	631,6	677,8	708,4	731,9	755,4	803,9	832,3	923,9	945,4	-	-
EER	W/W	2,93	2,84	2,92	2,77	2,79	2,85	2,91	2,92	2,93	2,81	2,86	-	-
Water flow rate system side	l/h	170980	180685	195353	199172	209139	219823	230507	246385	257643	274665	289333	-	-
Pressure drop system side	kPa	68	79	73	76	67	72	82	60	68	79	73	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	804,0	809,4	888,6	890,5	967,2	1043,7	1119,7	1129,8	1206,8	1215,8	1295,1	-	-
Input power	kW	27,5	27,5	30,2	30,2	33,0	35,7	38,5	38,5	41,2	41,2	44,0	-	-
Free cooling total input current	A	39,8	39,8	43,8	43,8	47,8	51,7	55,7	55,7	59,7	59,7	63,7	-	-
EER	W/W	29,24	29,44	29,38	29,44	29,31	29,20	29,09	29,35	29,26	29,48	29,44	-	-
Water flow rate system side	l/h	171170	180890	195570	199390	209370	220070	230760	246660	257930	274970	289650	-	-
Pressure drop system side	kPa	104	119	113	117	107	110	119	97	104	119	113	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	987,5	1041,9	1127,1	1148,0	1206,7	1269,3	1332,0	1421,7	1487,9	1583,2	1668,4	-	-
Input power	kW	344,2	375,3	394,8	424,0	442,2	454,4	466,6	497,6	517,4	577,4	596,8	-	-
Cooling total input current	A	554,8	601,5	631,6	677,8	708,4	731,9	755,4	803,9	832,3	923,9	945,4	-	-
EER	W/W	2,87	2,78	2,86	2,71	2,73	2,79	2,85	2,86	2,88	2,74	2,80	-	-
Water flow rate system side	l/h	169667	179011	193652	197235	207320	218083	228845	244269	255645	272005	286645	-	-
Pressure drop system side	kPa	69	80	74	76	68	72	82	60	69	80	74	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	857,5	862,4	947,1	948,8	1031,1	1113,1	1194,5	1204,3	1286,9	1295,0	1379,9	-	-
Input power	kW	27,9	27,9	30,7	30,7	33,5	36,3	39,0	39,0	41,8	41,8	44,6	-	-
Free cooling total input current	A	40,2	40,2	44,2	44,2	48,2	52,3	56,3	56,3	60,3	60,3	64,3	-	-
EER	W/W	30,74	30,92	30,87	30,92	30,81	30,70	30,59	30,84	30,76	30,95	30,92	-	-
Water flow rate system side	l/h	171170	180890	195570	199390	209370	220070	230760	246660	257930	274970	289650	-	-
Pressure drop system side	kPa	105	119	113	117	107	111	120	98	105	119	113	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	328,1	378,5	429,3	491,9	531,3	568,6	589,0	638,0	667,8	695,1	735,8	824,8	891,0	967,9
Input power	kW	105,3	121,3	136,2	155,8	172,9	180,0	191,0	202,4	216,1	228,4	242,4	263,0	288,2	311,5
Cooling total input current	A	185,8	211,5	232,0	266,3	297,1	312,9	332,3	352,6	374,2	392,3	413,0	442,7	477,2	522,6
EER	W/W	3,12	3,12	3,15	3,16	3,07	3,16	3,08	3,15	3,09	3,04	3,04	3,14	3,09	3,11
Water flow rate system side	l/h	56372	65027	73755	84508	91287	97691	101204	109611	114731	119418	126414	141715	153088	166304
Pressure drop system side	kPa	35	39	34	40	46	53	57	57	62	68	68	46	53	65
Cooling performances with free-cooling (2)															
Cooling capacity	kW	356,2	369,9	451,2	466,4	473,4	555,1	559,4	641,6	648,6	654,2	661,5	753,3	763,5	854,0
Input power	kW	15,0	15,0	18,7	18,7	18,7	22,5	22,5	26,2	26,2	26,2	26,2	30,0	30,0	33,7
Free cooling total input current	A	30,4	30,4	38,0	38,0	38,0	45,6	45,6	53,2	53,2	53,2	53,2	60,8	60,8	68,4
EER	W/W	23,76	24,67	24,07	24,88	25,26	24,68	24,87	24,45	24,71	24,93	25,21	25,12	25,46	25,31
Water flow rate system side	l/h	56430	65100	73840	84600	91390	97800	101320	109730	114860	119550	126550	141870	153260	166490
Pressure drop system side	kPa	59	71	60	73	85	85	92	88	96	104	108	82	96	105

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,9	376,7	427,6	488,8	527,6	565,4	585,6	634,6	664,0	691,7	732,5	820,3	884,7	961,8
Input power	kW	106,3	122,5	137,6	157,4	174,8	181,8	193,0	204,4	218,3	231,1	245,7	266,0	291,3	314,8
Cooling total input current	A	185,8	211,5	232,0	266,3	297,1	312,9	332,3	352,6	374,2	392,3	413,0	442,7	477,2	522,6
EER	W/W	3,08	3,07	3,11	3,10	3,02	3,11	3,03	3,10	3,04	2,99	2,98	3,08	3,04	3,06
Water flow rate system side	l/h	56168	64715	73458	83974	90642	97138	100613	109029	114089	118834	125850	140933	152002	165249
Pressure drop system side	kPa	35	40	34	40	47	54	58	57	63	68	69	46	54	65
Cooling performances with free-cooling (2)															
Cooling capacity	kW	381,5	396,7	483,5	500,0	507,4	595,1	599,9	687,8	695,4	701,6	709,4	807,7	818,0	915,4
Input power	kW	15,2	15,2	19,0	19,0	19,0	22,9	22,9	26,7	26,7	26,7	26,7	30,5	30,5	34,3
Free cooling total input current	A	30,7	30,7	38,4	38,4	38,4	46,1	46,1	53,7	53,7	53,7	53,7	61,4	61,4	69,1
EER	W/W	25,04	26,04	25,39	26,26	26,65	26,05	26,25	25,80	26,09	26,32	26,61	26,51	26,85	26,71
Water flow rate system side	l/h	56430	65100	73840	84600	91390	97800	101320	109730	114860	119550	126550	141870	153260	166490
Pressure drop system side	kPa	60	72	60	74	85	86	92	88	96	104	109	83	96	106

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - U

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1031,1	1095,0	1181,2	1208,8	1265,8	1326,2	1386,6	1491,1	1554,3	1666,6	1752,7	-	-
Input power	kW	332,0	358,4	379,0	405,3	426,4	440,0	453,5	478,4	498,9	549,8	570,4	-	-
Cooling total input current	A	564,1	604,8	638,6	681,5	718,3	746,0	773,7	811,6	846,2	926,2	954,2	-	-
EER	W/W	3,11	3,06	3,12	2,98	2,97	3,01	3,06	3,12	3,12	3,03	3,07	-	-
Water flow rate system side	l/h	177155	188137	202935	207692	217477	227858	238239	256194	267046	286336	301135	-	-
Pressure drop system side	kPa	74	86	79	83	73	77	87	64	74	86	79	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	941,7	951,8	1043,5	1047,6	1134,8	1221,6	1307,8	1326,2	1413,8	1431,0	1522,9	-	-
Input power	kW	37,5	37,5	41,2	41,2	45,0	48,7	52,5	52,5	56,2	56,2	60,0	-	-
Free cooling total input current	A	76,0	76,0	83,6	83,6	91,2	98,8	106,4	106,4	114,0	114,0	121,6	-	-
EER	W/W	25,12	25,39	25,30	25,40	25,22	25,07	24,92	25,27	25,14	25,45	25,39	-	-
Water flow rate system side	l/h	177350	188350	203160	207920	217720	228110	238500	256480	267340	286650	301470	-	-
Pressure drop system side	kPa	112	129	122	127	115	119	128	105	112	129	122	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1025,3	1088,1	1174,0	1200,9	1257,9	1318,5	1379,2	1482,0	1545,4	1655,7	1741,6	-	-
Input power	kW	335,5	362,4	383,1	409,7	430,7	444,3	457,9	483,4	504,1	556,1	576,8	-	-
Cooling total input current	A	564,1	604,8	638,6	681,5	718,3	746,0	773,7	811,6	846,2	926,2	954,2	-	-
EER	W/W	3,06	3,00	3,06	2,93	2,92	2,97	3,01	3,07	3,07	2,98	3,02	-	-
Water flow rate system side	l/h	176150	186945	201699	206322	216119	226541	236963	254617	265517	284475	299229	-	-
Pressure drop system side	kPa	74	86	79	83	73	78	88	65	74	86	80	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	1009,7	1020,0	1118,5	1122,6	1216,5	1309,9	1402,4	1421,6	1515,9	1533,4	1632,1	-	-
Input power	kW	38,1	38,1	41,9	41,9	45,7	49,5	53,3	53,3	57,1	57,1	60,9	-	-
Free cooling total input current	A	76,8	76,8	84,5	84,5	92,1	99,8	107,5	107,5	115,2	115,2	122,8	-	-
EER	W/W	26,51	26,78	26,70	26,80	26,62	26,46	26,30	26,66	26,54	26,84	26,78	-	-
Water flow rate system side	l/h	177350	188350	203160	207920	217720	228110	238500	256480	267340	286650	301470	-	-
Pressure drop system side	kPa	113	129	122	128	116	119	128	106	113	130	123	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,0	376,5	424,5	486,3	525,3	559,6	579,7	626,1	655,1	682,6	723,4	811,7	888,8	960,7
Input power	kW	103,6	119,3	134,4	153,8	170,9	178,3	189,4	200,8	214,8	227,9	242,9	263,8	283,0	307,1
Cooling total input current	A	174,8	199,9	218,4	252,6	283,3	297,4	316,9	335,2	357,1	376,5	398,7	426,6	452,0	496,6
EER	W/W	3,15	3,16	3,16	3,16	3,07	3,14	3,06	3,12	3,05	3,00	2,98	3,08	3,14	3,13
Water flow rate system side	l/h	56017	64687	72926	83554	90260	96150	99597	107568	112546	117285	124287	139460	152703	165051
Pressure drop system side	kPa	34	39	33	39	45	52	55	55	60	65	66	44	53	64
Cooling performances with free-cooling (2)															
Cooling capacity	kW	365,1	381,0	449,3	465,6	473,2	541,5	545,8	615,7	622,3	627,8	634,7	713,7	791,0	867,2
Input power	kW	13,7	13,7	16,5	16,5	16,5	19,2	19,2	22,0	22,0	22,0	22,0	24,7	27,5	30,2
Free cooling total input current	A	19,9	19,9	23,9	23,9	23,9	27,9	27,9	31,8	31,8	31,8	31,8	35,8	39,8	43,8
EER	W/W	26,56	27,71	27,24	28,22	28,69	28,13	28,36	27,99	28,29	28,54	28,86	28,84	28,77	28,67
Water flow rate system side	l/h	56080	64760	73010	83650	90360	96260	99710	107690	112670	117420	124420	139610	152870	165230
Pressure drop system side	kPa	51	61	51	63	73	76	82	79	87	94	98	74	83	93

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	325,1	375,2	422,9	483,6	522,0	556,8	576,7	623,1	651,8	679,6	720,3	807,0	882,8	955,1
Input power	kW	104,5	120,4	135,6	155,5	172,9	180,2	191,5	202,9	217,2	230,8	246,4	267,1	286,2	310,3
Cooling total input current	A	174,8	199,9	218,4	252,6	283,3	297,4	316,9	335,2	357,1	376,5	398,7	426,6	452,0	496,6
EER	W/W	3,11	3,12	3,12	3,11	3,02	3,09	3,01	3,07	3,00	2,94	2,92	3,02	3,09	3,08
Water flow rate system side	l/h	55859	64457	72661	83082	89692	95662	99076	107055	111979	116764	123749	138653	151682	164102
Pressure drop system side	kPa	35	39	33	39	46	52	56	55	61	66	67	45	54	64
Cooling performances with free-cooling (2)															
Cooling capacity	kW	387,5	406,1	478,1	496,6	505,0	577,5	582,4	656,5	663,9	670,1	677,6	761,7	844,0	925,5
Input power	kW	13,9	13,9	16,7	16,7	16,7	19,5	19,5	22,3	22,3	22,3	22,3	25,1	27,9	30,7
Free cooling total input current	A	20,1	20,1	24,1	24,1	24,1	28,1	28,1	32,2	32,2	32,2	32,2	36,2	40,2	44,2
EER	W/W	27,79	29,12	28,57	29,68	30,18	29,58	29,83	29,42	29,75	30,03	30,37	30,35	30,26	30,16
Water flow rate system side	l/h	56080	64760	73010	83650	90360	96260	99710	107690	112670	117420	124420	139610	152870	165230
Pressure drop system side	kPa	52	62	52	64	74	77	82	80	87	94	99	75	83	94

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - N

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1004,9	1098,6	1161,7	1218,0	1274,5	1318,1	1361,6	1478,4	-	-	-	-	-
Input power	kW	332,9	349,5	369,2	392,7	416,2	433,5	450,9	472,0	-	-	-	-	-
Cooling total input current	A	544,1	569,7	600,1	638,5	677,0	708,3	739,7	770,6	-	-	-	-	-
EER	W/W	3,02	3,14	3,15	3,10	3,06	3,04	3,02	3,13	-	-	-	-	-
Water flow rate system side	l/h	172652	188754	199587	209274	218966	226457	233947	254013	-	-	-	-	-
Pressure drop system side	kPa	70	71	84	88	74	78	85	64	-	-	-	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	874,3	1018,1	1092,1	1164,5	1236,6	1246,2	1254,9	1339,1	-	-	-	-	-
Input power	kW	30,2	35,7	38,5	41,2	44,0	44,0	44,0	46,7	-	-	-	-	-
Free cooling total input current	A	43,8	51,7	55,7	59,7	63,7	63,7	63,7	67,7	-	-	-	-	-
EER	W/W	28,91	28,48	28,37	28,24	28,11	28,33	28,52	28,65	-	-	-	-	-
Water flow rate system side	l/h	172840	188960	199810	209510	219210	226710	234210	254300	-	-	-	-	-
Pressure drop system side	kPa	102	100	114	117	103	109	118	93	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	998,8	1092,7	1155,6	1211,7	1267,7	1310,9	1354,2	1470,0	-	-	-	-	-
Input power	kW	336,7	353,2	373,0	396,5	420,0	437,6	455,3	476,9	-	-	-	-	-
Cooling total input current	A	544,1	569,7	600,1	638,5	677,0	708,3	739,7	770,6	-	-	-	-	-
EER	W/W	2,97	3,09	3,10	3,06	3,02	3,00	2,97	3,08	-	-	-	-	-
Water flow rate system side	l/h	171604	187733	198553	208183	217806	225235	232663	252555	-	-	-	-	-
Pressure drop system side	kPa	70	71	85	89	75	78	85	64	-	-	-	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	933,0	1086,4	1165,3	1242,2	1318,7	1329,5	1339,1	1429,1	-	-	-	-	-
Input power	kW	30,7	36,3	39,0	41,8	44,6	44,6	44,6	47,4	-	-	-	-	-
Free cooling total input current	A	44,2	52,3	56,3	60,3	64,3	64,3	64,3	68,3	-	-	-	-	-
EER	W/W	30,41	29,96	29,84	29,69	29,55	29,79	30,01	30,14	-	-	-	-	-
Water flow rate system side	l/h	172840	188960	199810	209510	219210	226710	234210	254300	-	-	-	-	-
Pressure drop system side	kPa	102	101	114	118	104	109	118	94	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F																
SEPR - (EN14825: 2018) High temperature with standard fans (1)																
SEPR	A	W/W	7,41	7,05	6,65	6,29	6,78	6,52	6,34	6,73	6,56	6,31	6,10	6,55	6,32	6,50
	E	W/W	7,22	6,77	7,10	6,65	6,30	6,89	6,59	6,81	6,69	6,42	6,09	6,28	6,23	6,44
	N	W/W	7,68	7,36	7,56	7,20	6,78	7,10	6,94	7,15	6,90	6,67	6,45	6,78	6,94	6,93
	U	W/W	7,50	7,13	7,47	7,13	6,79	7,22	6,97	7,28	7,03	6,82	6,62	6,97	6,75	6,86
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																
SEPR	A	W/W	7,41	7,05	6,65	6,29	6,78	6,52	6,34	6,73	6,56	6,31	6,10	6,55	6,32	6,50
	E	W/W	7,22	6,77	7,10	6,65	6,30	6,89	6,59	6,81	6,69	6,42	6,09	6,28	6,23	6,44
	N	W/W	7,68	7,36	7,56	7,20	6,78	7,10	6,94	7,15	6,90	6,67	6,45	6,78	6,94	6,93
	U	W/W	7,50	7,13	7,47	7,13	6,79	7,22	6,97	7,28	7,03	6,82	6,62	6,97	6,75	6,86

(1) Calculation performed with FIXED water flow rate.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P																
SEPR - (EN14825: 2018) High temperature with standard fans (1)																
SEPR	A	W/W	7,38	7,12	6,67	6,25	6,79	6,49	6,27	6,71	6,49	6,23	5,99	6,51	6,26	6,44
	E	W/W	7,25	6,73	7,15	6,60	6,20	6,83	6,51	6,84	6,61	6,31	5,99	6,46	6,22	6,34
	N	W/W	7,71	7,39	7,62	7,22	6,83	7,18	6,91	7,16	6,88	6,63	6,39	6,75	6,90	6,88
	U	W/W	7,57	7,17	7,56	7,16	6,77	7,23	6,97	7,30	7,02	6,78	6,56	6,97	6,71	6,81
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																
SEPR	A	W/W	7,38	7,12	6,67	6,25	6,79	6,49	6,27	6,71	6,49	6,23	5,99	6,51	6,26	6,44
	E	W/W	7,25	6,73	7,15	6,60	6,20	6,83	6,51	6,84	6,61	6,31	5,99	6,46	6,22	6,34
	N	W/W	7,71	7,39	7,62	7,22	6,83	7,18	6,91	7,16	6,88	6,63	6,39	6,75	6,90	6,88
	U	W/W	7,57	7,17	7,56	7,16	6,77	7,23	6,97	7,30	7,02	6,78	6,56	6,97	6,71	6,81

(1) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F															
SEPR - (EN14825: 2018) High temperature with standard fans (1)															
SEPR	A	W/W	6,18	6,40	6,17	5,87	6,04	6,24	6,13	6,61	6,38	6,69	6,52	6,18	6,44
	E	W/W	6,52	6,28	6,63	5,98	6,02	6,19	6,49	6,72	6,84	6,22	6,46	-	-
	N	W/W	6,65	6,88	7,12	7,03	6,96	6,74	6,72	7,28	-	-	-	-	-
	U	W/W	6,92	6,60	7,04	6,52	6,54	6,68	6,83	7,17	7,22	6,87	7,00	-	-
SEPR - (EN14825: 2018) High temperature with inverter fans (1)															
SEPR	A	W/W	6,18	6,40	6,17	5,87	6,04	6,24	6,13	6,61	6,38	6,69	6,52	6,18	6,44
	E	W/W	6,52	6,28	6,63	5,98	6,02	6,19	6,49	6,72	6,84	6,22	6,46	-	-
	N	W/W	6,65	6,88	7,12	7,03	6,96	6,74	6,72	7,28	-	-	-	-	-
	U	W/W	6,92	6,60	7,04	6,52	6,54	6,68	6,83	7,17	7,22	6,87	7,00	-	-

(1) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P															
SEPR - (EN14825: 2018) High temperature with standard fans (1)															
SEPR	A	W/W	6,09	6,31	6,06	5,76	5,95	6,14	6,01	6,57	6,32	6,64	6,44	6,13	6,37
	E	W/W	6,43	6,15	6,50	5,86	5,94	6,11	6,40	6,66	6,78	6,12	6,37	-	-
	N	W/W	6,59	7,00	7,07	6,99	6,94	6,81	6,68	7,25	-	-	-	-	-
	U	W/W	6,89	6,70	6,99	6,45	6,50	6,66	6,80	7,15	7,19	6,83	6,96	-	-
SEPR - (EN14825: 2018) High temperature with inverter fans (1)															
SEPR	A	W/W	6,09	6,31	6,06	5,76	5,95	6,14	6,01	6,57	6,32	6,64	6,44	6,13	6,37
	E	W/W	6,43	6,15	6,50	5,86	5,94	6,11	6,40	6,66	6,78	6,12	6,37	-	-
	N	W/W	6,59	7,00	7,07	6,99	6,94	6,81	6,68	7,25	-	-	-	-	-
	U	W/W	6,89	6,70	6,99	6,45	6,50	6,66	6,80	7,15	7,19	6,83	6,96	-	-

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
Maximum current (FLA)	A	A	243,9	271,9	299,1	332,5	374,4	395,7	417,0	450,2	474,9	474,9	474,9	531,4	579,4	635,9
	E,U	A	243,9	271,9	307,6	341,0	374,4	404,2	425,5	458,7	483,4	483,4	483,4	539,9	587,9	644,4
	N	A	252,4	280,4	316,1	349,5	382,9	412,7	434,0	467,2	491,9	491,9	491,9	548,4	604,9	667,2
Peak current (LRA)	A	A	265,5	307,3	350,2	388,2	419,8	466,8	484,0	519,5	529,4	529,4	529,4	661,9	701,8	831,3
	E,U	A	265,5	307,3	358,7	396,7	419,8	475,3	492,5	528,0	537,9	537,9	537,9	670,4	710,3	839,8
	N	A	274,0	315,8	367,2	405,2	428,3	483,8	501,0	536,5	546,4	546,4	546,4	678,9	727,3	862,6

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Electric data															
Maximum current (FLA)	A	A	683,9	731,4	770,4	813,4	864,9	913,2	947,2	980,7	1028,7	1123,7	1162,7	1300,2	1419,2
	E,U	A	700,9	739,9	793,2	836,2	887,7	930,2	972,7	997,7	1054,2	1132,2	1179,7	-	-
	N	A	715,2	771,2	818,7	870,2	921,7	955,7	989,7	1023,2	-	-	-	-	-
Peak current (LRA)	A	A	858,2	930,7	953,4	1108,4	1163,9	1290,2	1287,2	1069,4	1096,3	1200,0	1222,7	1480,2	1603,2
	E,U	A	875,2	939,2	976,2	1131,2	1186,7	1307,2	1312,7	1086,4	1121,8	1208,5	1239,7	-	-
	N	A	889,5	970,5	1001,7	1165,2	1220,7	1332,7	1329,7	1111,9	-	-	-	-	-

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Compressor																
Type	A,E,N,U	type	Screw													
Compressor regulation	A,E,N,U	Type	On-Off													
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type	R134a													
Refrigerant load circuit 1 (1)	A	kg	31,0	31,0	28,0	31,0	38,0	36,0	38,0	43,0	44,0	44,0	50,0	58,0	55,0	61,0
	E	kg	28,0	30,0	45,0	39,0	38,0	46,0	46,0	54,0	54,0	54,0	59,0	66,0	61,0	65,0
	N	kg	39,0	39,0	46,0	34,0	46,0	54,0	54,0	61,0	61,0	61,0	66,0	66,0	76,0	84,0
	U	kg	31,0	30,0	35,0	34,0	32,0	46,0	46,0	54,0	54,0	54,0	59,0	66,0	61,0	65,0
Refrigerant load circuit 2 (1)	A	kg	31,0	31,0	28,0	31,0	42,0	36,0	40,0	45,0	48,0	52,0	55,0	60,0	60,0	61,0
	E	kg	30,0	30,0	45,0	39,0	42,0	46,0	46,0	54,0	54,0	59,0	59,0	61,0	61,0	77,0
	N	kg	39,0	39,0	46,0	42,0	50,0	54,0	54,0	61,0	61,0	66,0	66,0	76,0	76,0	84,0
	U	kg	31,0	30,0	35,0	42,0	32,0	46,0	46,0	54,0	54,0	59,0	59,0	61,0	61,0	77,0
System side heat exchanger																
Type	A,E,N,U	type	Shell and tube													
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor															
Type	A,E,N,U	type							Screw						
Compressor regulation	A,E,N,U	Type							On-Off						
	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
Number	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
Circuits	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	A,E,N,U	type							R134a						
	A	kg	64,0	70,0	68,0	69,0	76,0	84,0	84,0	61,0	61,0	72,0	69,0	78,0	84,0
Refrigerant load circuit 1 (1)	E,U	kg	76,0	75,0	84,0	76,0	91,0	91,0	106,0	65,0	76,0	76,0	84,0	-	-
	N	kg	84,0	91,0	106,0	106,0	121,0	121,0	121,0	84,0	-	-	-	-	-
	A	kg	74,0	80,0	83,0	69,0	76,0	84,0	84,0	61,0	61,0	79,0	69,0	87,0	84,0
Refrigerant load circuit 2 (1)	E,U	kg	76,0	85,0	84,0	91,0	91,0	106,0	106,0	70,0	76,0	76,0	84,0	-	-
	N	kg	84,0	106,0	106,0	121,0	121,0	121,0	121,0	84,0	-	-	-	-	-
	A	kg	-	-	-	-	-	-	-	61,0	61,0	73,0	76,0	75,0	91,0
Refrigerant load circuit 3 (1)	E,U	kg	-	-	-	-	-	-	-	70,0	76,0	76,0	76,0	-	-
	N	kg	-	-	-	-	-	-	-	91,0	-	-	-	-	-
System side heat exchanger															
Type	A,E,N,U	type							Shell and tube						
	A	no.	1	1	1	1	1	1	1	2	2	2	2	2	2
Number	E,U	no.	1	1	1	1	2	2	2	2	2	2	2	-	-
	N	no.	1	2	2	2	2	2	2	2	-	-	-	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00																
Hydraulic connections																
Connections (in/out)	A,E,N,U	Type							Grooved joints							
	A	Ø	5″	5″	5″	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″
Size (in)	E,U	Ø	5″	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″	6″	6″
	N	Ø	5″	5″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″
	A	Ø	5″	5″	5″	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″
Size (out)	E,U	Ø	5″	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″	6″	6″
	N	Ø	5″	5″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00															
Hydraulic connections															
Connections (in/out)	A,E,N,U	Type							Grooved joints						
	A	Ø	6″	6″	6″	6″	6″	6″	6″	-	-	-	-	-	-
Size (in)	E,U	Ø	6″	6″	6″	6″	-	-	-	-	-	-	-	-	-
	N	Ø	6″	-	-	-	-	-	-	-	-	-	-	-	-
	A	Ø	6″	6″	6″	8″	8″	8″	8″	-	-	-	-	-	-
Size (out)	E,U	Ø	6″	6″	8″	8″	-	-	-	-	-	-	-	-	-
	N	Ø	6″	-	-	-	-	-	-	-	-	-	-	-	-
Module 1															
	A	Ø	-	-	-	-	-	-	-	6″	6″	6″	6″	6″	6″
Size (in)	E,U	Ø	-	-	-	-	6″	6″	6″	6″	6″	6″	6″	-	-
	N	Ø	-	6″	6″	6″	6″	6″	6″	6″	-	-	-	-	-
	A	Ø	-	-	-	-	-	-	-	6″	6″	6″	6″	8″	8″
Size (out)	E,U	Ø	-	-	-	-	6″	6″	6″	6″	6″	6″	8″	-	-
	N	Ø	-	6″	6″	6″	6″	6″	6″	6″	-	-	-	-	-
Module 2															
	A	Ø	-	-	-	-	-	-	-	5″	5″	5″	5″	5″	6″
Size (in)	E,U	Ø	-	-	-	-	6″	6″	6″	5″	5″	5″	5″	-	-
	N	Ø	-	6″	6″	6″	6″	6″	6″	6″	-	-	-	-	-
	A	Ø	-	-	-	-	-	-	-	5″	5″	5″	5″	5″	6″
Size (out)	E,U	Ø	-	-	-	-	6″	6″	6″	5″	5″	5″	5″	-	-
	N	Ø	-	6″	6″	6″	6″	6″	6″	6″	-	-	-	-	-

SOUND DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Sound data calculated in cooling mode (1)																
Sound power level	A	dB(A)	98,0	98,0	98,0	98,0	99,0	99,0	99,0	99,7	99,7	99,7	99,7	100,4	100,4	101,1
	E	dB(A)	91,0	91,0	91,7	91,9	92,1	92,6	92,5	93,0	93,0	93,0	93,0	93,7	93,9	94,6
	N	dB(A)	91,7	91,7	92,3	92,5	92,6	93,1	93,0	93,5	93,5	93,5	93,5	94,1	94,6	95,2
	U	dB(A)	98,0	98,0	98,9	99,0	99,0	99,7	99,7	100,4	100,4	100,4	100,4	100,9	101,0	101,5
Sound pressure level (10 m)	A	dB(A)	65,6	65,6	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,1	67,1	67,6	67,7	68,2
	E	dB(A)	58,6	58,6	59,2	59,4	59,5	59,9	59,9	60,3	60,3	60,3	60,3	60,8	61,0	61,6
	N	dB(A)	59,2	59,2	59,7	59,9	60,0	60,3	60,3	60,6	60,6	60,6	60,6	61,1	61,5	62,0
	U	dB(A)	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,6	67,6	67,6	67,6	68,1	68,1	68,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Sound data calculated in cooling mode (1)															
Sound power level	A	dB(A)	101,1	101,6	101,6	101,6	102,1	102,5	102,5	102,7	102,8	103,4	103,4	103,7	104,2
	E	dB(A)	95,2	95,2	95,4	95,6	96,0	96,2	96,4	96,0	96,5	96,4	96,6	-	-
	N	dB(A)	95,5	96,0	96,2	96,6	96,9	96,9	96,9	96,7	-	-	-	-	-
	U	dB(A)	102,0	102,0	102,4	102,4	102,8	103,1	103,4	103,4	103,7	103,7	103,9	-	-
Sound pressure level (10 m)	A	dB(A)	68,2	68,6	68,6	68,6	69,0	69,2	69,2	69,4	69,4	69,8	69,8	70,0	70,4
	E	dB(A)	62,1	62,0	62,2	62,3	62,7	62,8	62,9	62,5	62,8	62,8	62,8	-	-
	N	dB(A)	62,3	62,5	62,6	62,9	63,1	63,1	63,1	62,8	-	-	-	-	-
	U	dB(A)	68,9	68,9	69,1	69,2	69,5	69,7	69,9	69,8	70,0	70,0	70,2	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

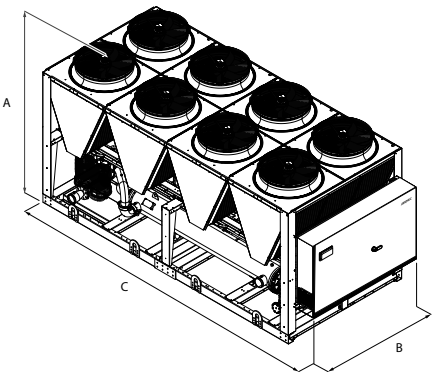
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F																
Fan																
Type	A,E,N,U	type	Axial													
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
Air flow rate	A	m^3/h	116000	116000	116000	116000	145000	145000	145000	174000	174000	174000	174000	203000	203000	232000
	E	m^3/h	89600	89600	112000	112000	112000	134400	134400	156800	156800	156800	156800	179200	179200	201600
	N	m^3/h	112000	112000	134400	134400	134400	156800	156800	179200	179200	179200	179200	201600	224000	246400
	U	m^3/h	116000	116000	145000	145000	145000	174000	174000	203000	203000	203000	203000	232000	232000	261000

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P																
Fan																
Type	A,E,N,U	type	Axial													
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
Air flow rate	A	m^3/h	109600	109600	109600	109600	137000	137000	137000	164400	164400	164400	164400	191800	191800	219200
	E	m^3/h	85600	85600	107000	107000	107000	128400	128400	149800	149800	149800	149800	171200	171200	192600
	N	m^3/h	107000	107000	128400	128400	128400	149800	149800	171200	171200	171200	171200	192600	214000	235400
	U	m^3/h	109600	109600	137000	137000	137000	164400	164400	191800	191800	191800	191800	219200	219200	246600

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F															
Fan															
Type	A,E,N,U	type	Axial												
Number	A	no.	16	18	18	18	20	22	22	24	24	28	28	30	34
	E,U	no.	20	20	22	22	24	26	28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	32	32	34	-	-	-	-	-
Air flow rate	A	m^3/h	232000	261000	261000	261000	290000	319000	319000	348000	348000	406000	406000	435000	493000
	E	m^3/h	224000	224000	246400	246400	268800	291200	313600	313600	336000	336000	358400	-	-
	N	m^3/h	246400	291200	313600	336000	358400	358400	358400	380800	-	-	-	-	-
	U	m^3/h	290000	290000	319000	319000	348000	377000	406000	406000	435000	435000	464000	-	-

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P															
Fan															
Type	A,E,N,U	type	Axial												
Number	A	no.	16	18	18	18	20	22	22	24	24	28	28	30	34
	E,U	no.	20	20	22	22	24	26	28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	32	32	34	-	-	-	-	-
Air flow rate	A	m^3/h	219200	246600	246600	246600	274000	301400	301400	328800	328800	383600	383600	411000	465800
	E	m^3/h	214000	214000	235400	235400	256800	278200	299600	299600	321000	321000	342400	-	-
	N	m^3/h	235400	278200	299600	321000	342400	342400	342400	363800	-	-	-	-	-
	U	m^3/h	274000	274000	301400	301400	328800	356200	383600	383600	411000	411000	438400	-	-

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	A	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330	9520
C	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520	10710
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900	13090

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights															
	A	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
A	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-	-
	A	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
B	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-	-
	A	mm	9520	10710	10710	10710	11900	13090	13090	14280	14280	16660	16660	17850	20230
C	E,U	mm	11900	11900	13090	13090	14280	15470	16660	16660	17850	17850	19040	-	-
	N	mm	13090	15470	16660	17850	19040	19040	19040	20230	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F																
Single module unit																
	A	kg	4695	4730	4870	5200	6065	6080	6285	6950	7145	7200	7300	8500	8975	9590
Empty weight	E,U	kg	4855	4875	5435	6025	6380	7025	7045	7625	7715	7785	7880	9145	9605	10475
	N	kg	5370	5390	6065	6655	7010	7560	7585	8175	8265	8340	8430	9930	10905	11630

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F															
Single module unit															
	A	kg	9655	10475	10525	10945	11580	12265	12305	-	-	-	-	-	-
Empty weight	E,U	kg	11070	11130	12135	12260	-	-	-	-	-	-	-	-	-
	N	kg	11700	-	-	-	-	-	-	-	-	-	-	-	-
Bimodule unit															
	A	kg	-	-	-	-	-	-	-	9590	9655	10475	10525	11580	12305
Empty weight module 1	E,U	kg	-	-	-	-	6630	6630	7170	10475	11070	11130	12135	-	-
	N	kg	-	6210	6995	6995	7730	7730	7775	11630	-	-	-	-	-
	A	kg	-	-	-	-	-	-	-	5225	5225	5765	5765	5930	6590
Empty weight module 2	E,U	kg	-	-	-	-	6630	7170	7170	5755	5755	5810	5820	-	-
	N	kg	-	6995	6995	7730	7730	7775	7775	6455	-	-	-	-	-

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NSM 1402-9603 B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 305,8 ÷ 2028,1 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **High efficiency also at partial loads**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:
1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

Electronic thermostatic as standard from size 5202 to 6402 and from 8403 to 9603.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

CONTROL

Units include 1 control board for each compressor.
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.
— Possibility to control two units in a Master-Slave configuration (from size 1402 to 6402)

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save

a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger
AK: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.
KDI: Double thickness evaporator insulation. Provides stand-still protection down to -20°C. Must be ordered in conjunction with options KRS.

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x no. 2	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP x no. 2	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1 x no. 2	A,E,N,U	•	•	•	•	•	•	•						
AER485P1 x no. 3	A								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERBACP x no. 2	A,E,N,U	•	•	•	•	•	•	•						
AERBACP x no. 3	A								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERNET	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
MULTICHILLER-EVO	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
PRV3	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	AVX929	AVX929	AVX929	AVX932	AVX933	AVX933	AVX933	AVX934	AVX937	AVX937	AVX937	AVX938	AVX938	AVX942
E, U	AVX929	AVX929	AVX930	AVX933	AVX933	AVX934	AVX934	AVX935	AVX935	AVX935	AVX935	AVX939	AVX939	AVX940
N	AVX930	AVX930	AVX931	AVX931	AVX934	AVX935	AVX935	AVX936	AVX936	AVX936	AVX936	AVX940	AVX941	AVX943

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	AVX942	AVX944	AVX944	AVX944	AVX945	AVX947	AVX947	AVX953	AVX953	AVX957	AVX954	AVX956	AVX955
E, U	AVX941	AVX945	AVX947	AVX947	AVX950	AVX952	AVX948	AVX954	AVX956	AVX956	AVX958	-	-
N	AVX943	AVX946	AVX948	AVX949	AVX951	AVX951	AVX951	AVX955	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
E, U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP7V	GP7V	GP8V	GP8V	GP9V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP8V	GP9V	GP10V	GP11V

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP5V+GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E, U	GP10V	GP10V	GP11V	GP11V	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V	GP8V+GP8V	GP8V+GP8V	GP8V+GP8V	GP6V+GP11V	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23
E, N, U	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
N	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	KRS24	KRS24	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E, U	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
N	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
E, N	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
E, N	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Double thickness evaporator insulation

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A, E, N, U	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)

(1) Contact us.
A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A, E, N, U	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)

(1) Contact us.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSM**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403, 9603
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (3)
9		**Model**
	B	Free-cooling glycol free
	G	Free-cooling glycol free plus (4)
10		**Heat recovery**
	D	Desuperheater
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency

Field		Description
12		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	2	230V ~ 3 50Hz with fuses (5)
	4	230V ~ 3 50Hz with magnet circuit breakers (5)
	8	400V ~ 3 50Hz with magnet circuit breakers
	°	400V ~ 3 50Hz with fuses
15,16		**Integrated hydronic kit**
	00	Without hydronic kit

(1) Water produced up to +4 °C
(2) Water produced from +4 °C ÷ -6 °C
(3) Water produced up to +4 °C.
(4) The Free cooling Plus "G" models are only compatible with "°" and "0" coils.
(5) Available only for size from 1402 to 2202

PERFORMANCE SPECIFICATIONS

NSM - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	306,5	350,2	396,8	450,5	505,3	522,5	556,5	600,8	649,8	678,4	726,3	813,3	872,8	954,1
Input power	kW	102,8	117,6	136,7	158,3	168,9	180,5	194,5	203,0	220,4	235,0	252,8	269,7	295,6	317,9
Cooling total input current	A	182,0	206,0	231,0	268,0	291,0	311,0	335,0	351,0	378,0	400,0	427,0	451,0	487,0	530,0
EER	W/W	2,98	2,98	2,90	2,85	2,99	2,90	2,86	2,96	2,95	2,89	2,87	3,02	2,95	3,00
Water flow rate system side	l/h	52653	60163	68174	77407	86812	89765	95621	103224	111642	116561	124785	139737	149957	163932
Pressure drop system side	kPa	73	94	100	72	90	96	108	107	117	100	94	81	93	112
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	201,2	207,2	212,6	221,0	271,8	273,9	277,4	334,0	337,2	352,7	355,8	414,1	417,7	460,7
Input power	kW	18,5	18,5	18,5	18,5	24,6	24,6	24,6	32,7	32,7	32,9	32,9	38,1	38,1	42,0
Free cooling total input current	A	33,0	32,0	31,0	31,0	42,0	42,0	42,0	57,0	56,0	56,0	56,0	64,0	63,0	70,0
EER	W/W	10,87	11,19	11,48	11,92	11,06	11,14	11,28	10,20	10,30	10,71	10,81	10,86	10,95	10,97

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	305,8	349,3	395,0	447,3	502,1	519,1	552,6	597,2	645,4	674,3	721,9	807,8	865,0	946,8
Input power	kW	103,7	118,8	138,1	160,2	170,8	182,6	197,0	205,3	223,1	238,4	257,1	273,3	299,3	321,8
Cooling total input current	A	184,0	208,0	233,0	271,0	294,0	315,0	339,0	355,0	382,0	405,0	433,0	456,0	492,0	536,0
EER	W/W	2,95	2,94	2,86	2,79	2,94	2,84	2,81	2,91	2,89	2,83	2,81	2,96	2,89	2,94
Water flow rate system side	l/h	52546	60019	67864	76853	86266	89180	94948	102598	110891	115859	124023	138789	148609	162675
Pressure drop system side	kPa	48	64	74	62	78	84	95	70	74	81	74	86	98	68
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	213,5	220,0	226,6	237,8	288,8	291,7	294,5	353,1	360,2	374,3	378,1	439,1	443,5	495,5
Input power	kW	18,3	18,3	18,3	18,3	24,2	24,2	24,2	32,1	32,1	32,3	32,3	37,4	37,4	41,3
Free cooling total input current	A	32,0	32,0	31,0	31,0	42,0	42,0	42,0	55,0	55,0	55,0	54,0	62,0	61,0	69,0
EER	W/W	11,68	12,03	12,39	12,99	11,92	12,04	12,16	11,00	11,22	11,59	11,71	11,74	11,86	12,00

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - A

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	996,8	1082,3	1128,3	1167,3	1222,8	1304,9	1346,7	1459,2	1501,9	1659,0	1705,0	1838,1	2028,1
Input power	kW	346,1	365,7	391,9	422,5	438,9	452,7	472,4	492,1	520,2	557,2	583,3	659,0	704,1
Cooling total input current	A	581,0	614,0	655,0	704,0	733,0	761,0	796,0	821,0	872,0	945,0	986,0	1100,0	1198,0
EER	W/W	2,88	2,96	2,88	2,76	2,79	2,88	2,85	2,97	2,89	2,98	2,92	2,79	2,88
Water flow rate system side	l/h	171269	185947	193855	200561	210092	224201	231379	250713	258050	285029	292937	315803	348457
Pressure drop system side	kPa	122	132	143	116	109	125	133	112	127	132	143	108	135
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	464,4	522,4	524,0	526,5	571,2	612,5	614,9	684,4	688,1	798,8	801,4	867,6	965,2
Input power	kW	42,0	46,2	46,2	46,2	50,1	53,8	53,9	60,5	60,5	70,7	70,8	78,9	86,8
Free cooling total input current	A	71,0	77,0	77,0	77,0	84,0	91,0	91,0	101,0	101,0	120,0	120,0	132,0	148,0
EER	W/W	11,06	11,32	11,35	11,41	11,41	11,38	11,41	11,31	11,37	11,29	11,32	10,99	11,12

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G														
Cooling performance chiller operation (1)														
Cooling capacity	kW	988,7	1074,2	1119,1	1156,4	1212,7	1295,2	1336,2	1447,7	1489,6	1646,9	1691,9	1822,8	2013,1
Input power	kW	350,6	370,3	397,1	428,3	444,3	458,0	478,2	498,2	527,1	564,0	590,8	667,1	712,4
Cooling total input current	A	588,0	621,0	663,0	713,0	741,0	769,0	805,0	830,0	882,0	956,0	998,0	1112,0	1211,0
EER	W/W	2,82	2,90	2,82	2,70	2,73	2,83	2,79	2,91	2,83	2,92	2,86	2,73	2,83
Water flow rate system side	l/h	169873	184553	192278	198678	208362	222522	229577	248739	255937	282961	290686	313186	345875
Pressure drop system side	kPa	74	91	98	86	95	109	116	84	84	110	110	101	116
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	500,3	559,0	564,4	569,9	610,4	656,1	662,5	737,9	742,7	856,4	861,8	926,6	1037,6
Input power	kW	41,3	45,5	45,5	45,5	49,3	53,1	53,1	59,6	59,6	69,7	69,7	77,6	85,4
Free cooling total input current	A	69,0	76,0	76,0	76,0	82,0	89,0	89,0	99,0	100,0	118,0	118,0	129,0	145,0
EER	W/W	12,12	12,30	12,42	12,54	12,38	12,36	12,48	12,38	12,46	12,29	12,37	11,95	12,15

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	319,8	365,8	417,7	473,0	509,1	549,8	568,8	618,6	646,3	675,1	715,5	796,7	851,7	929,6
Input power	kW	105,5	123,3	137,5	159,4	178,3	183,3	195,5	205,2	220,4	235,9	253,5	270,8	297,1	320,1
Cooling total input current	A	177,0	206,0	223,0	261,0	295,0	305,0	326,0	342,0	365,0	389,0	415,0	438,0	474,0	517,0
EER	W/W	3,03	2,97	3,04	2,97	2,85	3,00	2,91	3,01	2,93	2,86	2,82	2,94	2,87	2,90
Water flow rate system side	l/h	54946	62848	71763	81260	87462	94455	97732	106280	111042	115993	122937	136886	146332	159723
Pressure drop system side	kPa	62	76	84	78	90	88	94	100	109	91	94	80	92	110
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	186,6	192,0	231,5	241,7	246,1	294,5	297,3	334,0	337,2	351,6	354,9	403,7	407,3	448,1
Input power	kW	15,5	15,5	19,5	19,6	19,6	26,8	26,8	30,6	30,6	31,0	31,0	34,0	34,0	36,8
Free cooling total input current	A	26,0	26,0	32,0	32,0	32,0	44,0	45,0	51,0	51,0	51,0	51,0	55,0	54,0	59,0
EER	W/W	12,01	12,36	11,89	12,34	12,57	11,01	11,11	10,92	11,03	11,35	11,45	11,88	11,98	12,18

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	316,7	363,1	414,5	469,5	504,1	545,4	564,0	613,8	640,8	669,8	710,9	790,6	843,5	921,3
Input power	kW	106,6	124,7	138,6	161,1	181,0	185,4	197,8	207,6	223,1	239,2	257,8	274,6	301,1	324,4
Cooling total input current	A	179,0	208,0	225,0	263,0	298,0	308,0	329,0	345,0	369,0	393,0	421,0	443,0	480,0	523,0
EER	W/W	2,97	2,91	2,99	2,91	2,79	2,94	2,85	2,96	2,87	2,80	2,76	2,88	2,80	2,84
Water flow rate system side	l/h	54406	62391	71215	80666	86616	93710	96910	105465	110105	115087	122135	135840	144915	158291
Pressure drop system side	kPa	36	42	54	66	76	54	58	59	65	71	73	47	54	66
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	197,2	203,1	242,3	255,6	258,0	307,4	310,5	349,3	352,8	266,5	373,6	421,8	425,7	470,1
Input power	kW	15,2	15,2	19,1	19,2	19,2	26,1	26,1	29,9	29,9	30,3	30,3	33,3	33,3	36,1
Free cooling total input current	A	26,0	25,0	31,0	31,0	32,0	43,0	44,0	50,0	50,0	50,0	49,0	54,0	53,0	58,0
EER	W/W	12,94	13,32	12,67	13,29	13,42	11,76	11,88	11,68	11,79	12,11	12,35	12,68	12,80	13,02

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	995,2	1051,6	1137,0	1159,2	1217,3	1279,4	1341,6	1434,0	1499,6	1598,6	1684,0	-	-
Input power	kW	339,9	370,0	389,4	418,0	436,6	448,9	461,2	491,1	510,9	568,9	588,3	-	-
Cooling total input current	A	555,0	601,0	632,0	678,0	708,0	732,0	755,0	804,0	832,0	924,0	945,0	-	-
EER	W/W	2,93	2,84	2,92	2,77	2,79	2,85	2,91	2,92	2,93	2,81	2,86	-	-
Water flow rate system side	l/h	170980	180685	195353	199172	209139	219823	230507	246385	257643	274665	289333	-	-
Pressure drop system side	kPa	125	128	130	135	84	115	112	110	121	121	130	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	495,6	509,3	549,8	551,2	600,1	640,5	682,5	692,0	739,5	761,7	802,2	-	-
Input power	kW	44,0	44,2	46,9	47,0	53,5	57,3	61,5	56,4	63,5	65,6	68,4	-	-
Free cooling total input current	A	72,0	72,0	76,0	76,0	87,0	93,0	100,0	92,0	104,0	107,0	110,0	-	-
EER	W/W	11,27	11,54	11,72	11,73	11,22	11,17	11,14	12,27	11,64	11,60	11,72	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G														
Cooling performance chiller operation (1)														
Cooling capacity	kW	987,5	1041,9	1127,1	1148,0	1206,7	1269,3	1332,0	1421,7	1487,9	1583,2	1668,4	-	-
Input power	kW	344,2	375,3	394,8	424,0	442,2	454,4	466,6	497,6	517,4	577,4	596,9	-	-
Cooling total input current	A	561,0	609,0	640,0	687,0	717,0	740,0	763,0	814,0	842,0	937,0	957,0	-	-
EER	W/W	2,87	2,78	2,86	2,71	2,73	2,79	2,85	2,86	2,88	2,74	2,80	-	-
Water flow rate system side	l/h	169667	179011	193651	197235	207320	218083	228846	244269	255645	272005	286645	-	-
Pressure drop system side	kPa	76	87	83	86	58	70	70	86	86	100	100	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	523,4	531,6	576,1	581,5	627,1	669,8	712,5	728,1	781,4	795,8	840,2	-	-
Input power	kW	43,0	43,1	46,0	46,0	52,3	56,1	59,8	55,3	62,2	64,2	67,0	-	-
Free cooling total input current	A	70,0	70,0	74,0	74,0	85,0	91,0	98,0	91,0	101,0	104,0	107,0	-	-
EER	W/W	12,17	12,32	12,53	12,65	11,99	11,95	11,91	13,16	12,55	12,40	12,54	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	328,1	378,5	429,3	491,9	531,3	568,6	589,0	638,0	667,8	695,1	735,8	824,8	891,0	967,9
Input power	kW	105,3	121,3	136,2	155,8	172,9	180,0	191,0	202,4	216,1	228,4	242,4	263,0	288,2	311,5
Cooling total input current	A	186,0	212,0	232,0	266,0	297,0	313,0	332,0	353,0	374,0	392,0	413,0	443,0	477,0	523,0
EER	W/W	3,12	3,12	3,15	3,16	3,07	3,16	3,08	3,15	3,09	3,04	3,04	3,14	3,09	3,11
Water flow rate system side	l/h	56372	65027	73755	84508	91287	97691	101204	109611	114731	119419	126414	141715	153088	166304
Pressure drop system side	kPa	66	81	88	83	96	93	99	106	88	95	87	85	99	117
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	207,3	213,5	254,5	275,3	278,0	330,7	333,2	373,6	391,6	395,4	406,8	452,9	456,9	499,3
Input power	kW	19,5	19,5	24,5	26,5	26,5	32,7	32,8	37,6	38,0	38,0	38,1	42,0	42,0	45,8
Free cooling total input current	A	34,0	34,0	42,0	45,0	46,0	57,0	57,0	65,0	66,0	65,0	65,0	71,0	70,0	77,0
EER	W/W	10,62	10,94	10,40	10,40	10,49	10,10	10,17	9,94	10,31	10,41	10,67	10,79	10,88	10,90

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,9	376,7	427,6	488,8	527,6	565,4	585,6	634,6	664,0	691,7	732,5	820,3	884,7	961,8
Input power	kW	106,3	122,5	137,6	157,4	174,8	181,8	193,0	204,4	218,3	231,1	245,7	266,0	291,3	314,8
Cooling total input current	A	187,0	213,0	234,0	269,0	300,0	316,0	335,0	356,0	377,0	396,0	418,0	447,0	482,0	528,0
EER	W/W	3,08	3,07	3,11	3,10	3,02	3,11	3,03	3,10	3,04	2,99	2,98	3,08	3,04	3,06
Water flow rate system side	l/h	56168	64715	73458	83974	90643	97138	100613	109029	114089	118834	125850	140933	152003	165249
Pressure drop system side	kPa	39	45	58	72	84	59	63	64	70	76	78	51	59	72
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	219,8	228,8	272,7	291,1	297,0	349,6	353,1	394,9	414,0	418,2	430,6	479,9	489,3	530,2
Input power	kW	19,2	19,2	24,1	26,0	26,0	32,1	32,1	36,9	37,3	37,3	37,4	41,3	41,3	45,1
Free cooling total input current	A	34,0	33,0	41,0	44,0	45,0	56,0	56,0	64,0	64,0	64,0	64,0	69,0	68,0	75,0
EER	W/W	11,43	11,90	11,30	11,20	11,42	10,89	11,00	10,71	11,11	11,22	11,51	11,63	11,86	11,77

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - U

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1031,1	1095,0	1181,2	1208,8	1265,8	1326,2	1386,6	1491,1	1554,3	1666,6	1752,7	-	-
Input power	kW	332,0	358,4	379,0	405,3	426,4	440,0	453,5	478,4	498,9	549,8	570,4	-	-
Cooling total input current	A	564,0	605,0	639,0	682,0	718,0	746,0	774,0	812,0	846,0	926,0	954,0	-	-
EER	W/W	3,11	3,06	3,12	2,98	2,97	3,01	3,06	3,12	3,12	3,03	3,07	-	-
Water flow rate system side	l/h	177155	188137	202935	207692	217477	227858	238239	256194	267046	286336	301135	-	-
Pressure drop system side	kPa	119	137	138	145	104	124	113	117	119	137	138	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	565,8	570,9	615,3	617,2	681,2	721,6	762,0	777,2	843,7	865,6	910,0	-	-
Input power	kW	54,1	54,1	57,9	58,0	67,5	71,3	75,2	72,3	80,6	83,9	87,7	-	-
Free cooling total input current	A	92,0	91,0	98,0	97,0	114,0	121,0	128,0	123,0	137,0	141,0	147,0	-	-
EER	W/W	10,46	10,55	10,62	10,65	10,10	10,12	10,14	10,75	10,47	10,32	10,38	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1025,3	1088,1	1174,0	1200,9	1257,9	1318,5	1379,2	1482,0	1545,4	1655,7	1741,6	-	-
Input power	kW	335,5	362,4	383,1	409,7	430,7	444,3	457,9	483,4	504,1	556,1	576,8	-	-
Cooling total input current	A	569,0	611,0	645,0	688,0	725,0	752,0	780,0	819,0	854,0	936,0	963,0	-	-
EER	W/W	3,06	3,00	3,06	2,93	2,92	2,97	3,01	3,07	3,07	2,98	3,02	-	-
Water flow rate system side	l/h	176150	186945	201699	206322	216119	226541	236963	254617	265517	284475	299229	-	-
Pressure drop system side	kPa	81	94	90	94	63	70	75	85	92	103	113	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	600,3	606,3	654,1	660,5	720,3	764,2	808,1	827,1	897,3	920,4	968,2	-	-
Input power	kW	53,1	53,1	57,0	57,0	66,1	69,9	73,8	71,0	79,1	82,2	86,0	-	-
Free cooling total input current	A	90,0	90,0	96,0	96,0	111,0	118,0	126,0	120,0	134,0	138,0	144,0	-	-
EER	W/W	11,30	11,41	11,48	11,60	10,90	10,93	10,95	11,64	11,34	11,20	11,25	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,0	376,5	424,5	486,3	525,3	559,6	579,7	626,1	655,1	682,6	723,4	811,7	888,8	960,7
Input power	kW	103,6	119,3	134,4	153,8	170,9	178,3	189,4	200,8	214,8	227,9	242,9	263,8	283,0	307,1
Cooling total input current	A	175,0	200,0	218,0	253,0	283,0	297,0	317,0	335,0	357,0	376,0	399,0	427,0	452,0	497,0
EER	W/W	3,15	3,16	3,16	3,16	3,07	3,14	3,06	3,12	3,05	3,00	2,98	3,08	3,14	3,13
Water flow rate system side	l/h	56017	64687	72926	83554	90260	96150	99597	107568	112546	117285	124287	139460	152704	165051
Pressure drop system side	kPa	54	65	67	83	96	92	98	79	86	93	86	84	100	106
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	220,8	232,6	273,9	282,2	286,3	327,6	330,8	378,1	381,7	385,4	396,5	442,9	482,6	528,7
Input power	kW	18,3	19,6	26,5	26,5	27,4	30,6	30,6	33,8	33,8	33,8	34,0	40,8	43,6	46,5
Free cooling total input current	A	31,0	33,0	43,0	44,0	45,0	51,0	51,0	56,0	56,0	56,0	56,0	66,0	70,0	75,0
EER	W/W	12,04	11,88	10,32	10,63	10,44	10,71	10,82	11,17	11,28	11,39	11,66	10,86	11,07	11,37

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	325,1	375,2	422,9	483,6	522,0	556,8	576,7	623,1	651,8	679,6	720,3	807,0	882,8	955,1
Input power	kW	104,5	120,4	135,6	155,5	172,9	180,2	191,5	202,9	217,2	230,8	246,4	267,1	286,2	310,3
Cooling total input current	A	176,0	201,0	220,0	255,0	286,0	300,0	320,0	338,0	360,0	381,0	404,0	431,0	457,0	501,0
EER	W/W	3,11	3,12	3,12	3,11	3,02	3,09	3,01	3,07	3,00	2,94	2,92	3,02	3,09	3,08
Water flow rate system side	l/h	55859	64457	72661	83082	89692	95662	99076	107055	111979	116764	123748	138653	151682	164102
Pressure drop system side	kPa	39	46	36	44	51	58	62	40	43	47	46	50	60	72
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	230,8	243,4	284,6	294,0	301,4	342,3	345,8	395,2	403,2	407,2	414,7	463,0	509,0	554,0
Input power	kW	18,0	19,2	25,6	25,9	26,7	29,9	29,9	33,1	33,1	33,1	33,3	39,8	42,6	45,6
Free cooling total input current	A	30,0	32,0	42,0	43,0	44,0	50,0	50,0	55,0	55,0	55,0	55,0	64,0	68,0	74,0
EER	W/W	12,79	12,66	10,98	11,34	11,27	11,44	11,56	11,93	12,17	12,29	12,46	11,62	11,94	12,15

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - N

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1004,9	1098,6	1161,7	1218,0	1274,5	1318,1	1361,7	1478,4	-	-	-	-	-
Input power	kW	332,9	349,5	369,2	392,7	416,2	433,5	450,9	472,0	-	-	-	-	-
Cooling total input current	A	544,0	570,0	600,0	639,0	677,0	708,0	740,0	771,0	-	-	-	-	-
EER	W/W	3,02	3,14	3,15	3,10	3,06	3,04	3,02	3,13	-	-	-	-	-
Water flow rate system side	l/h	172652	188754	199587	209274	218966	226456	233947	254013	-	-	-	-	-
Pressure drop system side	kPa	116	112	104	109	72	78	81	105	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	533,7	625,3	661,6	712,1	756,1	767,1	770,8	815,0	-	-	-	-	-
Input power	kW	46,5	57,3	61,2	64,4	67,7	67,7	67,7	73,9	-	-	-	-	-
Free cooling total input current	A	76,0	93,0	99,0	105,0	110,0	111,0	111,0	121,0	-	-	-	-	-
EER	W/W	11,47	10,91	10,82	11,05	11,17	11,34	11,39	11,03	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G														
Cooling performance chiller operation (1)														
Cooling capacity	kW	998,8	1092,7	1155,6	1211,7	1267,7	1310,9	1354,2	1470,0	-	-	-	-	-
Input power	kW	336,7	353,2	373,0	396,5	420,0	437,6	455,3	476,9	-	-	-	-	-
Cooling total input current	A	550,0	575,0	606,0	644,0	682,0	714,0	746,0	778,0	-	-	-	-	-
EER	W/W	2,97	3,09	3,10	3,06	3,02	3,00	2,97	3,08	-	-	-	-	-
Water flow rate system side	l/h	171604	187733	198553	208183	217806	225235	232663	252555	-	-	-	-	-
Pressure drop system side	kPa	79	67	76	76	41	44	47	72	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	559,3	653,2	691,6	748,6	798,5	804,6	806,4	852,3	-	-	-	-	-
Input power	kW	45,6	56,1	59,8	63,1	66,3	66,2	66,3	72,3	-	-	-	-	-
Free cooling total input current	A	74,0	91,0	97,0	102,0	108,0	108,0	109,0	118,0	-	-	-	-	-
EER	W/W	12,27	11,65	11,56	11,87	12,05	12,15	12,17	11,79	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

ENERGY INDICES (REG. 2016/2281 EU)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B																
SEPR - (EN14825: 2018) High temperature with standard fans (1)																
SEPR	A	W/W	6,16	5,97	5,71	5,54	5,80	5,60	5,52	5,67	5,57	5,55	5,52	5,72	5,57	5,66
	E	W/W	6,18	5,87	6,03	5,79	5,54	5,86	5,65	5,80	5,67	5,56	5,51	5,72	5,57	5,64
	N	W/W	6,43	6,20	6,09	5,96	5,71	5,94	5,78	6,01	5,85	5,70	5,61	5,76	5,86	5,88
	U	W/W	6,20	6,02	6,11	6,09	5,85	6,00	5,84	5,96	5,92	5,78	5,71	5,96	5,82	5,86
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																
SEPR	A	W/W	6,16	5,97	5,71	5,54	5,80	5,60	5,52	5,67	5,57	5,55	5,52	5,72	5,57	5,66
	E	W/W	6,18	5,87	6,03	5,79	5,54	5,86	5,65	5,80	5,67	5,56	5,51	5,72	5,57	5,64
	N	W/W	6,43	6,20	6,09	5,96	5,71	5,94	5,78	6,01	5,85	5,70	5,61	5,76	5,86	5,88
	U	W/W	6,20	6,02	6,11	6,09	5,85	6,00	5,84	5,96	5,92	5,78	5,71	5,96	5,82	5,86

(1) Calculation performed with FIXED water flow rate.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G																
SEPR - (EN14825: 2018) High temperature with standard fans (1)																
SEPR	A	W/W	6,24	6,04	5,75	5,52	5,79	5,58	5,51	5,71	5,62	5,53	5,51	5,64	5,54	5,71
	E	W/W	6,21	5,91	6,07	5,76	5,51	5,87	5,66	5,84	5,71	5,53	5,51	5,71	5,56	5,66
	N	W/W	6,46	6,23	6,14	6,02	5,77	5,99	5,82	6,08	5,93	5,77	5,64	5,78	5,91	5,91
	U	W/W	6,27	6,11	6,19	6,07	5,83	6,05	5,89	6,04	5,93	5,78	5,68	6,01	5,88	5,92
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																
SEPR	A	W/W	6,24	6,04	5,75	5,52	5,79	5,58	5,51	5,71	5,62	5,53	5,51	5,64	5,54	5,71
	E	W/W	6,21	5,91	6,07	5,76	5,51	5,87	5,66	5,84	5,71	5,53	5,51	5,71	5,56	5,66
	N	W/W	6,46	6,23	6,14	6,02	5,77	5,99	5,82	6,08	5,93	5,77	5,64	5,78	5,91	5,91
	U	W/W	6,27	6,11	6,19	6,07	5,83	6,05	5,89	6,04	5,93	5,78	5,68	6,01	5,88	5,92

(1) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B															
SEPR - (EN14825: 2018) High temperature with standard fans (1)															
SEPR	A	W/W	5,52	5,60	5,53	5,53	5,52	5,52	5,51	5,73	5,60	5,77	5,64	5,52	5,58
	E	W/W	5,61	5,52	5,59	5,54	5,52	5,51	5,60	5,83	5,85	5,55	5,61	-	-
	N	W/W	5,69	5,85	5,82	5,93	5,94	5,87	5,81	6,05	-	-	-	-	-
	U	W/W	5,86	5,72	5,81	5,66	5,62	5,63	5,77	6,04	6,05	5,78	5,85	-	-
SEPR - (EN14825: 2018) High temperature with inverter fans (1)															
SEPR	A	W/W	5,52	5,60	5,53	5,53	5,52	5,52	5,51	5,73	5,60	5,77	5,64	5,52	5,58
	E	W/W	5,61	5,52	5,59	5,54	5,52	5,51	5,60	5,83	5,85	5,55	5,61	-	-
	N	W/W	5,69	5,85	5,82	5,93	5,94	5,87	5,81	6,05	-	-	-	-	-
	U	W/W	5,86	5,72	5,81	5,66	5,62	5,63	5,77	6,04	6,05	5,78	5,85	-	-

(1) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G															
SEPR - (EN14825: 2018) High temperature with standard fans (1)															
SEPR	A	W/W	5,57	5,64	5,57	5,53	5,51	5,50	5,51	5,75	5,64	5,77	5,66	5,51	5,58
	E	W/W	5,65	5,52	5,61	5,55	5,49	5,53	5,62	5,81	5,87	5,51	5,58	-	-
	N	W/W	5,72	5,90	5,84	5,97	5,99	5,91	5,84	6,08	-	-	-	-	-
	U	W/W	5,91	5,76	5,87	5,73	5,67	5,71	5,82	6,09	6,09	5,81	5,87	-	-
SEPR - (EN14825: 2018) High temperature with inverter fans (1)															
SEPR	A	W/W	5,57	5,64	5,57	5,53	5,51	5,50	5,51	5,75	5,64	5,77	5,66	5,51	5,58
	E	W/W	5,65	5,52	5,61	5,55	5,49	5,53	5,62	5,81	5,87	5,51	5,58	-	-
	N	W/W	5,72	5,90	5,84	5,97	5,99	5,91	5,84	6,08	-	-	-	-	-
	U	W/W	5,91	5,76	5,87	5,73	5,67	5,71	5,82	6,09	6,09	5,81	5,87	-	-

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
Maximum current (FLA)	A	A	243,9	271,9	299,1	332,5	374,4	395,7	417,0	450,2	474,9	474,9	474,9	531,4	579,4	635,9
	E,U	A	243,9	271,9	307,6	341,0	374,4	404,2	425,5	458,7	483,4	483,4	483,4	539,9	587,9	644,4
	N	A	252,4	280,4	316,1	349,5	382,9	412,7	434,0	467,2	491,9	491,9	491,9	548,4	604,9	667,2
Peak current (LRA)	A	A	265,5	307,3	350,2	388,2	419,8	466,8	484,0	519,5	529,4	529,4	529,4	661,9	701,8	831,3
	E,U	A	265,5	307,3	358,7	396,7	419,8	475,3	492,5	528,0	537,9	537,9	537,9	670,4	710,3	839,8
	N	A	274,0	315,8	367,2	405,2	428,3	483,8	501,0	536,5	546,4	546,4	546,4	678,9	727,3	862,6

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Electric data															
Maximum current (FLA)	A	A	683,9	731,4	770,4	813,4	864,9	913,2	947,2	980,7	1028,7	1123,7	1162,7	1300,2	1419,2
	E,U	A	700,9	739,9	793,2	836,2	887,7	930,2	972,7	997,7	1054,2	1132,2	1179,7	-	-
	N	A	715,2	771,2	818,7	870,2	921,7	955,7	989,7	1023,2	-	-	-	-	-
Peak current (LRA)	A	A	858,2	930,7	953,4	1108,4	1163,9	1290,2	1287,2	1069,4	1096,3	1200,0	1222,7	1480,2	1603,2
	E,U	A	875,2	939,2	976,2	1131,2	1186,7	1307,2	1312,7	1086,4	1121,8	1208,5	1239,7	-	-
	N	A	889,5	970,5	1001,7	1165,2	1220,7	1332,7	1329,7	1111,9	-	-	-	-	-

GENERAL TECHNICAL DATA

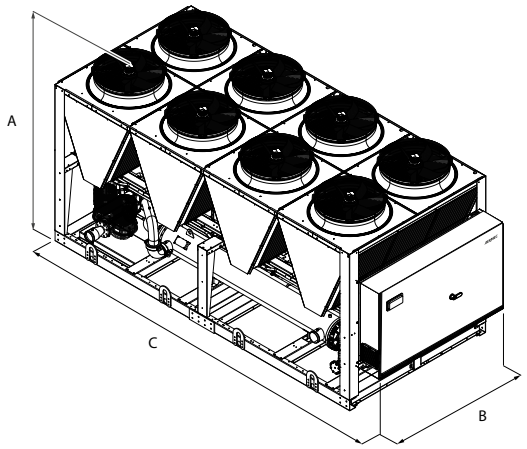
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Compressor																
Type	A,E,N,U	type	Bi-vite													
Compressor regulation	A,E,N,U	Type	On-Off													
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type	R134a													
System side heat exchanger																
Type	A,E,N,U	type	Shell and tube													
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E,N,U	Type	Grooved joints													
Fan																
Type	A,E,N,U	type	Axial													
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
Air flow rate	A	m^3/h	116000	116000	116000	116000	145000	145000	145000	174000	174000	174000	174000	203000	203000	232000
	E	m^3/h	89600	89600	112000	112000	112000	134400	134400	156800	156800	156800	156800	179200	179200	201600
	N	m^3/h	112000	112000	134400	134400	134400	156800	156800	179200	179200	179200	179200	201600	224000	246400
	U	m^3/h	116000	116000	145000	145000	145000	174000	174000	203000	203000	203000	203000	232000	232000	261000
Sound data calculated in cooling mode (1)																
Sound power level	A	dB(A)	98,0	98,0	98,0	98,0	99,0	99,0	99,0	99,7	99,7	99,7	99,7	100,4	100,4	101,1
	E	dB(A)	91,0	91,0	91,7	91,9	92,1	92,6	92,5	93,0	93,0	93,0	93,0	93,7	93,9	94,6
	N	dB(A)	91,7	91,7	92,3	92,5	92,6	93,1	93,0	93,5	93,5	93,5	93,5	94,1	94,6	95,2
	U	dB(A)	98,0	98,0	98,9	99,0	99,0	99,7	99,7	100,4	100,4	100,4	100,4	100,9	101,0	101,5
Sound pressure level (10 m)	A	dB(A)	65,6	65,6	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,1	67,1	67,6	67,7	68,2
	E	dB(A)	58,6	58,6	59,2	59,4	59,5	59,9	59,9	60,3	60,3	60,3	60,3	60,8	61,0	61,6
	N	dB(A)	59,2	59,2	59,7	59,9	60,0	60,3	60,3	60,6	60,6	60,6	60,6	61,1	61,5	62,0
	U	dB(A)	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,6	67,6	67,6	67,6	68,1	68,1	68,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor															
Type	A,E,N,U	type							Bi-vite						
Compressor regulation	A,E,N,U	Type							On-Off						
Number	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Circuits	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	A,E,N,U	type							R134a						
System side heat exchanger															
Type	A,E,N,U	type							Shell and tube						
Number	A	no.	1	1	1	1	1	1	1	2	2	2	2	2	2
	E,U	no.	1	1	1	1	2	2	2	2	2	2	2	-	-
	N	no.	1	2	2	2	2	2	2	2	-	-	-	-	-
Connections (in/out)	A,E,N,U	Type							Grooved joints						
Fan															
Type	A,E,N,U	type							Axial						
Number	A	no.	16	18	18	18	20	22	22	24	24	28	28	30	34
	E,U	no.	20	20	22	22	24	26	28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	32	32	34	-	-	-	-	-
Air flow rate	A	m^3/h	232000	261000	261000	261000	290000	319000	319000	348000	348000	406000	406000	435000	493000
	E	m^3/h	224000	224000	246400	246400	268800	291200	313600	313600	336000	336000	358400	-	-
	N	m^3/h	246400	291200	313600	336000	358400	358400	358400	380800	-	-	-	-	-
	U	m^3/h	290000	290000	319000	319000	348000	377000	406000	406000	435000	435000	464000	-	-
Sound data calculated in cooling mode (1)															
Sound power level	A	dB(A)	101,1	101,6	101,6	101,6	102,1	102,5	102,5	102,7	102,8	103,4	103,4	103,7	104,2
	E	dB(A)	95,2	95,2	95,4	95,6	96,0	96,2	96,4	96,0	96,5	96,4	96,6	-	-
	N	dB(A)	95,5	96,0	96,2	96,6	96,9	96,9	96,9	96,7	-	-	-	-	-
	U	dB(A)	102,0	102,0	102,4	102,4	102,8	103,1	103,4	103,4	103,7	103,7	103,9	-	-
Sound pressure level (10 m)	A	dB(A)	68,2	68,6	68,6	68,6	69,0	69,2	69,2	69,4	69,4	69,8	69,8	70,0	70,4
	E	dB(A)	62,1	62,0	62,2	62,3	62,7	62,8	62,9	62,5	62,8	62,8	62,8	-	-
	N	dB(A)	62,3	62,5	62,6	62,9	63,1	63,1	63,1	62,8	-	-	-	-	-
	U	dB(A)	68,9	68,9	69,1	69,2	69,5	69,7	69,9	69,8	70,0	70,0	70,2	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330	9520
	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520	10710
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900	13090

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights															
A	A	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-	-
B	A	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-	-
C	A	mm	9520	10710	10710	10710	11900	13090	13090	14280	14280	16660	16660	17850	20230
	E,U	mm	11900	11900	13090	13090	14280	15470	16660	16660	17850	17850	19040	-	-
	N	mm	13090	15470	16660	17850	19040	19040	19040	20230	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

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NSM HWT F

Air-water chiller with free-cooling

Cooling capacity 306 ÷ 2001 kW

- **High efficiency also at partial loads**
- **Microchannel coils**
- **Suitable for Data Center applications**
- **Water produced up to 30 °C**
- **Night mode**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

These are flexible and reliable units which adapt to the most diverse load conditions thanks to the precise design and the use of steady speed compressors together with inverter-controlled variable speed compressors guaranteeing a high energy efficiency level both at full and partial load.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Water produced from 5 °C ÷ 30 °C.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night Mode:** it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured

as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger
AK: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
AER485P1 x n° 2 (1)	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
AER485P1 x n° 2 (1)	A,E,N,U	•	•	•	•	•	•	•	•				
AER485P1 x n° 3 (1)	A,E,N,U									•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSM**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6903, 7203, 8403, 9603
8		**Operating field (1)**
	W	Electronic thermostatic expansion valve
9		**Model**
	F	Free-cooling
	P	Free-cooling plus (2)
10		**Heat recovery**
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper (2)
	S	Copper-Tinned copper / Copper -Tinned copper (2)
	V	Copper-painted alumimium / Copper-painted alumimium (2)
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
14		**Power supply**
	°	400V ~ 3 50Hz
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (3)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (3)
		Kit with 2 pumps
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (3)

(1) Water produced from 5 °C ÷ 30 °C
(2) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"
(3) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NSM HWT FA-PA

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: F														
Cooling performance chiller operation														
Cooling capacity	kW	306,0	351,0	400,0	441,0	479,0	505,0	546,0	589,0	638,0	653,0	687,0	753,0	792,0
Input power	kW	82,0	95,0	109,0	118,0	125,0	135,0	147,0	155,0	167,0	172,0	179,0	192,0	205,0
Cooling total input current	A	146,0	166,0	187,0	200,0	208,0	224,0	242,0	258,0	277,0	290,0	306,0	327,0	348,0
EER	W/W	3,75	3,69	3,69	3,73	3,83	3,73	3,71	3,79	3,81	3,80	3,84	3,92	3,86
Water flow rate system side	l/h	52650	60360	68820	75940	82440	86790	93850	101330	109680	112330	118100	129500	136230
Pressure drop system side	kPa	60	80	95	76	89	99	116	85	91	96	84	93	103
Cooling performances with free-cooling														
Cooling capacity	kW	336,0	351,0	363,0	370,0	449,0	454,0	462,0	542,0	551,0	554,0	559,0	644,0	651,0
Input power	kW	19,3	19,3	19,3	19,3	24,1	24,1	24,1	28,9	28,9	28,9	28,9	33,7	33,7
Free cooling total input current	A	30,0	30,0	30,0	30,0	37,6	37,6	37,6	45,1	45,1	45,1	45,1	52,6	52,6
EER	W/W	17,43	18,20	18,82	19,20	18,63	18,86	19,16	18,74	19,06	19,15	19,32	19,11	19,29
Water flow rate system side	l/h	52650	60360	68820	75940	82440	86790	93850	101330	109680	112330	118100	129500	136230
Pressure drop system side	kPa	87	115	139	129	133	147	171	128	141	147	141	146	161

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: P														
Cooling performance chiller operation														
Cooling capacity	kW	305,0	349,0	398,0	439,0	477,0	502,0	543,0	587,0	635,0	650,0	683,0	749,0	788,0
Input power	kW	82,0	96,0	109,0	120,0	126,0	136,0	148,0	157,0	169,0	174,0	181,0	194,0	207,0
Cooling total input current	A	147,0	167,0	188,0	201,0	210,0	226,0	244,0	260,0	279,0	292,0	308,0	330,0	351,0
EER	W/W	3,70	3,64	3,64	3,68	3,78	3,68	3,66	3,74	3,76	3,74	3,78	3,86	3,80
Water flow rate system side	l/h	52410	60090	68480	75580	82100	86410	93420	100950	109190	111820	117510	128910	135580
Pressure drop system side	kPa	59	79	94	75	89	98	115	84	90	95	83	92	102
Cooling performances with free-cooling														
Cooling capacity	kW	361,0	378,0	391,0	399,0	484,0	490,0	497,0	584,0	594,0	597,0	602,0	694,0	701,0
Input power	kW	19,7	19,7	19,7	19,7	24,6	24,6	24,6	29,5	29,5	29,5	29,5	34,4	34,4
Free cooling total input current	A	30,6	30,6	30,6	30,6	38,2	38,2	38,2	45,9	45,9	45,9	45,9	53,5	53,5
EER	W/W	18,35	19,22	19,89	20,29	19,69	19,93	20,25	19,81	20,15	20,24	20,41	20,19	20,38
Water flow rate system side	l/h	52410	60090	68480	75580	82100	86410	93420	100950	109190	111820	117510	128910	135580
Pressure drop system side	kPa	86	114	138	128	131	145	169	127	139	146	139	145	160

NSM HWT FA-PA

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: F													
Cooling performance chiller operation													
Cooling capacity	kW	853,0	882,0	959,0	1014,0	1082,0	1169,0	1262,0	1327,0	1476,0	1531,0	1758,0	2001,0
Input power	kW	216,0	228,0	244,0	260,0	281,0	295,0	319,0	343,0	373,0	388,0	442,0	512,0
Cooling total input current	A	362,0	377,0	416,0	453,0	478,0	494,0	531,0	567,0	646,0	683,0	740,0	854,0
EER	W/W	3,95	3,87	3,92	3,90	3,86	3,97	3,95	3,87	3,96	3,94	3,97	3,91
Water flow rate system side	l/h	146650	151620	165010	174350	186190	201150	217040	228220	253930	263260	302310	344170
Pressure drop system side	kPa	69	74	91	101	94	110	130	144	116	116	117	138
Cooling performances with free-cooling													
Cooling capacity	kW	735,0	740,0	827,0	836,0	845,0	935,0	1025,0	1033,0	1284,0	1293,0	1402,0	1590,0
Input power	kW	38,5	38,5	43,4	43,4	43,4	48,2	53,0	53,0	67,5	67,5	72,3	81,9
Free cooling total input current	A	60,1	60,1	67,6	67,6	67,6	75,1	82,6	82,6	105,1	105,1	112,7	127,7
EER	W/W	19,07	19,19	19,07	19,27	19,48	19,39	19,33	19,49	19,03	19,17	19,40	19,42
Water flow rate system side	l/h	146650	151620	165010	174350	186190	201150	217040	228220	253930	263260	302310	344170
Pressure drop system side	kPa	119	127	142	158	159	173	194	213	165	165	179	207

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: P													
Cooling performance chiller operation													
Cooling capacity	kW	849,0	878,0	955,0	1009,0	1077,0	1164,0	1256,0	1320,0	1470,0	1524,0	1749,0	1991,0
Input power	kW	218,0	230,0	247,0	262,0	284,0	298,0	322,0	346,0	377,0	392,0	447,0	517,0
Cooling total input current	A	365,0	381,0	420,0	456,0	482,0	498,0	536,0	571,0	652,0	688,0	747,0	861,0
EER	W/W	3,90	3,81	3,87	3,84	3,80	3,91	3,90	3,81	3,90	3,89	3,91	3,85
Water flow rate system side	l/h	146000	150930	164290	173550	185230	200120	215990	227050	252860	262120	300800	342450
Pressure drop system side	kPa	69	73	90	100	93	109	129	142	115	115	115	136
Cooling performances with free-cooling													
Cooling capacity	kW	792,0	797,0	891,0	900,0	910,0	1007,0	1104,0	1113,0	1384,0	1393,0	1510,0	1713,0
Input power	kW	39,3	39,3	44,2	44,2	44,2	49,1	54,0	54,0	68,8	68,8	73,7	83,5
Free cooling total input current	A	61,2	61,2	68,8	68,8	68,8	76,5	84,1	84,1	107,0	107,0	114,7	130,0
EER	W/W	20,16	20,28	20,16	20,36	20,58	20,49	20,42	20,59	20,12	20,25	20,49	20,51
Water flow rate system side	l/h	146000	150930	164290	173550	185230	200120	215990	227050	252860	262120	300800	342450
Pressure drop system side	kPa	118	126	141	156	157	172	192	211	164	164	178	205

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling: System side water heat exchanger 25 °C; External air 12°C

NSM HWT FE-PE

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: F														
Cooling performance chiller operation														
Cooling capacity	kW	315,0	362,0	415,0	456,0	478,0	524,0	551,0	599,0	626,0	641,0	667,0	735,0	772,0
Input power	kW	75,0	91,0	101,0	112,0	120,0	127,0	138,0	145,0	156,0	161,0	169,0	178,0	192,0
Cooling total input current	A	134,0	158,0	175,0	189,0	199,0	210,0	227,0	240,0	258,0	272,0	288,0	303,0	325,0
EER	W/W	4,19	3,97	4,09	4,07	3,98	4,13	4,00	4,12	4,02	3,97	3,95	4,13	4,03
Water flow rate system side	l/h	54220	62220	71300	78430	82240	90170	94830	102950	107680	110230	114670	126390	132800
Pressure drop system side	kPa	42	49	64	76	85	61	66	68	74	79	80	51	58
Cooling performances with free-cooling														
Cooling capacity	kW	267,0	273,0	337,0	342,0	344,0	408,0	411,0	474,0	478,0	479,0	482,0	548,0	551,0
Input power	kW	6,4	6,4	7,9	7,9	7,9	9,5	9,5	11,1	11,1	11,1	11,1	12,7	12,7
Free cooling total input current	A	9,4	9,4	11,8	11,8	11,8	14,1	14,1	16,5	16,5	16,5	16,5	18,8	18,8
EER	W/W	41,99	43,01	42,41	43,05	43,31	42,79	43,10	42,64	42,94	43,08	43,29	43,10	43,35
Water flow rate system side	l/h	54220	62220	71300	78430	82240	90170	94830	102950	107680	110230	114670	126390	132800
Pressure drop system side	kPa	71	86	97	115	127	95	104	102	112	118	122	89	99

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: P														
Cooling performance chiller operation														
Cooling capacity	kW	314,0	360,0	412,0	453,0	474,0	521,0	548,0	595,0	622,0	637,0	662,0	730,0	767,0
Input power	kW	76,0	92,0	102,0	113,0	122,0	128,0	139,0	147,0	157,0	163,0	170,0	180,0	194,0
Cooling total input current	A	134,0	159,0	176,0	190,0	201,0	211,0	229,0	242,0	260,0	274,0	291,0	306,0	328,0
EER	W/W	4,14	3,92	4,03	4,00	3,90	4,07	3,93	4,06	3,96	3,90	3,88	4,06	3,95
Water flow rate system side	l/h	53990	61890	70890	77860	81600	89640	94230	102360	107020	109540	113890	125570	131860
Pressure drop system side	kPa	42	49	63	75	83	60	65	67	73	78	79	51	57
Cooling performances with free-cooling														
Cooling capacity	kW	285,0	292,0	360,0	365,0	367,0	435,0	438,0	506,0	509,0	511,0	513,0	584,0	587,0
Input power	kW	6,5	6,5	8,1	8,1	8,1	9,7	9,7	11,3	11,3	11,3	11,3	12,9	12,9
Free cooling total input current	A	9,6	9,6	11,9	11,9	11,9	14,3	14,3	16,7	16,7	16,7	16,7	19,1	19,1
EER	W/W	44,05	45,10	44,49	45,14	45,38	44,88	45,19	44,73	45,03	45,17	45,36	45,18	45,42
Water flow rate system side	l/h	53990	61890	70890	77860	81600	89640	94230	102360	107020	109540	113890	125570	131860
Pressure drop system side	kPa	70	86	96	113	125	94	102	101	110	116	120	88	98

NSM HWT FE-PE

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: F													
Cooling performance chiller operation													
Cooling capacity	kW	823,0	870,0	932,0	1011,0	1070,0	1152,0	1226,0	1300,0	1423,0	1502,0	-	-
Input power	kW	202,0	210,0	228,0	241,0	260,0	275,0	296,0	318,0	350,0	364,0	-	-
Cooling total input current	A	339,0	348,0	388,0	421,0	443,0	460,0	493,0	526,0	601,0	631,0	-	-
EER	W/W	4,07	4,15	4,09	4,19	4,12	4,19	4,14	4,09	4,07	4,13	-	-
Water flow rate system side	l/h	141610	149590	160240	173870	184060	198120	210870	223620	244770	258380	-	-
Pressure drop system side	kPa	69	78	91	86	94	65	81	81	105	105	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	616,0	680,0	686,0	753,0	759,0	826,0	893,0	960,0	1031,0	1099,0	-	-
Input power	kW	14,3	15,9	15,9	17,5	17,5	19,1	20,7	22,3	23,8	25,4	-	-
Free cooling total input current	A	21,2	23,5	23,5	25,9	25,9	28,2	30,6	32,9	35,3	37,6	-	-
EER	W/W	43,07	42,76	43,17	43,10	43,39	43,32	43,24	43,16	43,27	43,21	-	-
Water flow rate system side	l/h	141610	149590	160240	173870	184060	198120	210870	223620	244770	258380	-	-
Pressure drop system side	kPa	107	114	133	128	140	106	121	121	150	150	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: P													
Cooling performance chiller operation													
Cooling capacity	kW	818,0	865,0	926,0	1005,0	1063,0	1144,0	1218,0	1292,0	1414,0	1493,0	-	-
Input power	kW	204,0	212,0	230,0	244,0	263,0	278,0	300,0	321,0	354,0	368,0	-	-
Cooling total input current	A	342,0	351,0	392,0	425,0	448,0	464,0	497,0	531,0	607,0	636,0	-	-
EER	W/W	4,00	4,08	4,02	4,12	4,04	4,12	4,07	4,02	3,99	4,06	-	-
Water flow rate system side	l/h	140680	148750	159230	172870	182790	196750	209470	222190	243180	256800	-	-
Pressure drop system side	kPa	68	77	90	85	93	64	80	80	104	104	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	657,0	725,0	732,0	803,0	808,0	880,0	952,0	1024,0	1099,0	1171,0	-	-
Input power	kW	14,5	16,2	16,2	17,8	17,8	19,4	21,0	22,6	24,2	25,9	-	-
Free cooling total input current	A	21,5	23,9	23,9	26,3	26,3	28,7	31,0	33,4	35,8	38,2	-	-
EER	W/W	45,16	44,85	45,26	45,19	45,45	45,40	45,32	45,24	45,35	45,30	-	-
Water flow rate system side	l/h	140680	148750	159230	172870	182790	196750	209470	222190	243180	256800	-	-
Pressure drop system side	kPa	106	113	131	127	139	104	119	120	148	149	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling: System side water heat exchanger 25 °C; External air 12°C

NSM HWT FU-PU

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: F														
Cooling performance chiller operation														
Cooling capacity	kW	328,0	381,0	435,0	482,0	506,0	550,0	580,0	627,0	657,0	674,0	703,0	772,0	814,0
Input power	kW	84,0	98,0	112,0	121,0	128,0	138,0	148,0	159,0	168,0	172,0	178,0	191,0	203,0
Cooling total input current	A	148,0	170,0	192,0	204,0	212,0	229,0	244,0	263,0	279,0	291,0	305,0	326,0	345,0
EER	W/W	3,93	3,90	3,89	3,99	3,97	3,99	3,92	3,94	3,91	3,91	3,95	4,05	4,02
Water flow rate system side	l/h	56440	65570	74810	82890	87080	94670	99780	107790	113080	115880	120880	132770	139960
Pressure drop system side	kPa	46	54	71	84	94	66	72	74	81	86	87	56	64
Cooling performances with free-cooling														
Cooling capacity	kW	344,0	359,0	437,0	450,0	455,0	533,0	540,0	617,0	625,0	629,0	635,0	719,0	728,0
Input power	kW	19,3	19,3	24,1	24,1	24,1	28,9	28,9	33,7	33,7	33,7	33,7	38,5	38,5
Free cooling total input current	A	30,0	30,0	37,6	37,6	37,6	45,1	45,1	52,6	52,6	52,6	52,6	60,1	60,1
EER	W/W	17,84	18,61	18,16	18,66	18,87	18,43	18,67	18,31	18,54	18,65	18,84	18,66	18,89
Water flow rate system side	l/h	56440	65570	74810	82890	87080	94670	99780	107790	113080	115880	120880	132770	139960
Pressure drop system side	kPa	77	95	107	127	142	104	114	111	122	129	134	97	109

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: P														
Cooling performance chiller operation														
Cooling capacity	kW	327,0	380,0	433,0	480,0	504,0	548,0	578,0	624,0	655,0	671,0	700,0	769,0	810,0
Input power	kW	84,0	99,0	113,0	122,0	129,0	139,0	149,0	160,0	170,0	174,0	180,0	192,0	205,0
Cooling total input current	A	-	-	-	-	-	-	-	-	-	-	-	-	-
EER	W/W	3,88	3,84	3,84	3,93	3,91	3,94	3,87	3,89	3,86	3,86	3,89	4,00	3,96
Water flow rate system side	l/h	56250	65300	74510	82510	86670	94290	99370	107380	112630	115420	120380	132250	139380
Pressure drop system side	kPa	46	54	70	83	93	66	72	73	80	85	86	55	63
Cooling performances with free-cooling														
Cooling capacity	kW	370,0	386,0	471,0	484,0	490,0	574,0	582,0	665,0	674,0	678,0	685,0	775,0	785,0
Input power	kW	19,7	19,7	24,6	24,6	24,6	29,5	29,5	34,4	34,4	34,4	34,4	39,3	39,3
Free cooling total input current	A	-	-	-	-	-	-	-	-	-	-	-	-	-
EER	W/W	18,82	19,66	19,17	19,72	19,94	19,47	19,73	19,34	19,59	19,71	19,91	19,72	19,97
Water flow rate system side	l/h	56250	65300	74510	82510	86670	94290	99370	107380	112630	115420	120380	132250	139380
Pressure drop system side	kPa	77	94	106	126	140	103	113	111	121	128	133	96	108

NSM HWT FU-PU

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: F													
Cooling performance chiller operation													
Cooling capacity	kW	864,0	909,0	978,0	1059,0	1127,0	1213,0	1289,0	1365,0	1495,0	1576,0	-	-
Input power	kW	216,0	228,0	243,0	260,0	276,0	293,0	317,0	341,0	372,0	388,0	-	-
Cooling total input current	A	363,0	378,0	414,0	454,0	472,0	493,0	529,0	566,0	639,0	677,0	-	-
EER	W/W	3,99	3,99	4,02	4,08	4,09	4,14	4,06	4,00	4,02	4,06	-	-
Water flow rate system side	l/h	148610	156340	168140	182140	193790	208610	221670	234730	257070	271060	-	-
Pressure drop system side	kPa	75	84	99	94	103	71	88	88	116	116	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	808,0	886,0	902,0	989,0	1003,0	1091,0	1177,0	1262,0	1359,0	1446,0	-	-
Input power	kW	43,4	48,2	48,2	53,0	53,0	57,8	62,6	67,5	72,3	77,1	-	-
Free cooling total input current	A	67,6	75,1	75,1	82,6	82,6	90,1	97,6	105,1	112,7	120,2	-	-
EER	W/W	18,64	18,38	18,72	18,65	18,92	18,86	18,78	18,71	18,80	18,75	-	-
Water flow rate system side	l/h	148610	156340	168140	182140	193790	208610	221670	234730	257070	271060	-	-
Pressure drop system side	kPa	117	124	145	140	154	116	132	132	166	165	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: P													
Cooling performance chiller operation													
Cooling capacity	kW	861,0	906,0	974,0	1055,0	1122,0	1208,0	1284,0	1359,0	1489,0	1570,0	-	-
Input power	kW	218,0	230,0	245,0	262,0	278,0	296,0	320,0	344,0	375,0	392,0	-	-
Cooling total input current	A	366,0	381,0	418,0	457,0	475,0	497,0	533,0	570,0	644,0	682,0	-	-
EER	W/W	3,94	3,94	3,97	4,03	4,03	4,08	4,01	3,95	3,97	4,01	-	-
Water flow rate system side	l/h	148030	155780	167500	181460	193010	207750	220780	233810	256070	270020	-	-
Pressure drop system side	kPa	75	84	99	93	102	70	87	87	115	115	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	871,0	954,0	972,0	1066,0	1081,0	1176,0	1268,0	1360,0	1465,0	1558,0	-	-
Input power	kW	44,2	49,1	49,1	54,0	54,0	59,0	63,9	68,8	73,7	78,6	-	-
Free cooling total input current	A	68,8	76,5	76,5	84,1	84,1	91,8	99,4	107,0	114,7	122,3	-	-
EER	W/W	19,70	19,42	19,79	19,71	20,00	19,94	19,85	19,77	19,88	19,82	-	-
Water flow rate system side	l/h	148030	155780	167500	181460	193010	207750	220780	233810	256070	270020	-	-
Pressure drop system side	kPa	117	123	144	139	153	115	131	131	164	164	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling: System side water heat exchanger 25 °C; External air 12°C

NSM HWT FN-PN

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: F														
Cooling performance chiller operation														
Cooling capacity	kW	324,0	376,0	428,0	473,0	497,0	538,0	567,0	614,0	643,0	659,0	687,0	751,0	803,0
Input power	kW	74,0	88,0	99,0	109,0	116,0	124,0	134,0	142,0	152,0	157,0	163,0	174,0	184,0
Cooling total input current	A	132,0	154,0	172,0	184,0	192,0	206,0	222,0	235,0	252,0	265,0	280,0	297,0	313,0
EER	W/W	4,41	4,27	4,31	4,35	4,29	4,33	4,21	4,32	4,24	4,21	4,22	4,32	4,38
Water flow rate system side	l/h	55800	64730	73570	81410	85540	92510	97450	105570	110670	113400	118220	129100	138190
Pressure drop system side	kPa	46	54	42	49	56	65	71	45	49	53	51	54	64
Cooling performances with free-cooling														
Cooling capacity	kW	318,0	330,0	391,0	401,0	404,0	465,0	470,0	531,0	536,0	539,0	543,0	607,0	670,0
Input power	kW	7,9	7,9	9,5	9,5	9,5	11,1	11,1	12,7	12,7	12,7	12,7	14,3	15,9
Free cooling total input current	A	12,0	12,0	14,0	14,0	14,0	16,0	16,0	19,0	19,0	19,0	19,0	21,0	24,0
EER	W/W	39,96	41,57	41,02	42,00	42,41	41,76	42,22	41,75	42,17	42,36	42,67	42,46	42,16
Water flow rate system side	l/h	55800	64730	73570	81410	85540	92510	97450	105570	110670	113400	118220	129100	138190
Pressure drop system side	kPa	67	81	66	78	87	93	102	72	79	84	84	87	95

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: P														
Cooling performance chiller operation														
Cooling capacity	kW	323,0	374,0	426,0	471,0	494,0	535,0	564,0	611,0	640,0	656,0	683,0	746,0	799,0
Input power	kW	74,0	89,0	100,0	110,0	117,0	125,0	136,0	143,0	153,0	158,0	164,0	175,0	185,0
Cooling total input current	A	132,0	155,0	173,0	185,0	194,0	207,0	224,0	237,0	254,0	267,0	282,0	300,0	316,0
EER	W/W	4,36	4,22	4,26	4,29	4,23	4,27	4,15	4,26	4,18	4,15	4,16	4,26	4,32
Water flow rate system side	l/h	55590	64410	73210	80970	85050	92040	96930	105040	110080	112780	117540	128400	137510
Pressure drop system side	kPa	45	53	42	49	55	64	70	44	49	52	50	54	63
Cooling performances with free-cooling														
Cooling capacity	kW	337,0	352,0	417,0	427,0	431,0	495,0	501,0	566,0	572,0	575,0	579,0	648,0	715,0
Input power	kW	8,1	8,1	9,7	9,7	9,7	11,3	11,3	12,9	12,9	12,9	12,9	14,5	16,2
Free cooling total input current	A	12,0	12,0	14,0	14,0	14,0	17,0	17,0	19,0	19,0	19,0	19,0	21,0	24,0
EER	W/W	41,76	43,58	42,96	44,05	44,49	43,79	44,29	43,78	44,23	44,44	44,76	44,54	44,22
Water flow rate system side	l/h	55590	64410	73210	80970	85050	92040	96930	105040	110080	112780	117540	128400	137510
Pressure drop system side	kPa	66	80	65	77	86	92	101	71	78	83	83	86	94

NSM HWT FN-PN

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: F													
Cooling performance chiller operation													
Cooling capacity	kW	852,0	881,0	969,0	1033,0	1115,0	1198,0	1263,0	1329,0	-	-	-	-
Input power	kW	195,0	207,0	218,0	232,0	249,0	265,0	288,0	311,0	-	-	-	-
Cooling total input current	A	328,0	343,0	374,0	408,0	427,0	447,0	481,0	516,0	-	-	-	-
EER	W/W	4,37	4,26	4,44	4,46	4,49	4,51	4,38	4,27	-	-	-	-
Water flow rate system side	l/h	146560	151590	166730	177640	191820	206010	217280	228590	-	-	-	-
Pressure drop system side	kPa	75	81	80	80	80	45	53	53	-	-	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	731,0	737,0	857,0	921,0	988,0	1056,0	1068,0	1079,0	-	-	-	-
Input power	kW	17,5	17,5	20,7	22,3	23,8	25,4	25,4	25,4	-	-	-	-
Free cooling total input current	A	26,0	26,0	31,0	33,0	35,0	38,0	38,0	38,0	-	-	-	-
EER	W/W	41,84	42,13	41,48	41,37	41,45	41,52	42,01	42,42	-	-	-	-
Water flow rate system side	l/h	146560	151590	166730	177640	191820	206010	217280	228590	-	-	-	-
Pressure drop system side	kPa	105	113	106	106	106	71	84	84	-	-	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: P													
Cooling performance chiller operation													
Cooling capacity	kW	848,0	877,0	965,0	1028,0	1110,0	1192,0	1257,0	1322,0	-	-	-	-
Input power	kW	197,0	209,0	220,0	234,0	251,0	268,0	291,0	314,0	-	-	-	-
Cooling total input current	A	330,0	346,0	377,0	411,0	430,0	450,0	485,0	520,0	-	-	-	-
EER	W/W	4,31	4,20	4,38	4,40	4,43	4,45	4,32	4,21	-	-	-	-
Water flow rate system side	l/h	145850	150820	165970	176870	190950	205020	216210	227390	-	-	-	-
Pressure drop system side	kPa	74	80	79	79	79	45	53	53	-	-	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	780,0	786,0	914,0	981,0	1053,0	1125,0	1139,0	1151,0	-	-	-	-
Input power	kW	17,8	17,8	21,0	22,6	24,2	25,9	25,9	25,9	-	-	-	-
Free cooling total input current	A	26,0	26,0	31,0	33,0	36,0	38,0	38,0	38,0	-	-	-	-
EER	W/W	43,88	44,20	43,48	43,37	43,45	43,52	44,06	44,51	-	-	-	-
Water flow rate system side	l/h	145850	150820	165970	176870	190950	205020	216210	227390	-	-	-	-
Pressure drop system side	kPa	104	112	105	105	105	70	84	84	-	-	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling: System side water heat exchanger 25 °C; External air 12°C

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Electric data															
Maximum current (FLA)	A	A	204,0	226,0	251,0	257,0	273,0	290,0	306,0	335,0	355,0	380,0	405,0	428,0	440,0
	E,U	A	204,0	226,0	261,0	267,0	273,0	299,0	316,0	345,0	364,0	390,0	415,0	437,0	450,0
	N	A	214,0	236,0	270,0	277,0	283,0	309,0	325,0	354,0	374,0	399,0	425,0	447,0	469,0
Peak current (LRA)	A	A	277,0	285,0	299,0	336,0	350,0	346,0	359,0	439,0	451,0	515,0	568,0	622,0	592,0
	E,U	A	277,0	285,0	308,0	345,0	350,0	356,0	368,0	449,0	461,0	525,0	578,0	632,0	601,0
	N	A	287,0	295,0	318,0	355,0	360,0	366,0	378,0	458,0	471,0	535,0	588,0	641,0	621,0

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Electric data														
Maximum current (FLA)	A	A	473,0	497,0	538,0	570,0	590,0	620,0	668,0	701,0	831,0	863,0	933,0	1051,0
	E,U	A	483,0	516,0	548,0	595,0	615,0	645,0	688,0	730,0	841,0	882,0	-	-
	N	A	508,0	531,0	583,0	624,0	654,0	683,0	716,0	749,0	-	-	-	-
Peak current (LRA)	A	A	601,0	625,0	680,0	710,0	846,0	886,0	965,0	958,0	902,0	932,0	1137,0	1205,0
	E,U	A	611,0	644,0	690,0	735,0	871,0	911,0	984,0	986,0	911,0	951,0	-	-
	N	A	636,0	659,0	724,0	764,0	910,0	949,0	1013,0	1006,0	-	-	-	-

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

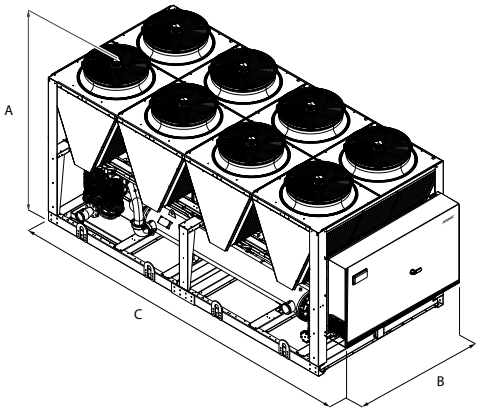
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Compressor															
Type	A,E,N,U	type	Screw												
Compressor regulation	A,E,N,U	Type	On-Off												
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type	R134a												
System side heat exchanger															
Type	A,E,N,U	type	Shell and tube												
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Inverter fan															
Type	A,E,N,U	type	Axial												
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20
Sound data calculated in cooling mode (1)															
Sound power level	A	dB(A)	97,0	97,0	97,0	97,0	98,0	98,0	98,0	98,0	98,0	99,0	99,0	100,0	101,0
	E	dB(A)	93,0	93,0	93,0	94,0	94,0	93,0	93,0	93,0	93,0	95,0	96,0	98,0	98,0
	N	dB(A)	93,0	93,0	94,0	94,0	94,0	94,0	93,0	93,0	93,0	94,0	96,0	98,0	99,0
	U	dB(A)	97,0	97,0	98,0	98,0	98,0	99,0	99,0	99,0	99,0	99,0	100,0	101,0	102,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Compressor														
Type	A,E,N,U	type	Screw											
Compressor regulation	A,E,N,U	Type	On-Off											
Number	A	no.	2	2	2	2	2	2	2	2	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	2	3	3	-	-
	N	no.	2	2	2	2	2	2	2	2	-	-	-	-
Circuits	A	no.	2	2	2	2	2	2	2	2	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	2	3	3	-	-
	N	no.	2	2	2	2	2	2	2	2	-	-	-	-
Refrigerant	A,E,N,U	type	R134a											
System side heat exchanger														
Type	A,E,N,U	type	Shell and tube											
Number	A	no.	1	1	1	1	1	1	1	1	2	2	2	2
	E	no.	1	1	1	1	1	1	1	1	2	2	-	-
	N	no.	1	1	2	2	2	2	2	2	-	-	-	-
	U	no.	1	1	1	1	1	2	2	2	2	2	-	-
Inverter fan														
Type	A,E,N,U	type	Axial											
Number	A	no.	16	16	18	18	18	20	22	22	28	28	30	34
	E,U	no.	18	20	20	22	22	24	26	28	30	32	-	-
	N	no.	22	22	26	28	30	32	32	32	-	-	-	-
Sound data calculated in cooling mode (1)														
Sound power level	A	dB(A)	101,0	100,0	101,0	101,0	101,0	102,0	102,0	102,0	104,0	104,0	105,0	105,0
	E	dB(A)	98,0	96,0	97,0	97,0	99,0	100,0	100,0	99,0	99,0	99,0	-	-
	N	dB(A)	98,0	97,0	97,0	97,0	99,0	100,0	100,0	99,0	-	-	-	-
	U	dB(A)	101,0	101,0	101,0	102,0	102,0	103,0	103,0	103,0	104,0	104,0	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Dimensions and weights															
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	A	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330
C	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Dimensions and weights														
	A	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
A	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-
	A	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
B	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-
	A	mm	9520	9520	10710	10710	10710	11900	13090	13090	16660	16660	17850	20230
C	E,U	mm	10710	11900	11900	13090	13090	14280	15470	16660	17850	19040	-	-
	N	mm	13090	13090	15470	16660	17850	19040	19040	19040	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately.

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NSM HWT B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 306 ÷ 1991 kW

- **High efficiency also at partial loads**
- **Microchannel coils**
- **Suitable for Data Center applications**
- **Water produced up to 30 °C**
- **Night mode**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

These are flexible and reliable units which adapt to the most diverse load conditions thanks to the precise design and the use of steady speed compressors together with inverter-controlled variable speed compressors guaranteeing a high energy efficiency level both at full and partial load.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Water produced from 5 °C ÷ 30 °C.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:
1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night Mode:** it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger
AK: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
AER485P1 x n° 2 (1)	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
AER485P1 x n° 2 (1)	A,E,N,U	•	•	•	•	•	•	•	•				
AER485P1 x n° 3 (1)	A,E,N,U									•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSM**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6903, 7203, 8403, 9603
8		**Operating field (1)**
	W	Electronic thermostatic expansion valve
9		**Model**
	B	Free-cooling glycol free
	G	Free-cooling glycol free plus (2)
10		**Heat recovery**
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper (2)
	S	Copper-Tinned copper / Copper -Tinned copper (2)
	V	Copper-painted alumimium / Copper-painted alumimium (2)
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
14		**Power supply**
	°	400V ~ 3 50Hz
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit

(1) Water produced from 5 °C ÷ 30 °C
(2) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"

PERFORMANCE SPECIFICATIONS

NSM HWT BA-GA

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: B														
Cooling performance chiller operation														
Cooling capacity	kW	306,0	351,0	400,0	441,0	479,0	505,0	546,0	589,0	638,0	653,0	687,0	753,0	792,0
Input power	kW	82,0	95,0	109,0	118,0	125,0	135,0	147,0	155,0	167,0	172,0	179,0	192,0	205,0
Cooling total input current	A	146,0	166,0	187,0	200,0	208,0	224,0	242,0	258,0	277,0	290,0	306,0	327,0	348,0
EER	W/W	3,75	3,69	3,69	3,73	3,83	3,73	3,71	3,79	3,81	3,80	3,84	3,92	3,86
Water flow rate system side	l/h	52824	60556	69042	76187	82709	87074	94164	101663	110040	112699	118488	129925	136678
Pressure drop system side	kPa	91	120	119	91	107	118	139	135	152	133	130	99	110
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	303,0	276,0	281,0	292,0	360,0	363,0	367,0	437,0	441,0	454,0	456,0	541,0	542,0
Input power	kW	22,6	22,6	22,6	22,6	29,7	29,7	29,7	38,6	38,6	38,7	38,7	44,8	44,8
Free cooling total input current	A	36,1	36,1	36,1	36,1	47,0	47,0	47,0	61,5	61,5	61,7	61,7	71,2	71,2
EER	W/W	13,43	12,22	12,46	12,93	12,14	12,23	12,36	11,32	11,43	11,73	11,79	12,07	12,11

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: G														
Cooling performance chiller operation														
Cooling capacity	kW	305,0	349,0	398,0	439,0	477,0	502,0	543,0	587,0	635,0	650,0	683,0	749,0	788,0
Input power	kW	82,0	96,0	109,0	120,0	126,0	136,0	148,0	157,0	169,0	174,0	181,0	194,0	207,0
Cooling total input current	A	147,0	167,0	188,0	201,0	210,0	226,0	244,0	260,0	279,0	292,0	308,0	330,0	351,0
EER	W/W	3,70	3,64	3,64	3,68	3,78	3,68	3,66	3,74	3,76	3,74	3,78	3,86	3,80
Water flow rate system side	l/h	52588	60291	68707	75829	82367	86693	93725	101283	109546	112184	117898	129336	136024
Pressure drop system side	kPa	90	119	118	90	106	117	137	134	151	132	129	98	108
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	314,0	287,0	293,0	305,0	377,0	380,0	384,0	459,0	463,0	478,0	481,0	570,0	572,0
Input power	kW	23,0	22,9	22,9	23,0	30,1	30,1	30,1	39,2	39,2	39,3	39,3	45,5	45,5
Free cooling total input current	A	36,6	36,6	36,6	36,6	47,7	47,7	47,7	62,3	62,3	62,5	62,5	72,1	72,1
EER	W/W	13,67	12,52	12,77	13,30	12,51	12,60	12,74	11,72	11,84	12,18	12,25	12,53	12,58

NSM HWT BA-GA

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: B													
Cooling performance chiller operation													
Cooling capacity	kW	853,0	882,0	959,0	1014,0	1082,0	1169,0	1262,0	1327,0	1476,0	1531,0	1758,0	2001,0
Input power	kW	216,0	228,0	244,0	260,0	281,0	295,0	319,0	343,0	373,0	388,0	442,0	512,0
Cooling total input current	A	362,0	377,0	416,0	453,0	478,0	494,0	531,0	567,0	646,0	683,0	740,0	854,0
EER	W/W	3,95	3,87	3,92	3,90	3,86	3,97	3,95	3,87	3,96	3,94	3,97	3,91
Water flow rate system side	l/h	147129	152124	165550	174920	186802	201811	217758	228975	254763	264131	303311	345300
Pressure drop system side	kPa	128	137	148	165	155	146	171	190	126	141	111	144
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	598,0	599,0	674,0	675,0	675,0	748,0	802,0	807,0	1038,0	1039,0	1134,0	1263,0
Input power	kW	49,8	49,8	55,0	55,0	55,0	60,0	64,9	64,9	84,7	84,7	93,7	103,6
Free cooling total input current	A	78,9	78,9	87,1	87,1	87,1	95,0	102,6	102,6	134,1	134,1	148,7	164,3
EER	W/W	12,03	12,04	12,26	12,28	12,28	12,46	12,36	12,43	12,26	12,27	12,10	12,18

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: G													
Cooling performance chiller operation													
Cooling capacity	kW	849,0	878,0	955,0	1009,0	1077,0	1164,0	1256,0	1320,0	1470,0	1524,0	1749,0	1991,0
Input power	kW	218,0	230,0	247,0	262,0	284,0	298,0	322,0	346,0	377,0	392,0	447,0	517,0
Cooling total input current	A	365,0	381,0	420,0	456,0	482,0	498,0	536,0	571,0	652,0	688,0	747,0	861,0
EER	W/W	3,90	3,81	3,87	3,84	3,80	3,91	3,90	3,81	3,90	3,89	3,91	3,85
Water flow rate system side	l/h	146478	151430	164829	174121	185838	200784	216706	227798	253695	262987	301787	343582
Pressure drop system side	kPa	127	136	147	164	153	144	170	188	125	140	110	143
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	628,0	629,0	708,0	709,0	709,0	785,0	839,0	844,0	1089,0	1090,0	1192,0	1325,0
Input power	kW	50,5	50,5	55,8	55,8	55,8	61,0	66,0	66,0	86,0	86,0	95,1	105,2
Free cooling total input current	A	80,0	80,0	88,3	88,3	88,3	96,4	104,1	104,1	136,0	136,0	150,8	166,6
EER	W/W	12,43	12,45	12,68	12,70	12,70	12,86	12,72	12,80	12,67	12,68	12,54	12,59

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling glycol-free: System side water heat exchanger 25 °C; External air 12 °C

NSM HWT BE-GE

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: B														
Cooling performance chiller operation														
Cooling capacity	kW	315,0	362,0	415,0	456,0	478,0	524,0	551,0	599,0	626,0	641,0	667,0	735,0	772,0
Input power	kW	75,0	91,0	101,0	112,0	120,0	127,0	138,0	145,0	156,0	161,0	169,0	178,0	192,0
Cooling total input current	A	134,0	158,0	175,0	189,0	199,0	210,0	227,0	240,0	258,0	272,0	288,0	303,0	325,0
EER	W/W	4,19	3,97	4,09	4,07	3,98	4,13	4,00	4,12	4,02	3,97	3,95	4,13	4,03
Water flow rate system side	l/h	54400	62421	71530	78692	82506	90469	95144	103288	108035	110595	115049	126808	133234
Pressure drop system side	kPa	81	100	101	95	104	105	116	127	139	121	125	96	106
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	260,0	228,0	276,0	285,0	287,0	343,0	345,0	389,0	391,0	402,0	403,0	469,0	471,0
Input power	kW	10,6	10,6	13,4	13,5	13,5	19,2	19,2	21,9	21,9	22,1	22,1	23,9	23,9
Free cooling total input current	A	16,7	16,6	21,0	21,2	21,2	30,5	30,5	34,5	34,5	34,9	34,9	37,6	37,6
EER	W/W	24,39	21,44	20,58	21,09	21,21	17,84	17,94	17,79	17,87	18,15	18,22	19,61	19,67

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: G														
Cooling performance chiller operation														
Cooling capacity	kW	314,0	360,0	412,0	453,0	474,0	521,0	548,0	595,0	622,0	637,0	662,0	730,0	767,0
Input power	kW	76,0	92,0	102,0	113,0	122,0	128,0	139,0	147,0	157,0	163,0	170,0	180,0	194,0
Cooling total input current	A	134,0	159,0	176,0	190,0	201,0	211,0	229,0	242,0	260,0	274,0	291,0	306,0	328,0
EER	W/W	4,14	3,92	4,03	4,00	3,90	4,07	3,93	4,06	3,96	3,90	3,88	4,06	3,95
Water flow rate system side	l/h	54167	62091	71121	78115	81864	89932	94544	102700	107375	109898	114268	125980	132294
Pressure drop system side	kPa	81	99	99	94	103	103	114	126	138	119	123	94	104
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	270,0	237,0	288,0	298,0	300,0	358,0	360,0	406,0	408,0	419,0	421,0	491,0	492,0
Input power	kW	10,8	10,7	13,5	13,7	13,7	19,4	19,4	22,1	22,1	22,3	22,3	24,1	24,1
Free cooling total input current	A	16,8	16,8	21,2	21,4	21,4	30,8	30,8	34,8	34,8	35,2	35,2	37,9	37,9
EER	W/W	25,10	22,15	21,24	21,80	21,93	18,48	18,59	18,39	18,48	18,80	18,87	20,33	20,39

NSM HWT BE-GE

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: B													
Cooling performance chiller operation													
Cooling capacity	kW	823,0	870,0	932,0	1011,0	1070,0	1152,0	1226,0	1300,0	1423,0	1502,0	-	-
Input power	kW	202,0	210,0	228,0	241,0	260,0	275,0	296,0	318,0	350,0	364,0	-	-
Cooling total input current	A	339,0	348,0	388,0	421,0	443,0	460,0	493,0	526,0	601,0	631,0	-	-
EER	W/W	4,07	4,15	4,09	4,19	4,12	4,19	4,14	4,09	4,07	4,13	-	-
Water flow rate system side	l/h	142081	150081	160772	174443	184665	198768	211564	224359	245581	259231	-	-
Pressure drop system side	kPa	121	135	142	152	170	81	128	110	119	123	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	515,0	578,0	588,0	633,0	634,0	693,0	742,0	788,0	880,0	924,0	-	-
Input power	kW	25,6	31,3	31,5	33,1	33,1	38,4	41,1	43,7	46,8	48,5	-	-
Free cooling total input current	A	40,1	48,8	49,1	51,6	51,6	61,1	65,0	69,0	73,4	75,9	-	-
EER	W/W	20,11	18,44	18,68	19,09	19,12	18,02	18,06	18,01	18,79	19,06	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: G													
Cooling performance chiller operation													
Cooling capacity	kW	818,0	865,0	926,0	1005,0	1063,0	1144,0	1218,0	1292,0	1414,0	1493,0	-	-
Input power	kW	204,0	212,0	230,0	244,0	263,0	278,0	300,0	321,0	354,0	368,0	-	-
Cooling total input current	A	342,0	351,0	392,0	425,0	448,0	464,0	497,0	531,0	607,0	636,0	-	-
EER	W/W	4,00	4,08	4,02	4,12	4,04	4,12	4,07	4,02	3,99	4,06	-	-
Water flow rate system side	l/h	141148	149240	159755	173439	183394	197398	210159	222920	243982	257648	-	-
Pressure drop system side	kPa	120	134	140	150	168	80	127	109	118	122	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	538,0	604,0	615,0	661,0	662,0	724,0	775,0	822,0	920,0	966,0	-	-
Input power	kW	25,8	31,6	31,7	33,4	33,4	38,8	41,4	44,1	46,8	48,9	-	-
Free cooling total input current	A	40,5	49,2	49,4	52,0	52,0	61,5	65,5	69,5	73,9	76,5	-	-
EER	W/W	20,80	19,11	19,38	19,78	19,80	18,67	18,70	18,64	19,65	19,74	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling glycol-free: System side water heat exchanger 25 °C; External air 12 °C

NSM HWT BU-GU

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: B														
Cooling performance chiller operation														
Cooling capacity	kW	328,0	381,0	435,0	482,0	506,0	550,0	580,0	627,0	657,0	674,0	703,0	772,0	814,0
Input power	kW	84,0	98,0	112,0	121,0	128,0	138,0	148,0	159,0	168,0	172,0	178,0	191,0	203,0
Cooling total input current	A	148,0	170,0	192,0	204,0	212,0	229,0	244,0	263,0	279,0	291,0	305,0	326,0	345,0
EER	W/W	3,93	3,90	3,89	3,99	3,97	3,99	3,92	3,94	3,91	3,91	3,95	4,05	4,02
Water flow rate system side	l/h	56622	65790	75056	83161	87363	94979	100110	108143	113452	116262	121282	133207	140417
Pressure drop system side	kPa	88	112	111	106	117	115	128	139	127	134	130	106	117
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	319,0	287,0	345,0	367,0	369,0	433,0	436,0	488,0	506,0	507,0	538,0	595,0	597,0
Input power	kW	23,6	23,5	29,6	31,5	31,5	38,6	38,6	44,5	44,7	44,7	44,8	49,8	49,8
Free cooling total input current	A	37,3	37,3	46,8	50,1	50,1	61,5	61,5	70,6	71,0	71,0	71,2	78,9	78,9
EER	W/W	13,52	12,20	11,67	11,64	11,72	11,22	11,30	10,96	11,31	11,35	12,01	11,96	12,00

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: G														
Cooling performance chiller operation														
Cooling capacity	kW	327,0	380,0	433,0	480,0	504,0	548,0	578,0	624,0	655,0	671,0	700,0	769,0	810,0
Input power	kW	84,0	99,0	113,0	122,0	129,0	139,0	149,0	160,0	170,0	174,0	180,0	192,0	205,0
Cooling total input current	A	149,0	171,0	194,0	205,0	214,0	231,0	246,0	265,0	281,0	294,0	308,0	328,0	347,0
EER	W/W	3,88	3,84	3,84	3,93	3,91	3,94	3,87	3,89	3,86	3,86	3,89	4,00	3,96
Water flow rate system side	l/h	56434	65512	74759	82781	86955	94601	99699	107739	113006	115799	120780	132683	139835
Pressure drop system side	kPa	87	111	110	105	116	115	127	138	126	132	129	105	116
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	331,0	300,0	360,0	385,0	388,0	455,0	458,0	510,0	531,0	533,0	567,0	624,0	626,0
Input power	kW	23,9	23,9	30,0	32,0	32,0	39,2	39,2	45,1	45,4	45,4	45,5	50,5	50,5
Free cooling total input current	A	37,9	37,8	47,5	50,8	50,8	62,3	62,3	71,6	72,0	72,0	72,1	80,0	80,0
EER	W/W	13,81	12,56	11,98	12,04	12,13	11,61	11,69	11,30	11,70	11,73	12,47	12,36	12,40

NSM HWT BU-GU

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: B													
Cooling performance chiller operation													
Cooling capacity	kW	864,0	909,0	978,0	1059,0	1127,0	1213,0	1289,0	1365,0	1495,0	1576,0	-	-
Input power	kW	216,0	228,0	243,0	260,0	276,0	293,0	317,0	341,0	372,0	388,0	-	-
Cooling total input current	A	363,0	378,0	414,0	454,0	472,0	493,0	529,0	566,0	639,0	677,0	-	-
EER	W/W	3,99	3,99	4,02	4,08	4,09	4,14	4,06	4,00	4,02	4,06	-	-
Water flow rate system side	l/h	149099	156852	168696	182745	194431	209298	222401	235505	257918	271953	-	-
Pressure drop system side	kPa	134	133	156	166	188	112	142	128	131	135	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	647,0	743,0	746,0	796,0	797,0	885,0	938,0	990,0	1126,0	1177,0	-	-
Input power	kW	54,7	63,8	63,8	68,7	68,7	79,0	84,0	89,0	98,2	103,1	-	-
Free cooling total input current	A	86,6	100,7	100,7	108,3	108,3	125,7	133,4	141,2	155,6	163,2	-	-
EER	W/W	11,83	11,65	11,69	11,60	11,61	11,20	11,17	11,13	11,46	11,41	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: G													
Cooling performance chiller operation													
Cooling capacity	kW	861,0	906,0	974,0	1055,0	1122,0	1208,0	1284,0	1359,0	1489,0	1570,0	-	-
Input power	kW	218,0	230,0	245,0	262,0	278,0	296,0	320,0	344,0	375,0	392,0	-	-
Cooling total input current	A	366,0	381,0	418,0	457,0	475,0	497,0	533,0	570,0	644,0	682,0	-	-
EER	W/W	3,94	3,94	3,97	4,03	4,03	4,08	4,01	3,95	3,97	4,01	-	-
Water flow rate system side	l/h	148519	156292	168052	182059	193641	208436	221510	234585	256917	270905	-	-
Pressure drop system side	kPa	133	132	155	165	187	111	141	127	130	134	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	676,0	780,0	783,0	834,0	835,0	931,0	984,0	1036,0	1185,0	1236,0	-	-
Input power	kW	55,5	64,7	64,7	69,7	69,7	80,1	85,2	90,3	99,6	104,6	-	-
Free cooling total input current	A	87,8	102,0	102,0	109,8	109,8	127,3	135,2	143,1	157,6	165,4	-	-
EER	W/W	12,18	12,05	12,11	11,97	11,98	11,62	11,54	11,48	11,90	11,81	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling glycol-free: System side water heat exchanger 25 °C; External air 12 °C

NSM HWT BN-GN

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: B														
Cooling performance chiller operation														
Cooling capacity	kW	324,0	376,0	428,0	473,0	497,0	538,0	567,0	614,0	643,0	659,0	687,0	751,0	803,0
Input power	kW	74,0	88,0	99,0	109,0	116,0	124,0	134,0	142,0	152,0	157,0	163,0	174,0	184,0
Cooling total input current	A	132,0	154,0	172,0	184,0	192,0	206,0	222,0	235,0	252,0	265,0	280,0	297,0	313,0
EER	W/W	4,41	4,27	4,31	4,35	4,29	4,33	4,21	4,32	4,24	4,21	4,22	4,32	4,38
Water flow rate system side	l/h	55983	64940	73810	81682	85818	92811	97769	105919	111036	113774	118607	129528	138643
Pressure drop system side	kPa	74	93	87	102	113	110	122	111	122	128	125	100	115
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	266,0	278,0	329,0	334,0	337,0	384,0	387,0	439,0	441,0	442,0	467,0	523,0	567,0
Input power	kW	12,0	14,0	19,0	19,0	20,0	22,0	22,0	24,0	24,0	24,0	24,0	29,0	31,0
Free cooling total input current	A	19,1	21,2	30,3	30,3	31,5	34,5	34,5	37,5	37,5	37,5	37,6	45,8	48,3
EER	W/W	21,73	20,57	17,29	17,53	16,94	17,58	17,68	18,41	18,50	18,55	19,52	17,83	18,28

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: G														
Cooling performance chiller operation														
Cooling capacity	kW	323,0	374,0	426,0	471,0	494,0	535,0	564,0	611,0	640,0	656,0	683,0	746,0	799,0
Input power	kW	74,0	89,0	100,0	110,0	117,0	125,0	136,0	143,0	153,0	158,0	164,0	175,0	185,0
Cooling total input current	A	132,0	155,0	173,0	185,0	194,0	207,0	224,0	237,0	254,0	267,0	282,0	300,0	316,0
EER	W/W	4,36	4,22	4,26	4,29	4,23	4,27	4,15	4,26	4,18	4,15	4,16	4,26	4,32
Water flow rate system side	l/h	55770	64623	73447	81232	85330	92341	97251	105389	110441	113149	117928	128821	137959
Pressure drop system side	kPa	74	92	86	101	112	109	121	110	121	127	123	99	113
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	279,0	292,0	346,0	351,0	354,0	404,0	407,0	461,0	463,0	464,0	491,0	549,0	595,0
Input power	kW	12,4	13,7	19,2	19,2	20,0	22,1	22,1	24,1	24,1	24,1	24,1	29,5	31,3
Free cooling total input current	A	19,2	21,4	30,5	30,5	31,7	34,8	34,8	37,8	37,8	37,8	37,9	46,1	48,6
EER	W/W	22,53	21,40	18,03	18,27	17,67	18,32	18,43	19,17	19,27	19,31	20,33	18,59	19,04

NSM HWT BN-GN

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: B													
Cooling performance chiller operation													
Cooling capacity	kW	852,0	881,0	969,0	1033,0	1115,0	1198,0	1263,0	1329,0	-	-	-	-
Input power	kW	195,0	207,0	218,0	232,0	249,0	265,0	288,0	311,0	-	-	-	-
Cooling total input current	A	328,0	343,0	374,0	408,0	427,0	447,0	481,0	516,0	-	-	-	-
EER	W/W	4,37	4,26	4,44	4,46	4,49	4,51	4,38	4,27	-	-	-	-
Water flow rate system side	l/h	147047	152087	167278	178230	192448	206685	217997	229339	-	-	-	-
Pressure drop system side	kPa	117	125	101	93	102	75	92	92	-	-	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	617,0	618,0	727,0	770,0	828,0	880,0	887,0	889,0	-	-	-	-
Input power	kW	32,8	32,8	41,1	43,7	45,7	47,7	47,7	47,7	-	-	-	-
Free cooling total input current	A	51,0	51,0	65,0	69,0	72,0	75,0	75,0	75,0	-	-	-	-
EER	W/W	18,81	18,85	17,68	17,59	18,12	18,46	18,60	18,64	-	-	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: G													
Cooling performance chiller operation													
Cooling capacity	kW	848,0	877,0	965,0	1028,0	1110,0	1192,0	1257,0	1322,0	-	-	-	-
Input power	kW	197,0	209,0	220,0	234,0	251,0	268,0	291,0	314,0	-	-	-	-
Cooling total input current	A	330,0	346,0	377,0	411,0	430,0	450,0	485,0	520,0	-	-	-	-
EER	W/W	4,31	4,20	4,38	4,40	4,43	4,45	4,32	4,21	-	-	-	-
Water flow rate system side	l/h	146331	151317	166517	177452	191576	205700	216918	228136	-	-	-	-
Pressure drop system side	kPa	116	124	100	92	101	74	91	91	-	-	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	647,0	649,0	764,0	809,0	870,0	925,0	932,0	934,0	-	-	-	-
Input power	kW	33,1	33,1	41,4	44,1	46,1	48,1	48,1	48,1	-	-	-	-
Free cooling total input current	A	51,4	51,4	65,5	69,5	72,5	75,5	75,5	75,5	-	-	-	-
EER	W/W	19,56	19,61	18,44	18,34	18,87	19,22	19,37	19,41	-	-	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling glycol-free: System side water heat exchanger 25 °C; External air 12 °C

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Electric data															
Maximum current (FLA)	A	A	206,0	228,0	253,0	265,0	289,0	306,0	324,0	362,0	384,0	400,0	415,0	449,0	472,0
	E	A	207,0	229,0	265,0	277,0	289,0	322,0	339,0	372,0	394,0	410,0	426,0	457,0	480,0
	N	A	215,0	240,0	280,0	292,0	305,0	332,0	349,0	381,0	404,0	419,0	434,0	472,0	503,0
	U	A	207,0	229,0	265,0	280,0	292,0	322,0	339,0	372,0	395,0	410,0	426,0	457,0	480,0
Peak current (LRA)	A	A	279,0	269,0	308,0	346,0	362,0	395,0	406,0	457,0	472,0	490,0	500,0	536,0	551,0
	E	A	279,0	269,0	317,0	354,0	362,0	403,0	415,0	466,0	480,0	499,0	509,0	545,0	560,0
	N	A	288,0	280,0	332,0	369,0	378,0	414,0	425,0	475,0	490,0	508,0	518,0	559,0	583,0
	U	A	279,0	269,0	317,0	357,0	365,0	403,0	415,0	466,0	481,0	499,0	509,0	545,0	560,0

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Electric data														
Maximum current (FLA)	A	A	504,0	527,0	569,0	602,0	619,0	645,0	698,0	737,0	877,0	910,0	976,0	1111,0
	E	A	512,0	550,0	583,0	631,0	648,0	681,0	730,0	779,0	894,0	936,0	-	-
	N	A	541,0	564,0	624,0	667,0	693,0	719,0	758,0	797,0	-	-	-	-
	U	A	512,0	550,0	583,0	631,0	648,0	683,0	731,0	779,0	899,0	941,0	-	-
Peak current (LRA)	A	A	590,0	611,0	643,0	665,0	857,0	883,0	963,0	990,0	866,0	888,0	1072,0	1204,0
	E	A	598,0	628,0	651,0	687,0	879,0	906,0	980,0	1016,0	875,0	905,0	-	-
	N	A	627,0	642,0	692,0	723,0	924,0	945,0	1009,0	1034,0	-	-	-	-
	U	A	598,0	628,0	651,0	687,0	879,0	909,0	982,0	1016,0	880,0	910,0	-	-

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Compressor															
Type	A,E,N,U	type	Screw												
Compressor regulation	A,E,N,U	Type	On-Off												
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type	R134a												
System side heat exchanger															
Type	A,E,N,U	type	Shell and tube												
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Inverter fan															
Type	A,E,N,U	type	Axial												
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20
Sound data calculated in cooling mode (1)															
Sound power level	A	dB(A)	97,1	97,1	97,4	97,3	98,1	98,0	97,8	98,4	98,4	98,7	99,3	100,4	100,8
	E	dB(A)	92,7	93,0	93,4	93,6	93,8	93,4	92,8	92,7	92,5	94,9	96,4	97,6	98,4
	N	dB(A)	92,8	93,1	93,9	93,8	93,9	93,7	93,2	93,0	92,8	94,3	96,0	97,9	98,7
	U	dB(A)	97,3	97,4	98,4	98,3	98,4	98,8	98,7	99,1	99,1	99,5	100,1	101,2	101,6

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

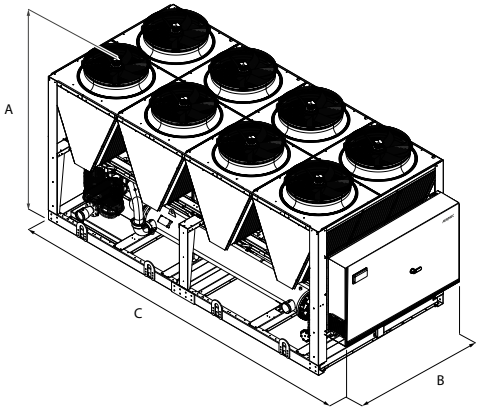
Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Compressor														
Type	A,E,N,U	type	Screw											
Compressor regulation	A,E,N,U	Type	On-Off											
Number	A	no.	2	2	2	2	2	2	2	2	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	2	3	3	-	-
	N	no.	2	2	2	2	2	2	2	2	-	-	-	-
Circuits	A	no.	2	2	2	2	2	2	2	2	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	2	3	3	-	-
	N	no.	2	2	2	2	2	2	2	2	-	-	-	-
Refrigerant	A,E,N,U	type	R134a											
System side heat exchanger														
Type	A,E,N,U	type	Shell and tube											
Number	A	no.	1	1	1	1	1	1	1	1	1	1	1	1
	E,U	no.	1	1	1	1	1	2	2	2	2	2	-	-
	N	no.	1	1	2	2	2	2	2	2	-	-	-	-
Inverter fan														
Type	A,E,N,U	type	Axial											
Number	A	no.	16	16	18	18	18	20	22	22	28	28	30	34
	E,U	no.	18	20	20	22	22	24	26	28	30	32	-	-
	N	no.	22	22	26	28	30	32	32	32	-	-	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Sound data calculated in cooling mode (1)														
Sound power level	A	dB(A)	100,8	100,4	100,8	100,9	101,4	102,3	102,3	101,9	103,7	103,8	105,0	104,8
	E	dB(A)	97,6	96,4	96,7	97,0	98,9	100,3	99,5	98,7	98,7	98,9	-	-
	N	dB(A)	97,9	96,8	97,0	97,3	98,7	100,1	99,5	98,7	-	-	-	-
	U	dB(A)	101,5	101,4	101,4	101,8	102,3	103,2	103,1	102,9	104,0	104,3	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Dimensions and weights															
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330
	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Dimensions and weights														
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	9520	9520	10710	10710	10710	11900	13090	13090	16660	16660	17850	20230
	E,U	mm	10710	11900	11900	13090	13090	14280	15470	16660	17850	19040	-	-
	N	mm	13090	13090	15470	16660	17850	19040	19040	19040	-	-	-	-

■ *For transport reasons, the units with the depth of more than 13090 mm are shipped separately.*

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NSMI 1251-6102 F

Air-water chiller with free-cooling

Cooling capacity 286 ÷ 1280 kW

- **High efficiency also at partial loads**
- **Microchannel coil**
- **Low electrical consumption**

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature. Unit can produce chilled water (up to -6 °C).

Units mono or dual-circuit

Unit with 1–2 refrigerant circuits.
The single circuit units have the inverter compressor, while the dual-circuit have an asynchronous compressor on/off switch and an inverter,the combination provides both high efficiency at part load and full load

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.

Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

Low noise version

Silenced versions feature a special compressor jacket which ensures a further noise reduction of approximately 4 dB.

CONTROL PCO[5]

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Further features:
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save

a log file with all the connected unit datas in the personal terminal for post analysis.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
AER485P1	A,E	•	•	•												
AER485P1 x no. 2	A,E				•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•												
AERBACP x no. 2	A,E				•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A, E	GP4V	GP4V	GP5V	GP5V	GP6V	GP7V	GP7V	GP7V	GP8V	GP9V	GP10V	GP11V	GP11V	GP11V	GP11V

A grey background indicates the accessory must be assembled in the factory

Antivibration - NSMI free-cooling

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00															
A	AVX991	AVX992	AVX993	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990
E	AVX991	AVX992	AVX994	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990

Antivibration - NSMI free-cooling plus

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00															
A	AVX991	AVX992	AVX993	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990
E	AVX991	AVX992	AVX994	AVX966	AVX970	AVX995	AVX995	AVX999	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990

Heater exchangers

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	-	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
E	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3,4	**NSMI**
5,6,7,8	**Size** 1251, 1601, 1801, 2352, 2652, 2802, 3202, 3402, 3802, 4102, 4402, 4802, 5202, 5702, 6102
9	**Model**
F	Free-cooling
P	Free-cooling plus (1)
10	**Heat recovery**
D	With desuperheater (2)
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency
12	**Coils / free-cooling coils**
0	Painted alluminium microchannel / Copper painted aluminium
R	Copper-copper/Copper-copper
S	Copper-Tinned copper / Copper -Tinned copper
V	Copper-painted alumimium / Copper-painted alumimium
°	Alluminium microchannel / Copper - aluminium
13	**Fans**
J	Inverter
°	Standard
14	**Power supply**
°	400V ~ 3 50Hz with magnet circuit breakers
15,16	**Integrated hydronic kit**
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (3)
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (3)
	Kit with 2 pumps
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J (3)
17	**Refrigerant gas**
°	R134a

(1) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"
(2) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(3) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NSMI - free-cooling (FA/FE - PA/PE)

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: F																	
Cooling performance chiller operation (1)																	
Cooling capacity	A,E	kW	286,5	385,6	455,6	496,5	587,5	649,6	718,4	784,3	832,8	929,0	989,0	1096,3	1164,2	1208,4	1280,3
Input power	A,E	kW	96,6	126,7	157,5	177,7	206,3	221,2	244,7	272,7	280,5	324,3	343,8	368,4	417,3	436,6	477,9
Cooling total input current	A,E	A	166,0	212,0	261,0	309,0	356,0	381,0	417,0	456,0	470,0	547,0	580,0	644,0	692,0	728,0	761,0
EER	A,E	W/W	2,97	3,04	2,89	2,79	2,85	2,94	2,94	2,88	2,97	2,86	2,88	2,98	2,79	2,77	2,68
Water flow rate system side	A,E	l/h	49230	66245	78283	85309	100931	111607	123424	134748	143088	159614	169917	188349	200020	207622	219967
Pressure drop system side	A,E	kPa	52	78	75	48	67	68	76	46	54	68	79	80	90	94	107
Cooling performances with free-cooling (2)																	
Cooling capacity	A,E	kW	254,5	276,0	340,9	346,5	414,6	649,6	488,1	495,1	559,2	628,2	692,4	762,8	771,1	775,7	782,2
Input power	A,E	kW	15,0	15,0	18,7	18,7	22,5	26,2	26,2	26,2	30,0	33,7	37,5	41,2	41,2	41,2	41,2
Free cooling total input current	A,E	A	26,0	25,0	31,0	33,0	39,0	45,0	45,0	44,0	50,0	57,0	63,0	72,0	68,0	69,0	66,0
EER	A,E	W/W	19,97	18,41	18,19	18,49	18,43	18,22	18,60	18,87	18,65	18,62	18,47	18,50	18,70	18,81	18,97
Water flow rate system side	A,E	l/h	49230	66245	78283	85309	100931	111607	123424	134748	143088	159614	169917	188349	200020	207622	219967
Pressure drop system side	A,E	kPa	80	121	128	88	109	109	124	94	99	108	125	127	143	157	169

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: P																	
Cooling performance chiller operation (1)																	
Cooling capacity	A,E	kW	285,5	383,5	453,4	493,5	584,0	646,4	714,7	778,5	827,8	923,5	983,6	1090,1	1156,6	1200,5	1270,3
Input power	A,E	kW	97,4	127,8	158,9	179,7	208,6	223,4	247,5	275,8	283,4	327,8	347,4	372,4	421,9	441,5	483,8
Cooling total input current	A,E	A	168,0	214,0	263,0	312,0	360,0	385,0	421,0	461,0	474,0	553,0	585,0	644,0	692,0	728,0	761,0
EER	A,E	W/W	2,93	3,00	2,85	2,75	2,80	2,89	2,89	2,82	2,92	2,82	2,83	2,93	2,74	2,72	2,63
Water flow rate system side	A,E	l/h	49048	65887	77903	84789	100332	111060	122801	133758	142233	158667	168998	187289	198712	206254	218254
Pressure drop system side	A,E	kPa	51	78	74	47	67	67	75	45	53	67	79	79	89	92	105
Cooling performances with free-cooling (2)																	
Cooling capacity	A,E	kW	271,8	296,0	365,5	371,4	444,5	512,7	523,2	530,1	599,3	673,3	742,3	817,7	826,2	830,9	837,1
Input power	A,E	kW	15,2	15,2	19,0	19,0	22,8	26,7	26,7	26,7	30,5	34,3	38,1	41,9	41,9	41,9	41,9
Free cooling total input current	A,E	A	26,0	25,0	32,0	33,0	39,0	46,0	45,0	45,0	51,0	58,0	64,0	72,0	69,0	69,0	66,0
EER	A,E	W/W	17,84	19,43	19,19	19,50	19,45	19,23	19,63	19,89	19,67	19,64	19,49	19,52	19,72	19,83	19,98
Water flow rate system side	A,E	l/h	49048	65887	77903	84789	100332	111060	122801	133758	142233	158667	168998	187289	198712	206254	218254
Pressure drop system side	A,E	kPa	80	120	127	87	108	108	123	93	98	107	123	125	141	155	166

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: F																	
SEPR - (EN14825: 2018) High temperature with standard fans (1)																	
SEPR	A,E	W/W	6,95	6,32	6,23	6,60	6,73	7,06	6,85	6,65	6,98	6,74	6,83	7,24	7,11	7,28	7,05
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																	
SEPR	A,E	W/W	6,95	6,32	6,23	6,60	6,73	7,06	6,85	6,65	6,98	6,74	6,83	7,24	7,11	7,28	7,05

(1) Calculation performed with FIXED water flow rate.

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: P																	
SEPR - (EN14825: 2018) High temperature with standard fans (1)																	
SEPR	A,E	W/W	7,02	6,39	6,31	6,69	6,83	7,19	6,93	6,69	7,06	6,82	6,93	7,30	7,15	7,31	7,05
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																	
SEPR	A,E	W/W	7,02	6,39	6,31	6,69	6,83	7,19	6,93	6,69	7,06	6,82	6,93	7,30	7,15	7,31	7,05

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Electric data																	
Maximum current (FLA)	A,E	A	259,9	299,9	388,4	452,7	485,9	534,4	534,4	582,4	670,9	727,4	774,9	874,2	917,2	1002,2	1036,2
Peak current (LRA)	A,E	A	59,9	59,9	68,4	582,4	617,9	666,4	666,4	790,4	878,9	1008,4	1080,0	1180,2	1335,2	1420,2	1532,2

GENERAL TECHNICAL DATA

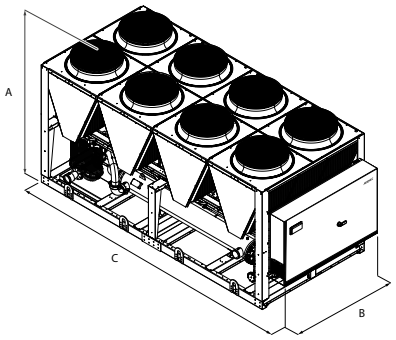
Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Compressor																	
Type	A,E	type	Screw														
Compressor regulation	A,E	Type	I	I	I	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type	R134a														
System side heat exchanger																	
Type	A,E	type	Shell and tube														
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections																	
Connections (in/out)	A,E	Type	Grooved joints														
Sizes (in/out)	A,E	Ø	5″	6″	6″	6″	6″	6″	6″	8″	8″	8″	8″	10″	10″	10″	10″
Fan																	
Type	A,E	type	Axial														
Fan motor	A,E	type	Asynchronous with phase cut														
Number	A,E	no.	8	8	10	10	12	14	14	14	16	18	20	22	22	22	22
Air flow rate	A,E	m^3/h	109600	109600	137000	137000	164400	191800	191800	191800	219200	146600	274000	301400	301400	301400	301400

Sound data

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Sound data calculated in cooling mode (1)																	
Sound power level	A	dB(A)	98,1	99,2	99,4	99,4	99,7	100,7	100,7	101,1	101,2	101,3	101,9	103,6	103,8	103,8	103,9
	E	dB(A)	94,2	96,0	96,3	95,7	96,2	96,6	96,6	97,8	97,9	98,3	98,6	100,2	100,2	100,2	100,3

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Dimensions and weights																	
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	4760	4760	5950	6400	7140	8330	8330	8330	9520	10710	11900	13090	13090	13090	13090

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TBA 1300-3350 F

Air-water chiller with free-cooling

Cooling capacity 317,2 ÷ 1223,6 kW

- **High efficiency also at partial loads**
- **Microchannel coil**
- **Low peak current (only 6 Amps!)**
- **Evaporator with low refrigerant charge**
- **Available also with R513A (XP10) refrigerant**

DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.
These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers.
The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 43°C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Units mono or dual-circuit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.
Compressor features:
— Operates without oil as bearings are magnetic levitation type
— Continuous load modulation by varying rpm (from 30% to 100%)
— Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO[5]

Units include 1 control board for each circuit.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Further features:
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

CONFIGURATOR

Field		Description
1,2,3		**TBA**
4,5,6,7		**Size** 1300, 1350, 2300, 2325, 2350, 3300, 3320, 3340, 3350
8		**Model**
	F	Free-cooling
	P	Free-cooling plus (1)
9		**Heat recovery**
	°	Without heat recovery
10		**Version**
	A	High efficiency
	E	Silenced high efficiency
11		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
12		**Fans**
	J	Inverter
13		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
14,15		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (2)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (2)
		Kit with inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	II	Pump I equipped with inverter device to work at fixed speed
	IJ	Pump J equipped with inverter device to work at fixed speed (2)
		Kit with n°1 pump + stand-by pump both equipped wih inverter device to work at fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (2)
		Kit with double pump both equipped with inverter device to work at fixed speed
	KF	Doble pump F with inverter device to work at fixed speed
	KG	Doble pump G with inverter device to work at fixed speed
	KH	Doble pump H with inverter device to work at fixed speed
	KI	Doble pump I with inverter device to work at fixed speed
	KJ	Doble pump J with inverter device to work at fixed speed (2)
		Kit with double pumps
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (2)
16		**Refrigerant gas**
	G	R513A (XP10)
	°	R134a

(1) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"
(2) For all configurations including pump J please contact the factory.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350
AER485P1	A,E	•	•	•		•	•		•	•
AER485P1 x no. 2	A,E				•			•		
AERBACP	A,E	•	•	•		•	•		•	•
AERBACP x no. 2	A,E				•			•		
AERNET	A,E	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•

Antivibration

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350
A, E	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Anti-intrusion grid

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350
A, E	GP3T	GP4T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: F											
Cooling performance chiller operation (1)											
Cooling capacity	A,E	kW	317,2	419,2	634,5	736,4	838,4	934,7	1065,0	1149,0	1223,6
Input power	A,E	kW	91,6	121,8	182,8	214,3	244,4	267,3	311,2	337,8	365,9
Cooling total input current	A,E	A	147,5	198,3	295,0	345,8	396,7	427,5	498,3	559,2	604,2
EER	A,E	W/W	3,46	3,44	3,47	3,44	3,43	3,50	3,42	3,40	3,34
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	210235
Pressure drop system side	A,E	kPa	65	32	70	54	45	69	72	66	52
Cooling performances with free-cooling (2)											
Cooling capacity	A,E	kW	297,2	395,5	594,4	692,7	791,1	888,3	994,1	1085,0	1100,1
Input power	A,E	kW	11,3	15,0	22,5	26,3	30,0	33,8	37,5	41,3	41,3
Free cooling total input current	A,E	A	17,5	23,3	35,0	40,8	46,7	52,5	58,3	64,2	64,2
EER	A,E	W/W	26,41	26,36	26,41	26,38	26,36	26,31	26,50	26,30	26,66
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	210235
Pressure drop system side	A,E	kPa	118	78	130	103	99	127	138	117	109

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: P											
Cooling performance chiller operation (1)											
Cooling capacity	A,E	kW	317,2	419,2	634,5	736,4	838,4	934,7	1065,0	1149,0	1206,6
Input power	A,E	kW	93,1	123,9	185,8	217,9	248,6	271,6	316,4	343,6	366,0
Cooling total input current	A,E	A	147,9	198,8	295,7	346,7	397,6	428,6	499,6	560,5	605,5
EER	A,E	W/W	3,41	3,38	3,42	3,38	3,37	3,44	3,37	3,34	3,30
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	207315
Pressure drop system side	A,E	kPa	65	32	70	54	45	69	72	66	50
Cooling performances with free-cooling (2)											
Cooling capacity	A,E	kW	319,4	425,1	638,8	744,5	850,2	954,8	1068,2	1166,2	1181,8
Input power	A,E	kW	11,5	15,3	23,0	26,8	30,7	34,5	38,4	42,2	42,2
Free cooling total input current	A,E	A	17,9	18,8	35,7	36,7	37,6	53,6	44,6	65,5	80,5
EER	A,E	W/W	27,76	27,71	27,76	27,73	27,71	27,66	27,85	27,64	28,01
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	207315
Pressure drop system side	A,E	kPa	114	74	126	99	95	123	134	113	102

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: F											
SEER - (EN14825:2018) 12/7 with inverter fans (1)											
SEER	A,E	W/W	5,06	5,14	5,21	5,17	5,30	5,40	5,32	5,26	5,23
Seasonal efficiency	A,E	%	199,3%	202,7%	205,5%	203,6%	208,8%	212,8%	209,6%	207,2%	206,1%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)											
SEPR	A,E	W/W	8,65	8,51	8,79	8,32	8,53	9,04	9,34	8,89	8,58

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: P											
SEER - (EN14825:2018) 12/7 with inverter fans (1)											
SEER	A,E	W/W	4,98	5,06	5,14	5,09	5,21	5,32	5,11	5,18	5,17
Seasonal efficiency	A,E	%	196,3%	199,4%	202,5%	200,4%	205,5%	209,7%	201,2%	204,0%	203,7%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)											
SEPR	A,E	W/W	8,91	8,45	8,88	8,53	8,65	9,18	8,99	9,06	8,81

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Electric data											
Maximum current (FLA)	A,E	A	165,0	249,0	329,0	413,0	498,0	493,0	577,0	737,0	737,0
Peak current (LRA)	A,E	A	36,0	45,0	210,0	305,0	315,0	384,0	479,0	575,0	575,0

GENERAL TECHNICAL DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Compressor											
Type	A,E	type					Centrifugal				
Compressor regulation	A,E	Type					Inverter				
Number	A,E	no.	1	1	2	2	2	3	3	3	3
Circuits	A,E	no.	1	1	1	2	1	1	2	1	1
Refrigerant	A,E	type					R134a				
Refrigerant charge (1)	A,E	kg	81,5	165,7	163,0	253,8	295,8	275,2	317,2	327,9	397,9
System side heat exchanger											
Type	A,E	type					Shell and tube				
Number	A,E	no.	1	1	1	1	1	1	1	1	1
Hydraulic connections											
Connections (in/out)	A,E	Type					Grooved joints				
Size (in)	A,E	Ø	3″	4″	4″	5″	5″	5″	5″	6″	6″
Size (out)	A,E	Ø	3″	4″	4″	5″	5″	5″	5″	6″	6″
Sound data calculated in cooling mode (2)											
Sound power level	A	dB(A)	88,3	90,0	91,3	92,8	93,1	93,1	94,1	95,5	95,5
	E	dB(A)	82,3	84,0	85,3	86,8	87,1	87,1	88,1	89,5	89,5
Sound pressure level (10 m)	A	dB(A)	56,1	57,6	58,7	60,0	60,2	60,1	61,0	62,3	62,3
	E	dB(A)	50,1	51,6	52,7	54,0	54,2	54,1	55,0	56,3	56,3

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

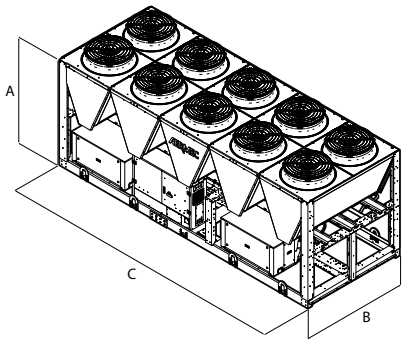
General data - fans (F model)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Fan											
Type	A,E	type					Axial				
Fan motor	A,E	type					Inverter				
Number	A,E	no.	6	8	12	14	16	18	20	22	22
Air flow rate	A,E	m^3/h	93180	124240	186360	217420	248480	279540	310600	341660	341660

General data - fans (P model)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Fan											
Type	A,E	type					Axial				
Fan motor	A,E	type					Inverter				
Number	A,E	no.	6	8	12	14	16	18	20	22	22
Air flow rate	A,E	m^3/h	88680	118240	177360	206920	236480	266040	295600	325160	325160

DIMENSIONS



Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ											
Dimensions and weights											
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3570	4760	7140	8330	9520	10710	11900	13090	13090

Model F

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Integrated hydronic kit: 00											
Weights											
Empty weight	A	kg	3290	4330	5860	7050	8020	8490	9820	10310	10670
	E	kg	3370	4440	6030	7250	8240	8740	10100	10610	10970
Weight functioning	A	kg	3570	4720	6380	7680	8790	9270	10720	11270	11710
	E	kg	3650	4830	6550	7880	9010	9520	11000	11570	12010

Model P

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Integrated hydronic kit: 00											
Weights											
Empty weight	A	kg	3380	4460	6050	7270	8270	8780	10140	10650	11020
	E	kg	3470	4570	6220	7470	8490	9020	10410	10960	11320
Weight functioning	A	kg	3700	4910	6650	8000	9150	9680	11180	11760	12220
	E	kg	3790	5020	6820	8200	9370	9920	11450	12070	12520

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TBG 1230-4310 F

Air-water chiller with free-cooling

Cooling capacity 238 ÷ 1110 kW

- **HFO R1234ze refrigerant gas**
- **High efficiency also at partial loads**
- **Microchannel coil**
- **Low peak current (only 6 Amps!)**
- **Evaporator with low refrigerant charge**

DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.
These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers.
The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 43°C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Units mono or dual-circuit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.
Compressor features:
— Operates without oil as bearings are magnetic levitation type
— Continuous load modulation by varying rpm (from 30% to 100%)
— Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:
da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430;
with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

CONTROL PCO^5

Units include 1 control board for each circuit.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Further features:
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

CONFIGURATOR

Field		Description
1,2,3		**TBG**
4,5,6,7		**Size** 1230, 1310, 2230, 2270, 2310, 3270, 3280, 3310, 4270, 4310
8		**Model**
	F	Free-cooling
	P	Free-cooling plus (1)
9		**Heat recovery**
	°	Without heat recovery
10		**Version**
	A	High efficiency
	E	Silenced high efficiency
11		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
12		**Fans**
	J	Inverter
13		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
14,15		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (2)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (2)
		Kit with inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	II	Pump I equipped with inverter device to work at fixed speed
	IJ	Pump J equipped with inverter device to work at fixed speed (2)
		Kit with n°1 pump + stand-by pump both equipped wih inverter device to work at fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (2)
		Kit with double pump both equipped with inverter device to work at fixed speed
	KF	Doble pump F with inverter device to work at fixed speed
	KG	Doble pump G with inverter device to work at fixed speed
	KH	Doble pump H with inverter device to work at fixed speed
	KI	Doble pump I with inverter device to work at fixed speed
	KJ	Doble pump J with inverter device to work at fixed speed (2)
		Kit with double pumps
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (2)

(1) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"
(2) For all configurations including pump J please contact the factory.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
AER485P1	A,E	•	•	•		•		•	•		
AER485P1 x no. 2	A,E				•		•			•	•
AERBACP	A,E	•	•	•		•		•	•		
AERBACP x no. 2	A,E				•		•			•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•

Antivibration

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ										
A, E	AVX591	AVX. (1)	AVX1187	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Anti-intrusion grid

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A, E	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	A,E	kW	237,9	328,6	453,2	526,8	623,2	730,8	798,8	907,5	1019,7	1110,3
Input power	A,E	kW	68,6	95,3	130,6	153,1	181,1	211,4	231,7	260,0	294,0	328,1
Cooling total input current	A,E	A	112,5	158,3	214,2	255,0	300,8	346,7	387,5	433,3	489,2	549,2
EER	A,E	W/W	3,47	3,45	3,47	3,44	3,44	3,46	3,45	3,49	3,47	3,38
Water flow rate system side	A,E	l/h	40879	56452	77865	90518	107064	125557	137237	155924	175196	190769
Pressure drop system side	A,E	kPa	48	51	45	54	50	55	54	63	46	56
Cooling performances with free-cooling (2)												
Cooling capacity	A,E	kW	275,5	371,6	478,0	568,6	665,9	766,4	855,5	956,3	1057,8	1079,5
Input power	A,E	kW	11,3	15,0	18,8	22,5	26,3	30,0	33,8	37,5	41,3	41,3
Free cooling total input current	A,E	A	17,5	23,3	29,2	35,0	40,8	46,7	52,5	58,3	64,2	64,2
EER	A,E	W/W	24,49	24,77	25,49	25,27	25,36	25,54	25,34	25,50	25,64	26,16
Water flow rate system side	A,E	l/h	40879	56452	77865	90518	107064	125557	137237	155924	175196	190769
Pressure drop system side	A,E	kPa	81	93	86	97	87	97	98	113	88	105

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	A,E	kW	237,9	328,6	453,2	526,8	623,1	730,8	798,8	907,5	1019,7	1110,3
Input power	A,E	kW	69,6	96,9	132,6	155,8	184,3	214,7	235,6	265,7	296,9	337,7
Cooling total input current	A,E	A	112,5	158,3	214,2	255,0	300,8	346,7	387,5	433,3	489,2	549,2
EER	A,E	W/W	3,42	3,39	3,42	3,38	3,38	3,40	3,39	3,42	3,43	3,29
Water flow rate system side	A,E	l/h	40879	56452	77865	90518	107064	125557	137237	155924	175196	190769
Pressure drop system side	A,E	kPa	48	51	45	54	50	55	54	63	46	56
Cooling performances with free-cooling (2)												
Cooling capacity	A,E	kW	295,4	398,2	514,2	610,9	714,2	823,8	919,0	1029,7	1136,1	1160,9
Input power	A,E	kW	11,5	15,4	19,2	23,0	26,9	30,7	34,5	38,3	42,2	42,2
Free cooling total input current	A,E	A	17,5	23,3	29,2	35,0	40,8	46,7	52,5	58,3	64,2	64,2
EER	A,E	W/W	25,70	25,90	26,80	26,50	26,60	26,90	26,60	26,90	26,90	27,50
Water flow rate system side	A,E	l/h	40879	56452	77864	90517	107064	125557	137236	155924	175196	190768
Pressure drop system side	A,E	kPa	78	91	83	94	84	94	95	110	84	101

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: F												
SEER - (EN14825:2018) 12/7 with inverter fans (1)												
SEER	A,E	W/W	5,40	5,47	5,72	5,35	5,72	5,53	5,64	5,67	5,66	5,49
Seasonal efficiency	A,E	%	213,1%	215,7%	225,9%	210,9%	225,8%	218,0%	222,6%	223,7%	223,4%	216,4%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)												
SEPR	A,E	W/W	9,45	9,36	9,37	8,49	9,15	9,31	9,45	9,50	9,47	9,13

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: P												
SEER - (EN14825:2018) 12/7 with inverter fans (1)												
SEER	A,E	W/W	5,33	5,58	5,65	5,27	5,63	5,45	5,56	5,56	5,63	5,34
Seasonal efficiency	A,E	%	210,3%	220,0%	222,8%	207,6%	222,2%	214,9%	219,2%	219,3%	222,3%	210,7%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)												
SEPR	A,E	W/W	9,36	9,24	9,27	8,55	9,21	9,34	9,35	9,35	9,43	8,93

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Electric data												
Maximum current (FLA)	A,E	A	125,0	189,0	239,0	304,0	368,0	418,0	538,0	547,0	597,0	707,0
Peak current (LRA)	A,E	A	36,0	45,0	161,0	230,0	239,0	355,0	424,0	433,0	549,0	608,0

GENERAL TECHNICAL DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Compressor												
Type	A,E	type	Centrifugal									
Compressor regulation	A,E	Type	Inverter									
Number	A,E	no.	1	1	2	2	2	3	3	3	4	4
Circuits	A,E	no.	1	1	1	2	1	2	1	1	2	2
Refrigerant	A,E	type	R1234ze									
Refrigerant charge (1)	A,E	kg	81,5	120,1	152,3	187,1	197,8	264,5	275,2	285,9	327,9	327,9
System side heat exchanger												
Type	A,E	type	Shell and tube									
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E	Type	Grooved joints									
Size (in)	A,E	Ø	3"	3"	4"	4"	5"	5"	5"	5"	6"	6"
Size (out)	A,E	Ø	3"	3"	4"	4"	5"	5"	5"	5"	6"	6"
Sound data calculated in cooling mode (2)												
Sound power level	A	dB(A)	86,3	88,9	88,8	90,5	91,7	91,6	93,1	93,3	93,3	94,2
	E	dB(A)	83,3	85,9	85,8	87,5	88,7	88,6	90,1	90,3	90,3	91,2
Sound pressure level (10 m)	A	dB(A)	54,1	56,5	56,3	57,9	58,9	58,7	60,1	60,2	60,1	61,0
	E	dB(A)	51,1	53,5	53,3	54,9	55,9	55,7	57,1	57,2	57,1	58,0

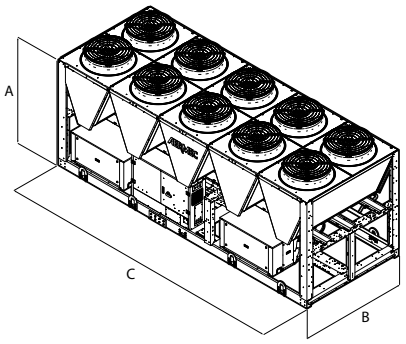
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

General data - fans

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: F												
Inverter fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Inverter									
Number	A,E	no.	6	8	10	12	14	16	18	20	22	22
Air flow rate	A,E	m^3/h	93150	124200	155250	186300	217350	248400	279450	310500	341550	341550

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: P												
Inverter fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Inverter									
Number	A,E	no.	6	8	10	12	14	16	18	20	22	22
Air flow rate	A,E	m^3/h	88800	118400	148000	177600	207200	236800	266400	296000	325600	325600

DIMENSIONS



Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ												
Dimensions and weights												
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3570	4760	5950	7140	8330	9520	10710	11900	13090	13090

Model F

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00												
Weights												
Empty weight	A	kg	3250	4110	5220	6180	6770	8130	8720	9400	10960	11220
	E	kg	3330	4220	5360	6350	6960	8350	8960	9670	11270	11520
Weight functioning	A	kg	3510	4450	5630	6700	7360	8820	9500	10250	11920	12190
	E	kg	3590	4560	5770	6870	7550	9040	9740	10520	12230	12490

Model P

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00												
Weights												
Empty weight	A	kg	3340	4240	5380	6370	6990	8380	9000	9710	11310	11570
	E	kg	3430	4350	5520	6540	7180	8600	9250	9990	11610	11870
Weight functioning	A	kg	3640	4640	5860	6970	7680	9180	9900	10700	12420	12690
	E	kg	3730	4750	6000	7140	7870	9400	10150	10980	12720	12990

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www.aermec.com

WATER / WATER CHILLERS AND HEAT PUMPS

Aermec plant engineering really comes into its own in the field of machines and technology for centralised systems. Aermec offer a full range of chillers and heat pumps from the small domestic system up to that of the large size for the service industry.

The cooling capacity range is extremely wide, and the fittings solutions are equally diverse, for scroll, screw or centrifugal compressor applications.

The careful selection of materials and the close attention paid to every detail of assembly coupled with the huge selection of accessories complete the industry-leading products designed for use in this sector, making Aermec units a real "must" in the world of Italian and European climate control.

WATER / WATER CHILLERS AND HEAT PUMPS

			Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll compressors					
	VENICE-H	Reversible water-cooled heat pump, gas side	-	6,9-,9,7	8,3-11,7	720
	WRL 026H-161H	Reversible water-cooled heat pump, gas side	-	6,0-40,0	8,0-48,0	723
	WRL 026-161	Water cooled heat pump reversible water side	-	6,6-44,2	7,5-48,0	730
	WRL 180H-650H	Reversible water-cooled heat pump, gas side	-	44,9-157,4	53,0-183,3	736
	WRL 180-650	Water cooled heat pump reversible water side	-	49,0-174,0	55,0-192,0	740
	WRK	Reversible water-cooled heat pump, gas side	-	38,9-165,9	48,5-207,7	745
	WWB 0300-0900	Water-water heat pumps only	-	-	56,7-265,9	753
new	**WWBG**	Water-water heat pumps only	-	-	77,2-,138,2	758
	WWM	Water cooled heat pump reversible water side	-	96	110	763
	NXW 0503-1654	Water cooled heat pump reversible water side	-	111-511	127-582	769
	NXW 0503H - 1654H	Reversible water-cooled heat pump, gas side	-	106-477	125-565	774
new	**NGW-0500-2600**	Water cooled heat pump reversible water side	-	116,3-790,2	131,3-904,6	779
new	**NGW-0350H-2600H**	Reversible water-cooled heat pump, gas side	-	107,0-746,4	126,3-879,3	784
	Units with screw compressors					
	WS 0601-2802	Water cooled heat pump reversible water side	-	147-700	164-778	790
	HWS 0601 - 2802	Water cooled heat pump reversible water side	-	147-369	165-778	794
	HWSG	Water cooled heat pump reversible water side	-	110-396	122-595	799
	WSH	Reversible water-cooled heat pump, gas side	-	165,8-269,7	183,3-300,3	803
	WFGI	Water cooled heat pump reversible water side	-	217-1765	243-1960	807
	WFGN	Water cooled heat pump reversible water side	-	136-1727	153-1921	817
	WFI	Water cooled heat pump reversible water side	-	291-2406	326-2664	824
	WFN	Water cooled heat pump reversible water side	-	182-2349	205-2610	833
	Units with centrifugal compressors					
	WMX	Water/water chiller (with R134a)	-	280,1-324,2	-	841
	WMG	Water/water chiller (with R1234ze)	-	282,3-312,4	-	844
	WTX	Water/water chiller	-	222,9-1958,4	-	847
	WTG	Water/water chiller (with R1234ze)	-	246,6-1959,4	-	852

VENICE-H

Reversible water-cooled heat pump, gas side

Cooling capacity 6,9 ÷ 9,7 kW
Heating capacity 8,3 ÷ 11,7 kW

- **Compact dimensions**
- **Quick & easy installation**

DESCRIPTION

The water-cooled heat pumps are reversible units for the production of chilled and hot water. They are indoor units with scroll compressors, system side heat exchangers and a plate source, which fully meet the needs of the residential market: reduced size, easy installation, low noise levels.

FEATURES

— Cycle reversal on refrigerant circuit
— All versions are equipped with circulation pump, water tank, water filter and safety valve
— Complies with safety (EC) directive
— Differential pressure switch on the external circuit standard on heat pumps
— Flow-switch supplied in series only on the DHW side exchanger.
— Microprocessor control
— Control panel
— Plate heat exchanger
— Compact dimensions
— Metallic protective cabinet with rustproofing polyester paint RAL 9003
— Protection rating IP 24

ACCESSORIES

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
VPH: Pressure switch valve with bypass solenoid valve, during cooling mode operation the bypass valve is closed so the water flows exclusively through the circuit with the pressure switch. During heating mode operation the water flows through both branches of the circuit.
VT: Anti-vibration supports.

ACCESSORIES COMPATIBILITY

Accessory	VENICE 20H	VENICE 30H
PR3	•	•

Pressure switch valve

Accessory	VENICE 20H	VENICE 30H
VPH10	•	
VPH11		•

Antivibration

Accessory	VENICE 20H	VENICE 30H
VT7	•	•

PERFORMANCE SPECIFICATIONS

		VENICE 20H	VENICE 30H
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	6,9	9,7
Input power	kW	1,9	2,6
Cooling total input current	A	9,0	13,0
EER	W/W	3,62	3,72
Water flow rate system side	l/h	1185	1667
Useful head system side	kPa	63	59
Water flow rate source side	l/h	1495	2095
Pressure drop source side	kPa	18	12
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	8,3	11,7
Input power	kW	2,3	3,2
Heating total input current	A	12,0	16,0
COP	W/W	3,66	3,70
Water flow rate system side	l/h	1450	2027
Useful head system side	kPa	48	41
Water flow rate source side	l/h	1791	2505
Pressure drop source side	kPa	25	17

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

		VENICE 20H	VENICE 30H
SEER - 12/7 (EN14825: 2018) (1)			
SEER	W/W	3,66	4,02
Seasonal efficiency	%	143,4	157,8
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)			
Pdesignh	kW	11	16
SCOP	W/W	4,20	4,33
ηsh	%	160,00	165,00
Efficiency energy class		A++	A++

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

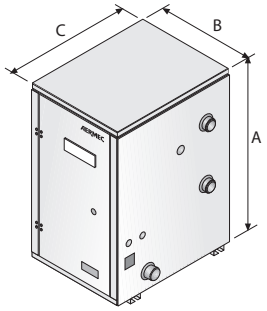
ELECTRIC DATA

		VENICE 20H	VENICE 30H
Power supply			
Power supply		230V~50Hz	230V~50Hz
Electric data			
Maximum current (FLA)	A	15,0	24,0
Peak current (LRA)	A	61,0	100,0

GENERAL TECHNICAL DATA

		VENICE 20H	VENICE 30H
Compressor			
Type	type	Scroll	Scroll
Number	no.	1	1
Circuits	no.	1	1
Refrigerant	type	R407C	R407C
System side heat exchanger			
Type	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Type	Gas M	Gas M
Sizes (in/out)	Ø	1"	1"
Source side heat exchanger			
Type	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Type	Gas M	Gas M
Sizes (in/out)	Ø	1"	1"
Sound data			
Sound power level	dB(A)	56,0	57,0
Sound pressure level	dB(A)	48,0	49,0

DIMENSIONS



		VENICE 20H	VENICE 30H
Dimensions and weights			
A	mm	625	625
B	mm	404	404
C	mm	504	504
Empty weight	kg	103	109

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

WRL 026H - 161H

Reversible water-cooled heat pump, gas side

Cooling capacity 6 ÷ 40 kW
Heating capacity 8 ÷ 48 kW

- **High efficiency**
- **Production of hot water up to 60 °C**
- **Production of domestic hot water priority**
- **Suitable for geothermal applications**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
In the configuration with desuperheater, it is also possible to produce free-hot water.
The technological choices made, always oriented to the highest quality, ensure very easy installation. In fact the electrical and hydraulic connections are all located in the upper part of the unit, facilitating the installation and maintenance operations and also reducing the technical gaps and their position in as little space as possible.

VERSIONS

° Without storage tank
A With storage tank

FEATURES

Operating field

Operation at full power with domestic hot water for the system up to 60 °C. (for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.
The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.
The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).

To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).
Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

CONTROL MPC

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
KSAE: External air sensor.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SSM: Probe to be used with the mixer valve in applications with radiant panels. The probe requires the VMF-CRP area accessory as well.
TAH: Ambient terminal with temperature and humidity probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump and dehumidifier consent.
TAT: Ambient terminal with temperature probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump.
VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
VPHL: Pressure switch valve with bypass solenoid valve, during cooling mode operation the bypass valve is closed so the water flows exclusively

through the circuit with the pressure switch. During heating mode operation the water flows through both branches of the circuit.

ACCESSORIES COMPATIBILITY

Model	026	031	041	051	071	081	101	141	161
AER485P1	•	•	•	•	•	•	•	•	•
AERBACP	•	•	•	•	•	•	•	•	•
KSAE	•	•	•	•	•	•	•	•	•
PGD1	•	•	•	•	•	•	•	•	•
SGD	•	•	•	•	•	•	•	•	•
SSM	•	•	•	•	•	•	•	•	•
TAH	•	•	•	•	•	•	•	•	•
TAT	•	•	•	•	•	•	•	•	•

Antivibration

Version	Integrated hydronic kit, source side	System side - pumps	026	031	041	051	071
°	°, B, I, U, V	°, N, P	VT9	VT9	VT9	VT9	VT9
A	°, B, I, U, V	°, N, P	VT15	VT15	VT15	VT15	VT15

Version	Integrated hydronic kit, source side	System side - pumps	081	101	141	161
°	°, B, I, U, V	°, N, P	VT9	VT15	VT15	VT15
A	°, B, I, U, V	°, N, P	VT15	VT15A	VT15A	VT15A

Pressure switch valve

Ver	026	031	041	051	071	081	101	141	161
°, A	VPHL1	VPHL1	VPHL2	VPHL2	VPHL3	VPHL3	VPHL4	VPHL4	VPHL4

CONFIGURATOR

Field		Description
1,2,3		**WRL**
4,5,6		**Size** 026, 031, 041, 051, 071, 081, 101, 141, 161
7		**Operating field**
	X	Electronic thermostatic expansion valve
8		**Model**
	H	Reversible heat pump, gas side
9		**Version**
	°	Without storage tank
	A	With storage tank
10		**Heat recovery**
	°	Without heat recovery
11		**Integrated hydronic kit, source side**
	B	On-off pump (1)
	I	Inverter pump (2)
	U	Pump high head (3)
	V	Applications with bore hole water
	°	Without hydronic kit
12		**System side - pumps**
	N	Pump high head (3)
	P	Pump (4)
	°	Without hydronic kit
13		**Recovery side - pumps**
	°	Without hydronic kit
14		**Soft-start**
	S	With soft-start
	°	Without soft-start
15		**Power supply**
	M	230V~ 50Hz (5)
	°	400V~3N 50Hz

(1) For size WRL 051 ÷ 081. The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.
(2) Only for WRL 026 ÷ 081
(3) Only for WRL 101 ÷ 161
(4) In sizes WRL 026 ÷ 081, it's an inverter circulator; for other sizes, it's an on-off pump.
(5) Only for WRL 026 ÷ 041

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

WRL - (H°) - (400V 3N ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,3	8,1	10,4	13,7	17,8	20,3	27,6	35,4	40,4
Input power	kW	1,6	2,3	2,3	3,0	4,2	5,0	6,1	8,5	10,1
Cooling total input current	A	4,0	4,0	6,0	7,0	9,0	10,0	13,0	17,0	19,0
EER	W/W	3,98	3,47	4,52	4,51	4,18	4,08	4,49	4,15	4,01
Water flow rate source side	l/h	1346	1782	2178	2870	3759	4312	5763	7501	8611
Pressure drop source side	kPa	13	16	19	20	24	27	28	37	44
Water flow rate system side	l/h	1085	1396	1798	2367	3058	3492	4748	6098	6964
Pressure drop system side	kPa	9	11	13	14	16	18	20	24	29
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,9	9,5	12,4	16,4	20,9	24,0	32,7	41,7	47,6
Input power	kW	2,1	2,4	3,0	4,0	5,2	6,1	8,1	10,5	12,3
Heating total input current	A	4,8	4,8	6,6	8,3	10,0	12,0	16,0	20,0	23,0
COP	W/W	3,84	3,96	4,08	4,07	4,01	3,94	4,05	3,97	3,87
Water flow rate source side	l/h	1714	2086	2759	3635	4611	5291	7248	9196	10445
Pressure drop source side	kPa	34	34	46	43	50	59	52	62	73
Water flow rate system side	l/h	1364	1644	2151	2842	3616	4165	5669	7217	8246
Pressure drop system side	kPa	20	18	28	28	32	38	35	43	51

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Technical data WRL (H°) - (230V ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,3	7,9	10,3	-	-	-	-	-	-
Input power	kW	1,7	1,9	2,4	-	-	-	-	-	-
Cooling total input current	A	9,0	11,0	14,0	-	-	-	-	-	-
EER	W/W	3,74	4,13	4,28	-	-	-	-	-	-
Water flow rate source side	l/h	1363	1678	2179	-	-	-	-	-	-
Pressure drop source side	kPa	14	16	19	-	-	-	-	-	-
Water flow rate system side	l/h	1085	1362	1781	-	-	-	-	-	-
Pressure drop system side	kPa	9	10	13	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,9	9,9	12,6	-	-	-	-	-	-
Input power	kW	2,1	2,6	3,3	-	-	-	-	-	-
Heating total input current	A	10,0	13,0	17,0	-	-	-	-	-	-
COP	W/W	3,85	3,89	3,82	-	-	-	-	-	-
Water flow rate source side	l/h	1717	2173	2745	-	-	-	-	-	-
Pressure drop source side	kPa	34	36	46	-	-	-	-	-	-
Water flow rate system side	l/h	1366	1723	2186	-	-	-	-	-	-
Pressure drop system side	kPa	20	22	29	-	-	-	-	-	-

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

WRL - (H°) - (400V 3N ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 23 °C / 18 °C (1)										
Cooling capacity	kW	8,3	10,0	13,5	17,5	23,9	27,4	34,9	47,8	54,5
Input power	kW	1,6	1,9	2,4	3,3	4,4	5,2	6,6	9,0	10,7
Cooling total input current	A	4,1	3,0	6,0	7,6	9,2	10,0	14,0	17,0	19,0
EER	W/W	5,22	5,34	5,54	5,35	5,39	5,25	5,31	5,32	5,11
Water flow rate source side	l/h	1681	2039	2719	3547	4844	5557	7089	9679	11092
Pressure drop source side	kPa	20	21	30	31	40	45	42	62	73
Water flow rate system side	l/h	1428	1737	2330	3022	4136	4730	6040	8270	9438
Pressure drop system side	kPa	16	17	22	23	29	33	32	44	53
Heating performance 30 °C / 35 °C (2)										
Heating capacity	kW	8,1	10,1	13,0	17,0	22,6	25,8	34,1	45,0	50,8
Input power	kW	1,6	1,9	2,5	3,2	4,3	5,1	6,4	8,7	10,3
Heating total input current	A	3,7	3,7	5,2	6,4	8,4	9,7	12,0	16,0	19,0
COP	W/W	5,03	5,38	5,29	5,33	5,24	5,06	5,31	5,18	4,91
Water flow rate source side	l/h	1397	1751	2246	2934	3893	4456	5888	7770	8761
Pressure drop source side	kPa	21	20	30	30	37	43	38	50	58
Water flow rate system side	l/h	1901	2418	3098	4045	5363	6102	8125	10710	11951
Pressure drop system side	kPa	42	46	58	53	68	78	65	84	95

(1) Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

WRL (H°) - (230V ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
Cooling performance 23 °C / 18 °C (1)										
Cooling capacity	kW	8,3	10,1	13,3	-	-	-	-	-	-
Input power	kW	1,6	2,0	2,5	-	-	-	-	-	-
Cooling total input current	A	8,1	11,0	14,0	-	-	-	-	-	-
EER	W/W	5,05	5,18	5,27	-	-	-	-	-	-
Water flow rate source side	l/h	1690	2070	2699	-	-	-	-	-	-
Pressure drop source side	kPa	22	24	29	-	-	-	-	-	-
Water flow rate system side	l/h	1428	1755	2295	-	-	-	-	-	-
Pressure drop system side	kPa	16	17	22	-	-	-	-	-	-
Heating performance 30 °C / 35 °C (2)										
Heating capacity	kW	8,2	10,2	13,1	-	-	-	-	-	-
Input power	kW	1,6	1,9	2,6	-	-	-	-	-	-
Heating total input current	A	8,1	9,7	13,0	-	-	-	-	-	-
COP	W/W	5,05	5,27	5,01	-	-	-	-	-	-
Water flow rate source side	l/h	1409	1767	2263	-	-	-	-	-	-
Pressure drop source side	kPa	21	23	31	-	-	-	-	-	-
Water flow rate system side	l/h	1919	2430	3082	-	-	-	-	-	-
Pressure drop system side	kPa	42	45	58	-	-	-	-	-	-

(1) Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL - (H°) - (400V 3N ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,64	3,39	4,31	4,53	4,20	4,13	4,81	4,49	4,36
Seasonal efficiency	%	142,7%	132,4%	169,4%	178,1%	165,1%	162,3%	189,4%	176,5%	171,4%
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	10	12	16	21	26	31	42	53	61
ηsh	%	141.0%	145.0%	151.0%	152.0%	151.0%	150.0%	175.0%	173.0%	167.0%
SCOP	W/W	3,73	3,83	3,98	4,00	3,98	3,95	4,58	4,53	4,38
Efficiency energy class		A++	A++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (3)										
Pdesignh	kW	11	14	17	23	30	35	45	60	68
ηsh	%	195.0%	210.0%	207.0%	212.0%	211.0%	205.0%	233.0%	226.0%	212.0%
SCOP	W/W	5,08	5,45	5,38	5,50	5,48	5,33	6,03	5,85	5,50
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL - (H°) - (230V ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,48	3,80	4,15	-	-	-	-	-	-
Seasonal efficiency	%	136,2%	148,8%	163,1%	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	10	13	16	-	-	-	-	-	-
ηsh	%	142.0%	145.0%	142.0%	-	-	-	-	-	-
SCOP	W/W	3,75	3,83	3,75	-	-	-	-	-	-
Efficiency energy class		A++	A++	A++	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (3)										
Pdesignh	kW	11	14	17	-	-	-	-	-	-
ηsh	%	198.0%	212.0%	199.0%	-	-	-	-	-	-
SCOP	W/W	5,15	5,50	5,18	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL - (H ABP) - (400V 3N ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	4,47	4,07	5,37	5,40	4,96	4,85	5,17	4,75	4,67
Seasonal efficiency	%	175,9%	159,7%	211,8%	213,1%	195,3%	190,9%	203,7%	186,8%	183,9%
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	10	12	16	21	26	30	41	52	60
ηsh	%	151.0%	155.0%	161.0%	161.0%	157.0%	155.0%	173.0%	170.0%	166.0%
SCOP	W/W	3,98	4,08	4,23	4,23	4,13	4,08	4,53	4,45	4,35
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (3)										
Pdesignh	kW	10	13	17	22	30	34	44	59	66
ηsh	%	223.0%	238.0%	222.0%	237.0%	222.0%	210.0%	232.0%	230.0%	216.0%
SCOP	W/W	5,78	6,15	5,75	6,13	5,75	5,45	6,00	5,95	5,60
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL - (H ABP) - (230V ~ 50Hz)

Size			026	031	041	051	071	081	101	141	161
Power supply: M											
SEER - 12/7 (EN14825: 2018) (1)											
SEER		W/W	4,21	4,63	5,14	-	-	-	-	-	-
Seasonal efficiency		%	165,5%	182,3%	202,7%	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)											
Pdesignh		kW	10	13	16	-	-	-	-	-	-
ηsh		%	152.0%	156.0%	152.0%	-	-	-	-	-	-
SCOP		W/W	4,00	4,10	4,00	-	-	-	-	-	-
Efficiency energy class			A+++	A+++	A+++	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (3)											
Pdesignh		kW	11	13	17	-	-	-	-	-	-
ηsh		%	228.0%	243.0%	214.0%	-	-	-	-	-	-
SCOP		W/W	5,90	6,28	5,55	-	-	-	-	-	-
Efficiency energy class			A+++	A+++	A+++	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			026	031	041	051	071	081	101	141	161
Power supply: °											
Electric data											
Maximum current (FLA)		A	8,5	9,0	11,0	13,0	20,0	23,0	23,0	37,0	43,0
Peak current (LRA)		A	34,0	37,0	50,0	66,0	75,0	75,0	88,0	91,0	94,0

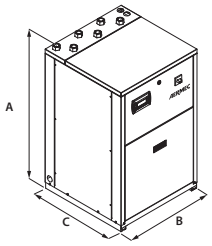
Size			026	031	041	051	071	081	101	141	161
Power supply: M											
Electric data											
Maximum current (FLA)		A	19,0	22,0	26,0	-	-	-	-	-	-
Peak current (LRA)		A	63,0	84,0	99,0	-	-	-	-	-	-

GENERAL TECHNICAL DATA

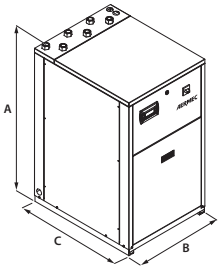
Size			026	031	041	051	071	081	101	141	161
Compressor											
Type	°,A	type					Scroll				
Number	°,A	no.	1	1	1	1	1	1	2	2	2
Circuits	°,A	no.	1	1	1	1	1	1	1	1	1
Refrigerant	°,A	type					R410A				
Source side heat exchanger											
Type	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
System side heat exchanger											
Type	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
Source side hydraulic connections											
Connections (in/out)	°,A	Type					Gas - F				
Sizes (in/out)	°,A	Ø					1" 1/4				
System side hydraulic connections											
Connections (in/out)	°,A	Type					Gas - F				
Sizes (in/out)	°,A	Ø					1" 1/4				
Sound data calculated in cooling mode (1)											
Sound power level	°,A	dB(A)	55,5	57,0	57,5	59,0	60,0	60,5	62,0	63,0	63,5
Sound pressure level (10 m)	°	dB(A)	24,3	25,8	26,3	27,7	28,7	29,2	30,6	31,6	32,1
	A	dB(A)	24,1	25,6	26,1	27,6	28,6	29,1	30,5	31,5	32,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

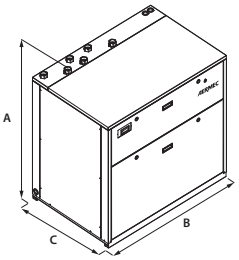
DIMENSIONS



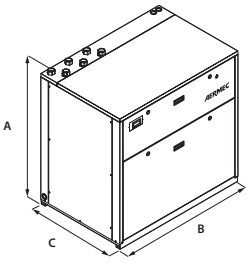
WRL 026-041



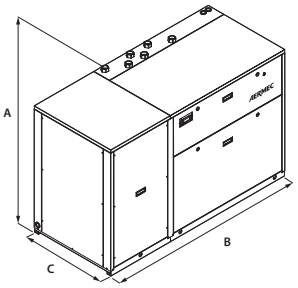
WRL 051-081



WRL 101-161



WRL-A 026-081



WRL-A 101-161

Size			026	031	041	051	071	081	101	141	161
Dimensions and weights											
A	°	mm	976	976	976	1126	1126	1126	1126	1126	1126
	A	mm	1126	1126	1126	1126	1126	1126	1126	1126	1126
B	°	mm	605	605	605	605	605	605	1155	1155	1155
	A	mm	1155	1155	1155	1155	1155	1155	1755	1755	1755
C	°	mm	603	603	603	773	773	773	773	773	773
	A	mm	773	773	773	773	773	773	773	773	773
Empty weight	°	kg	120	125	130	150	170	180	260	270	280
	A	kg	190 (1)	200 (1)	210 (1)	230 (1)	250 (1)	260 (1)	340 (1)	350 (1)	360 (1)

(1) Units with two heat exchangers and storage tank, without pumps

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

WRL 026 -161

Water cooled heat pump reversible water side

Cooling capacity 6,6 ÷ 44,2 kW
Heating capacity 7,5 ÷ 48,0 kW

- **High efficiency**
- **Suitable for geothermal applications**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
In the configuration with desuperheater, it is also possible to produce free-hot water.
The technological choices made, always oriented to the highest quality, ensure very easy installation.
In fact, the electrical and hydraulic connections are all located at the top of the unit making it easy to install and maintain, also reducing the technical areas and their placement in the smallest space possible.

VERSIONS

° Without storage tank
A With storage tank

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.
The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.
The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).
To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).
Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.
The regulation using an outside air temperature sensor (accessory) allows a dynamic control of the water temperature produced by increasing the energy efficiency of the system.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
KSAE: External air sensor.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
VT: Anti-vibration supports.
VPL: Pressure switch valve complete with connections, piloted directly in relation to condensation pressure; the valve modulates the volume of water needed to cool the condenser, thereby maintaining the condensation temperature unchanged.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

ACCESSORIES COMPATIBILITY

Model	Ver	026	031	041	051	071	081	101	141	161
AERBAC-MODU	°,A	•	•	•	•	•	•	•	•	•
AERSET	°,A	•	•	•	•	•	•	•	•	•
KSAE	°,A	•	•	•	•	•	•	•	•	•
MODU-485BL	°,A	•	•	•	•	•	•	•	•	•
PR3	°,A	•	•	•	•	•	•	•	•	•
SGD	°,A	•	•	•	•	•	•	•	•	•

Antivibration

Version	Integrated hydronic kit, source side	System side - pumps	026	031	041	051	071
°	°	°	VT9	VT9	VT9	VT9	VT9
°	B, I, U, V	N, P	VT9	VT9	VT9	VT9	VT9
A	°, B, I, U, V	°, N, P	VT15	VT15	VT15	VT15	VT15

Version	Integrated hydronic kit, source side	System side - pumps	081	101	141	161
°	°	°	VT9	VT15	VT15	VT15
°	U	N, P	VT9	VT15	VT15	VT15
°	B, I, V	N, P	VT9	VT15	VT15	-
A	°, B, I, U, V	°, N, P	VT15	VT15A	VT15A	VT15A

- not available

PR4

Model	Ver	026	031	041	051	071	081	101	141	161
PR4	°,A	•	•	•	•	•	•	•	•	•

Pressure switch valve

Ver	026	031	041	051	071	081	101	141	161
°, A	VPL1	VPL1	VPL2	VPL2	VPL3	VPL3	VPL4	VPL4	VPL4

CONFIGURATOR

Configuration options

Field		Description
1,2,3		**WRL**
4,5,6		**Size** 026, 031, 041, 051, 071, 081, 101, 141, 161
7		**Operating field**
	Y	Low temperature mechanic thermostatic valve (1)
	°	Standard mechanic thermostatic valve (2)
8		**Model**
	E	Evaporating unit (3)
	°	Heat pump reversible on the water side
9		**Version**
	°	Without storage tank
	A	With storage tank
10		**Heat recovery**
	D	With desuperheater
	°	Without heat recovery
11		**Integrated hydronic kit, source side**
	B	On-off pump (4)
	I	Inverter pump (5)
	U	Pump high head (6)
	V	2-way modulating valve
	°	Without hydronic kit
12		**System side - pumps**
	N	Pump high head (6)
	P	On-off pump (4)
	°	Without hydronic kit
13		**Recovery side - pumps**
	°	Without Pumps
14		**Soft-start**
	S	With soft-start
	°	Without soft-start
15		**Power supply**
	M	230V~ 50Hz (7)
	°	400V~3N 50Hz

(1) Water produced from 4 °C ÷ - 8 °C
(2) Water produced from 4 °C ÷ 18 °C
(3) Shipped with holding charge only
(4) For size WRL 051 ÷ 081. The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.
(5) Only for WRL 026 ÷ 081
(6) Only for WRL 101 ÷ 161
(7) Only for WRL 026 ÷ 041

PERFORMANCE SPECIFICATIONS

WRL - °

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,6	8,3	11,3	-	-	-	-	-	-
Input power	kW	1,5	1,8	2,5	-	-	-	-	-	-
Cooling total input current	A	7,2	9,2	12,0	-	-	-	-	-	-
EER	W/W	4,30	4,50	4,56	-	-	-	-	-	-
Water flow rate source side	l/h	1386	1731	2359	-	-	-	-	-	-
Pressure drop source side	kPa	28	29	36	-	-	-	-	-	-
Water flow rate system side	l/h	1137	1430	1955	-	-	-	-	-	-
Pressure drop system side	kPa	15	17	23	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,6	9,4	12,5	-	-	-	-	-	-
Input power	kW	2,0	2,4	3,1	-	-	-	-	-	-
Heating total input current	A	9,3	12,0	15,0	-	-	-	-	-	-
COP	W/W	3,86	3,89	4,05	-	-	-	-	-	-
Water flow rate source side	l/h	1662	2053	2778	-	-	-	-	-	-
Pressure drop source side	kPa	32	35	46	-	-	-	-	-	-
Water flow rate system side	l/h	1319	1626	2171	-	-	-	-	-	-
Pressure drop system side	kPa	25	26	30	-	-	-	-	-	-

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,7	8,4	11,3	14,7	19,3	21,9	29,5	38,5	43,9
Input power	kW	1,5	1,8	2,6	3,1	4,0	4,7	6,2	8,1	9,5
Cooling total input current	A	3,1	2,6	4,9	6,4	7,4	9,1	13,0	15,0	18,0
EER	W/W	4,49	4,74	4,39	4,70	4,77	4,63	4,72	4,75	4,62
Water flow rate source side	l/h	1396	1735	2375	3054	3978	4538	6100	7947	9077
Pressure drop source side	kPa	28	30	35	32	40	46	42	57	66
Water flow rate system side	l/h	1154	1447	1955	2541	3320	3770	5078	6638	7555
Pressure drop system side	kPa	15	17	23	21	26	30	25	34	38
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,7	9,3	12,6	16,3	21,0	24,0	32,5	42,1	48,0
Input power	kW	1,9	2,3	3,2	4,0	5,1	5,9	8,0	10,2	12,0
Heating total input current	A	4,1	3,4	6,1	8,2	9,2	11,0	16,0	18,0	23,0
COP	W/W	3,93	4,04	3,94	4,05	4,17	4,04	4,06	4,14	4,02
Water flow rate source side	l/h	1680	2053	2767	3602	4708	5325	7200	9414	10671
Pressure drop source side	kPa	32	34	46	42	52	60	50	68	76
Water flow rate system side	l/h	1326	1607	2181	2819	3647	4159	5629	7284	8315
Pressure drop system side	kPa	25	26	30	27	34	39	36	48	55

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL - °

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,77	4,13	4,27	-	-	-	-	-	-
Seasonal efficiency	%	147,9%	162,0%	167,6%	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	11	14	17	-	-	-	-	-	-
SCOP	W/W	5,15	5,50	5,18	-	-	-	-	-	-
ηsh	%	198.0%	212.0%	199.0%	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,93	4,29	4,13	4,51	4,66	4,52	4,93	4,93	4,75
Seasonal efficiency	%	154,0%	168,5%	162,1%	177,3%	183,3%	177,8%	194,1%	194,0%	187,1%
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	11	14	17	23	30	35	45	60	68
SCOP	W/W	5,08	5,45	5,38	5,50	5,48	5,33	6,03	5,85	5,50
ηsh	%	195.0%	210.0%	207.0%	212.0%	211.0%	205.0%	233.0%	226.0%	212.0%
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

PERFORMANCE SPECIFICATIONS

WRL ABP

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,7	8,4	11,4	-	-	-	-	-	-
Input power	kW	1,5	1,8	2,4	-	-	-	-	-	-
Cooling total input current	A	7,8	9,9	12,0	-	-	-	-	-	-
EER	W/W	4,54	4,75	4,80	-	-	-	-	-	-
Water flow rate source side	l/h	1386	1731	2359	-	-	-	-	-	-
Useful head source side	kPa	59	54	36	-	-	-	-	-	-
Water flow rate system side	l/h	1137	1430	1955	-	-	-	-	-	-
Useful head system side	kPa	74	70	56	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,5	9,3	12,4	-	-	-	-	-	-
Input power	kW	1,9	2,3	3,0	-	-	-	-	-	-
Heating total input current	A	9,9	13,0	15,0	-	-	-	-	-	-
COP	W/W	3,97	4,01	4,17	-	-	-	-	-	-
Water flow rate source side	l/h	1662	2053	2778	-	-	-	-	-	-
Useful head source side	kPa	52	43	16	-	-	-	-	-	-
Water flow rate system side	l/h	1319	1626	2171	-	-	-	-	-	-
Useful head system side	kPa	63	59	45	-	-	-	-	-	-

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,8	8,5	11,4	14,9	19,4	22,0	29,8	38,9	44,2
Input power	kW	1,4	1,7	2,5	3,1	3,9	4,6	6,3	8,1	9,4
Cooling total input current	A	3,7	3,3	5,6	7,5	8,6	10,0	14,0	17,0	20,0
EER	W/W	4,75	5,02	4,62	4,84	4,93	4,78	4,75	4,79	4,69
Water flow rate source side	l/h	1396	1735	2375	3054	3978	4538	6100	7947	9077
Useful head source side	kPa	59	53	36	63	43	28	116	137	125
Water flow rate system side	l/h	1154	1447	1955	2541	3320	3770	5078	6638	7555
Useful head system side	kPa	74	70	56	79	66	56	148	164	157
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,6	9,2	12,5	16,1	20,9	23,8	32,2	41,6	47,6
Input power	kW	1,9	2,2	3,1	3,9	4,9	5,8	8,0	10,1	11,8
Heating total input current	A	4,7	4,0	6,7	9,3	10,0	13,0	18,0	20,0	25,0
COP	W/W	4,05	4,17	4,05	4,11	4,24	4,09	4,01	4,13	4,04
Water flow rate source side	l/h	1680	2053	2767	3602	4708	5325	7200	9414	10671
Useful head source side	kPa	52	43	16	46	20	4	90	121	109
Water flow rate system side	l/h	1326	1607	2181	2819	3647	4159	5629	7284	8315
Useful head system side	kPa	63	59	46	70	54	41	130	148	138

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

Size			026	031	041	051	071	081	101	141	161
Power supply: M											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	°	kW	6,6	8,3	11,3	-	-	-	-	-	-
	A	kW	6,7	8,4	11,4	-	-	-	-	-	-
Input power	°	kW	1,5	1,8	2,5	-	-	-	-	-	-
	A	kW	1,5	1,8	2,4	-	-	-	-	-	-
Cooling total input current	°	A	7,2	9,2	12,0	-	-	-	-	-	-
	A	A	7,8	9,9	12,0	-	-	-	-	-	-
EER	°	W/W	4,30	4,50	4,56	-	-	-	-	-	-
	A	W/W	4,54	4,75	4,80	-	-	-	-	-	-
Water flow rate system side	°,A	l/h	1137	1430	1955	-	-	-	-	-	-
Pressure drop system side	°,A	kPa	15	17	23	-	-	-	-	-	-

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			026	031	041	051	071	081	101	141	161
Power supply: °											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	°	kW	6,7	8,4	11,3	14,7	19,3	21,9	29,5	38,5	43,9
	A	kW	6,8	8,5	11,4	14,9	19,4	22,0	29,8	38,9	44,2
Input power	°	kW	1,5	1,8	2,6	3,1	4,0	4,7	6,2	8,1	9,5
	A	kW	1,4	1,7	2,5	3,1	3,9	4,6	6,3	8,1	9,4
Cooling total input current	°	A	3,1	2,6	4,9	6,4	7,4	9,1	13,0	15,0	18,0
	A	A	3,7	3,3	5,6	7,5	8,6	10,0	14,0	17,0	20,0
EER	°	W/W	4,49	4,74	4,39	4,70	4,77	4,63	4,72	4,75	4,62
	A	W/W	4,75	5,02	4,62	4,84	4,93	4,78	4,75	4,79	4,69
Water flow rate system side	°,A	l/h	1154	1447	1955	2541	3320	3770	5078	6638	7555
Pressure drop system side	°,A	kPa	15	17	23	21	26	30	25	34	38

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL ABP

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	4,73	5,20	5,22	-	-	-	-	-	-
Seasonal efficiency	%	186,3%	205,1%	205,6%	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	11	13	17	-	-	-	-	-	-
SCOP	W/W	5,90	6,28	5,55	-	-	-	-	-	-
ηsh	%	228.0%	243.0%	214.0%	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	5,00	5,37	5,22	5,38	5,62	5,30	5,31	5,27	5,21
Seasonal efficiency	%	196,9%	211,7%	205,8%	212,0%	221,7%	208,8%	209,2%	207,7%	205,5%
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	10	13	17	22	30	34	44	59	66
SCOP	W/W	5,78	6,15	5,75	6,13	5,75	5,45	6,00	5,95	5,60
ηsh	%	223.0%	238.0%	222.0%	237.0%	222.0%	210.0%	232.0%	230.0%	216.0%
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Electric data

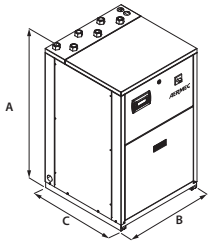
Size			026	031	041	051	071	081	101	141	161
Electric data											
Maximum current (FLA)	°	A	8,0	8,0	15,0	17,0	21,0	22,0	32,0	40,0	41,0
	M	A	18,0	21,0	34,0	-	-	-	-	-	-
Peak current (LRA)	°	A	34,0	37,0	65,0	75,0	75,0	75,0	90,0	94,0	95,0
	M	A	63,0	84,0	119,0	-	-	-	-	-	-

GENERAL TECHNICAL DATA

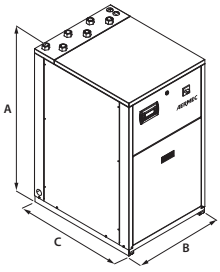
Size			026	031	041	051	071	081	101	141	161
Compressor											
Type	°,A	type					Scroll				
Number	°,A	no.	1	1	1	1	1	1	2	2	2
Circuits	°,A	no.	1	1	1	1	1	1	1	1	1
Refrigerant	°,A	type					R410A				
Refrigerant charge (1)	°,A	kg	0,8	0,9	1,2	1,6	1,9	2,0	3,6	4,4	4,7
Source side heat exchanger											
Type	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
System side heat exchanger											
Type	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
Source side hydraulic connections											
Connections (in/out)	°,A	Type					Gas-F				
Sizes (in/out)	°,A	Ø					1"1/4				
System side hydraulic connections											
Connections (in/out)	°,A	Type					Gas-F				
Sizes (in/out)	°,A	Ø					1"1/4				
Sound data calculated in cooling mode (2)											
Sound power level	°,A	dB(A)	55,5	57,0	57,5	59,0	60,0	60,5	62,0	63,0	63,5
Sound pressure level (10 m)	°	dB(A)	24,3	25,8	26,3	27,7	28,7	29,2	30,6	31,6	32,1
	A	dB(A)	24,1	25,6	26,1	27,6	28,6	29,1	30,5	31,5	32,0

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

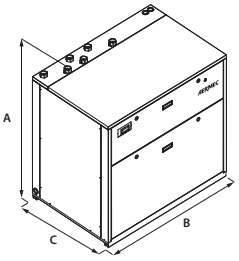
DIMENSIONS



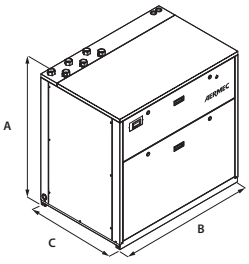
WRL 026-041



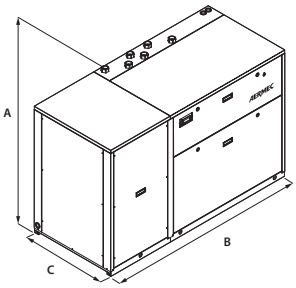
WRL 051-081



WRL 101-161



WRL-A 026-081



WRL-A 101-161

Size			026	031	041	051	071	081	101	141	161
Dimensions and weights											
A	°	mm	976	976	976	1126	1126	1126	1126	1126	1126
	A	mm	1126	1126	1126	1126	1126	1126	1126	1126	1126
B	°	mm	605	605	605	605	605	605	1155	1155	1155
	A	mm	1155	1155	1155	1155	1155	1155	1755	1755	1755
C	°	mm	603	603	603	773	773	773	773	773	773
	A	mm	773	773	773	773	773	773	773	773	773
Empty weight	°	kg	120	125	130	150	170	180	260	270	280
	A	kg	190 (1)	200 (1)	210 (1)	230 (1)	250 (1)	260 (1)	340 (1)	350 (1)	360 (1)

(1) Units with two heat exchangers and storage tank, without pumps

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

WRL 180H - 650H

Reversible water-cooled heat pump, gas side

Cooling capacity 44,9 ÷ 157,4 kW
Heating capacity 53,0 ÷ 183,3 kW

- **High efficiency**
- **Suitable for geothermal applications**
- **Production of hot water up to 55 °C**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
In the configuration with desuperheater, it is also possible to produce free-hot water.
The technological choices made, always oriented to the highest quality, ensure very easy installation. In fact the electrical and hydraulic connections are all located in the upper part of the unit, facilitating the installation and maintenance operations and also reducing the technical gaps and their position in as little space as possible.

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.
The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.
The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).
To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).

Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

CONTROL MPC

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
KSAE: External air sensor.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SSM: Probe to be used with the mixer valve in applications with radiant panels. The probe requires the VMF-CRP area accessory as well.
TAH: Ambient terminal with temperature and humidity probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump and dehumidifier consent.
TAT: Ambient terminal with temperature probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump.
VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the

VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

ACCESSORIES COMPATIBILITY

Model	Ver	180	200	300	400	500	550	600	650
AER485P1	°	•	•	•	•	•	•	•	•
AERNET	°	•	•	•	•	•	•	•	•
KSAE	°	•	•	•	•	•	•	•	•
PGD1	°	•	•	•	•	•	•	•	•
SGD	°	•	•	•	•	•			
SSM	°	•	•	•	•	•	•	•	•
TAH	°	•	•	•	•	•	•	•	•
TAT	°	•	•	•	•	•	•	•	•
VMF-CRP	°	•	•	•	•	•	•	•	•

Antivibration

System side - pumps	Integrated hydronic kit, source side	180	200	300	400	500	550	600	650
°, N, P	°, B, F, I, U, V	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15

PR4

Model	Ver	180	200	300	400	500	550	600	650
PR4	°	•	•	•	•	•	•	•	•

CONFIGURATOR

Field	Description
1,2,3	**WRL**
4,5,6	**Size** 180, 200, 300, 400, 500, 550, 600, 650
7	**Operating field**
X	Electronic thermostatic expansion valve
Y	Low temperature mechanic thermostatic valve (1)
°	Standard mechanic thermostatic valve (2)
8	**Model**
H	Reversible heat pump, gas side
9	**Version**
°	Standard
10	**Heat recovery**
D	With desuperheater
°	Without heat recovery
11	**Integrated hydronic kit, source side**
B	On-off pump
F	Single low-head inverter pump
I	High-head inverter pump
U	Pump high head
	Applications with bore hole water
V	2-way modulating valve
°	Without hydronic kit
12	**System side - pumps**
N	Pump high head
P	Pump low head
°	Without hydronic kit
13	**Field for future development**
°	Field for future development
14	**Soft-start**
S	With soft-start
°	Without soft-start
15	**Power supply**
°	400V ~ 3N 50Hz

(1) Water produced from 4 °C ÷ - 8 °C
(2) Water produced from 4 °C ÷ 18 °C

PERFORMANCE SPECIFICATIONS

WRL - °

Size			180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	°	kW	44,9	59,6	64,8	79,5	93,0	120,1	140,1	157,4
Input power	°	kW	10,8	14,7	16,3	18,6	20,1	27,6	31,4	35,8
Cooling total input current	°	A	20,0	25,0	28,0	32,0	36,0	52,0	60,0	69,0
EER	°	W/W	4,15	4,06	3,97	4,27	4,63	4,34	4,46	4,39
Water flow rate source side	°	l/h	9520	12659	13823	16682	19331	25177	29250	32920
Pressure drop source side	°	kPa	31	52	51	74	34	56	57	71
Water flow rate system side	°	l/h	7732	10274	11168	13711	16013	20686	24139	27112
Pressure drop system side	°	kPa	22	37	36	52	25	40	40	38
Heating performance 40 °C / 45 °C (2)										
Heating capacity	°	kW	53,0	70,9	76,6	92,6	106,4	143,7	164,2	183,3
Input power	°	kW	12,9	17,7	19,1	22,6	24,0	33,1	37,2	42,7
Heating total input current	°	A	23,0	29,0	31,0	37,0	41,0	56,0	64,0	74,0
COP	°	W/W	4,10	4,00	4,01	4,10	4,44	4,34	4,41	4,30
Water flow rate source side	°	l/h	11777	15734	17011	20840	24211	32704	37512	41689
Pressure drop source side	°	kPa	49	89	92	132	61	107	101	126
Water flow rate system side	°	l/h	9190	12277	13264	16046	18452	24913	28485	31788
Pressure drop system side	°	kPa	30	52	49	72	32	58	56	70

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ELECTRIC DATA

Size			180	200	300	400	500	550	600	650
Electric data										
Maximum current (FLA)	°	A	32,6	41,8	45,2	52,1	59,0	99,0	112,0	125,0
Peak current (LRA)	°	A	119,0	123,0	125,0	167,0	174,0	265,0	310,0	323,0

ENERGY INDICES (REG. 2016/2281 EU)

Size			180	200	300	400	500	550	600	650
SEER - 12/7 (EN14825: 2018) (1)										
SEER	°	W/W	4,25	4,04	4,15	4,38	5,04	4,62	4,80	4,69
Seasonal efficiency	°	%	166,9%	158,5%	162,8%	172,3%	198,4%	181,7%	188,9%	184,5%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)										
Pdesignh	°	kW	68	91	98	119	137	185	212	236
ηsh	°	%	173.0%	170.0%	170.0%	175.0%	189.0%	186.0%	189.0%	184.0%
SCOP	°	W/W	4,53	4,45	4,45	4,58	4,93	4,85	4,93	4,80
Efficiency energy class	°		A+++	-	-	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)										
Pdesignh	°	kW	79	-	-	-	-	-	-	-
ηsh	°	%	222.0%	-	-	-	-	-	-	-
SCOP	°	W/W	5,75	-	-	-	-	-	-	-
Efficiency energy class	°		A+++	-	-	-	-	-	-	-

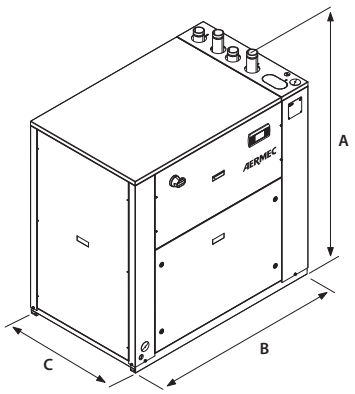
(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

GENERAL TECHNICAL DATA

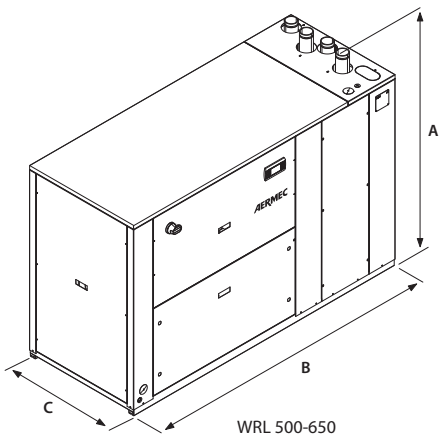
Size			180	200	300	400	500	550	600	650
Compressor										
Type	°	type				Scroll				
Compressor regulation	°	Type				On-Off				
Number	°	no.	2	2	2	2	2	2	2	2
Circuits	°	no.	1	1	1	1	1	1	1	1
Refrigerant	°	type				R410A				
Source side heat exchanger										
Type	°	type				Brazed plate				
Number	°	no.	1	1	1	1	1	1	1	1
System side heat exchanger										
Type	°	type				Brazed plate				
Number	°	no.	1	1	1	1	1	1	1	1
Source side hydraulic connections										
Connections (in/out)	°	Type				Grooved joints				
Sizes (in/out)	°	Ø	2"	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
System side hydraulic connections										
Connections (in/out)	°	Type				Grooved joints				
Sizes (in/out)	°	Ø	2"	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
Sound data calculated in cooling mode (1)										
Sound power level	°	dB(A)	61,1	61,8	62,9	71,1	67,6	79,1	79,1	79,1
Sound pressure level (10 m)	°	dB(A)	29,6	30,3	31,4	39,6	36,0	47,5	47,5	47,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



WRL 180-400



WRL 500-650

Size			180	200	300	400	500	550	600	650
Dimensions and weights										
A	°	mm	1380	1380	1380	1380	1380	1380	1380	1380
B	°	mm	1320	1320	1320	1320	2060	2060	2060	2060
C	°	mm	845	845	845	845	845	845	845	845
Empty weight	°	kg	370	370	381	388	522	598	708	753

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

WRL 180 - 650

Water cooled heat pump reversible water side

Cooling capacity 49 ÷ 174 kW
Heating capacity 55 ÷ 192 kW

- **High efficiency**
- **Suitable for geothermal applications**
- **Production of hot water up to 55 °C**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
In the configuration with desuperheater, it is also possible to produce free-hot water.
The technological choices made, always oriented to the highest quality, ensure very easy installation. In fact the electrical and hydraulic connections are all located in the upper part of the unit, facilitating the installation and maintenance operations and also reducing the technical gaps and their position in as little space as possible.

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.
The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.
The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).
To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).

Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

CONTROL MPC

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
KSAE: External air sensor.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SSM: Probe to be used with the mixer valve in applications with radiant panels. The probe requires the VMF-CRP area accessory as well.
TAH: Ambient terminal with temperature and humidity probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump and dehumidifier consent.
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VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

ACCESSORIES COMPATIBILITY

Ver	180	200	300	400	500	550	600	650
Model: E, K, °								
°	AER485P1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SSM, TAH, TAT, VMF-CRP

PR4

Model	Ver	180	200	300	400	500	550	600	650
PR4	°,E,K	•	•	•	•	•	•	•	•

Antivibration

Integrated hydronic kit, source side	System side - pumps	180	200	300	400	500	550	600	650
°, B, F, I, U, V	°, N, P	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15

CONFIGURATOR

Field	Description
1,2,3	**WRL**
4,5,6	**Size** 180, 200, 300, 400, 500, 550, 600, 650
7	**Operating field**
X	Electronic thermostatic expansion valve
Y	Low temperature mechanic thermostatic valve (1)
°	Standard mechanic thermostatic valve (2)
8	**Model**
E	Evaporating unit (3)
K	Heat pump reversible on the water side with low pressure drops
°	Heat pump reversible on the water side
9	**Version**
°	Standard
10	**Heat recovery**
D	With desuperheater
°	Without heat recovery
11	**Integrated hydronic kit, source side**
B	On-off pump
F	Single low-head inverter pump
I	High-head inverter pump
U	Pump high head
	Applications with bore hole water
V	2-way modulating valve
°	Without hydronic kit
12	**System side - pumps**
N	Pump high head
P	Pump low head
°	Without hydronic kit
13	**Field for future development**
°	Field for future development
14	**Soft-start**
S	With soft-start
°	Without soft-start
15	**Power supply**
°	400V~3N 50Hz

(1) Water produced from 4 °C ÷ - 8 °C
(2) Water produced from 4 °C ÷ 18 °C
(3) Shipped with holding charge only

PERFORMANCE SPECIFICATIONS

WRL - E

Size		180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	46,0	60,1	69,6	80,1	90,6	121,3	140,2	158,7
Input power	kW	12,4	16,0	18,5	19,8	23,1	29,6	34,1	38,5
Cooling total input current	A	23,0	29,0	32,0	36,0	42,0	56,0	65,0	74,0
EER	W/W	3,71	3,76	3,76	4,05	3,92	4,10	4,11	4,12
Water flow rate system side	l/h	7903	10326	11958	13762	15566	20841	24088	27266
Pressure drop system side	kPa	23	39	39	56	25	42	47	57

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

WRL - °

Size		180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	49,7	64,3	74,4	85,9	99,8	129,5	150,1	169,0
Input power	kW	10,8	14,4	16,8	18,3	20,4	27,0	31,0	35,7
Cooling total input current	A	20,0	25,0	29,0	62,0	36,0	51,0	59,0	68,0
EER	W/W	4,59	4,47	4,42	4,69	4,90	4,80	4,84	4,73
Water flow rate source side	l/h	10336	13418	15531	17725	20550	26664	30860	34836
Pressure drop source side	kPa	27	46	62	81	32	52	57	72
Water flow rate system side	l/h	8549	11082	12824	14822	17186	22296	25844	29025
Pressure drop system side	kPa	27	43	46	60	30	49	53	67
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	55,8	72,6	84,1	95,6	110,7	143,6	166,1	187,7
Input power	kW	13,2	17,6	20,5	22,4	24,8	32,9	37,9	43,9
Heating total input current	A	24,0	30,0	34,0	38,0	44,0	61,0	71,0	82,0
COP	W/W	4,24	4,13	4,10	4,27	4,46	4,36	4,38	4,27
Water flow rate source side	l/h	12542	16257	18813	21745	25213	32709	37914	42683
Pressure drop source side	kPa	58	93	99	129	65	105	114	144
Water flow rate system side	l/h	9685	12580	14561	16557	19196	24909	28816	32553
Pressure drop system side	kPa	24	40	55	71	28	45	50	63

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WRL - K

Size		180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	49,7	66,3	76,7	88,6	99,8	133,5	154,6	174,1
Input power	kW	10,8	14,4	16,9	18,3	20,4	26,7	30,8	35,6
Cooling total input current	A	20,0	25,0	29,0	32,0	36,0	51,0	59,0	68,0
EER	W/W	4,59	4,61	4,55	4,85	4,50	5,00	5,02	4,90
Water flow rate source side	l/h	10336	13753	15919	18173	20550	27338	31642	35716
Pressure drop source side	kPa	27	48	65	85	32	55	60	76
Water flow rate system side	l/h	8549	11414	13209	15267	17186	22965	26619	29967
Pressure drop system side	kPa	27	34	42	48	30	24	33	41
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	55,8	74,3	86,1	97,9	110,7	147,1	170,1	192,1
Input power	kW	13,2	17,5	20,5	22,2	24,8	32,3	37,3	43,1
Heating total input current	A	24,0	30,0	34,0	38,0	44,0	61,0	71,0	82,0
COP	W/W	4,24	4,24	4,20	4,40	4,46	4,56	4,56	4,46
Water flow rate source side	l/h	12542	16745	19337	22397	25213	33690	39052	43963
Pressure drop source side	kPa	58	73	90	103	65	52	71	88
Water flow rate system side	l/h	9685	12876	14904	16953	19196	25504	29507	33331
Pressure drop system side	kPa	24	42	57	74	28	48	52	66

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL °

Size		180	200	300	400	500	550	600	650
SEER - 12/7 (EN14825: 2018) (1)									
SEER	W/W	4,65	4,55	4,54	4,74	5,31	5,04	5,12	4,97
Seasonal efficiency	%	182,8%	178,9%	178,5%	186,4%	209,3%	198,7%	201,7%	195,8%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)									
Pdesignh	kW	68	91	98	119	137	185	212	236
ηsh	%	173.0%	170.0%	170.0%	175.0%	189.0%	186.0%	189.0%	184.0%
SCOP	W/W	4,53	4,45	4,45	4,58	4,93	4,85	4,93	4,80
Efficiency energy class		A+++	-	-	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)									
Pdesignh	kW	79	-	-	-	-	-	-	-
ηsh	%	222.0%	-	-	-	-	-	-	-
SCOP	W/W	5,75	-	-	-	-	-	-	-
Efficiency energy class		A+++	-	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL K

Size		180	200	300	400	500	550	600	650
SEER - 12/7 (EN14825: 2018) (1)									
SEER	W/W	4,65	4,71	4,67	4,90	5,31	5,31	5,35	5,19
Seasonal efficiency	%	182,8%	185,3%	183,6%	192,9%	209,3%	209,2%	210,9%	204,6%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)									
Pdesignh	kW	68	91	98	119	137	185	212	236
ηsh	%	173.0%	170.0%	170.0%	175.0%	189.0%	186.0%	189.0%	184.0%
SCOP	W/W	4,53	4,45	4,45	4,58	4,93	4,85	4,93	4,80
Efficiency energy class		A+++	-	-	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)									
Pdesignh	kW	79	-	-	-	-	-	-	-
ηsh	%	222.0%	-	-	-	-	-	-	-
SCOP	W/W	5,75	-	-	-	-	-	-	-
Efficiency energy class		A+++	-	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

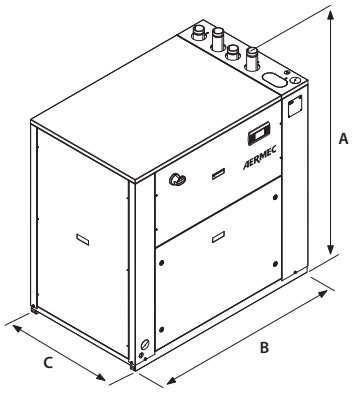
Size			180	200	300	400	500	550	600	650
Electric data										
Maximum current (FLA)	°,E,K	A	32,6	41,8	45,2	52,1	59,0	99,0	112,0	125,0
Peak current (LRA)	°,E,K	A	119,0	123,0	125,0	167,0	174,0	265,0	310,0	323,0

GENERAL TECHNICAL DATA

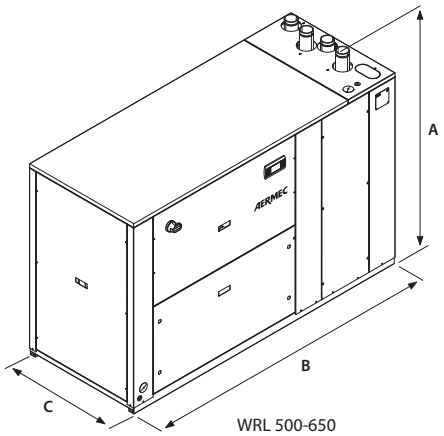
Size			180	200	300	400	500	550	600	650
Compressor										
Type	°,E,K	type	Scroll							
Compressor regulation	°,E,K	Type	On-Off							
Number	°,E,K	no.	2	2	2	2	2	2	2	2
Circuits	°,E,K	no.	1	1	1	1	1	1	1	1
Refrigerant	°,E,K	type	R410A							
Refrigerant charge (1)	°,K	kg	6,0	7,0	6,8	7,2	9,0	14,5	16,8	16,5
	E	kg	Holding charge	Holding charge	Holding charge	Holding charge	Holding charge	Holding charge	Holding charge	Holding charge
Source side heat exchanger										
Type	°,K	type	Brazed plate							
	E	type								
Number	°,K	no.	1	1	1	1	1	1	1	1
	E	no.	-	-	-	-	-	-	-	-
System side heat exchanger										
Type	°,E,K	type	Brazed plate							
Number	°,E,K	no.	1	1	1	1	1	1	1	1
Source side hydraulic connections										
Connections (in/out)	°,K	Type	Grooved joints							
	E	Type								
Sizes (in/out)	°,K	Ø	2"	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
	E	Ø								
System side hydraulic connections										
Connections (in/out)	°,E,K	Type	Grooved joints							
Sizes (in/out)	°,E,K	Ø	2"	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
Sound data calculated in cooling mode (2)										
Sound power level	°,E,K	dB(A)	61,1	61,8	62,9	71,1	67,6	79,1	79,1	79,1
Sound pressure level (10 m)	°,E,K	dB(A)	29,6	30,3	31,4	39,6	36,0	47,5	47,5	47,5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



WRL 180-400



WRL 500-650

Size			180	200	300	400	500	550	600	650
Dimensions and weights										
A	°,E,K	mm	1380	1380	1380	1380	1380	1380	1380	1380
B	°,E,K	mm	1320	1320	1320	1320	2060	2060	2060	2060
C	°,E,K	mm	845	845	845	845	845	845	845	845
Empty weight	°,K	kg	375	375	381	388	518	594	670	715
	E	kg	-	-	-	-	-	-	-	-

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WRK

Reversible water-cooled heat pump, gas side

Cooling capacity 38,9 ÷ 165,9 kW
Heating capacity 48,5 ÷ 207,7 kW

- **Optimised for heating in centralised systems.**
- **Production of hot water at high temperature up to 68°C.**
- **Independent from the gas network.**
- **DHW production.**

DESCRIPTION
Water source heat pump with reverse cycle valve. The unit can produce chilled and hot water but it is optimized for high temperature hot water production, making it a perfect solution for DHW applications. It can also work with low source temperatures which make it possible to work with geothermal applications.

VERSIONS
° Standard
L Standard silenced

FEATURES

Extended operating range
Particular attention has been given to winter operation, ensuring the production of hot water up to 68°C.

Plug and play
All units are equipped with scroll compressors with steam injection and brazed plate heat exchangers. The base and panels are made of steel treated with polyester paints RAL 9003.
The heat pump can be supplied with all the components required for its installation in new systems and in retrofit applications. It can be combined with low temperature emission systems such as in floor radiant heating or fan coils, but also with conventional radiators.

Integrated hydronic kit
Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO_5
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES
AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.
The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

FACTORY FITTED ACCESSORIES
DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
AER485P1	°						•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•
AERBACP	°						•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•
AERNET	°						•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•
PGD1	°						•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•
SGD	°						•	•			
	L	•	•	•	•	•	•	•			

Antivibration

Version	System side - pumps	Integrated hydronic kit, source side	0200	0280	0300	0330	0350
°	°	°, J, K, Q, R, U, V, W, Z	-	-	-	-	-
°	M	°, J, K, U, W	-	-	-	-	-
°	N	°, Q, R, V, Z	-	-	-	-	-
°	O	°, J, K, U, W	-	-	-	-	-
°	P	°, Q, R, V, Z	-	-	-	-	-
L	°	°, J, K, Q, R, U, V, W, Z	-	-	-	-	-
L	M	°, J, K, U, W	-	-	-	-	-
L	N	°, Q, R, V, Z	-	-	-	-	-
L	O	°, J, K, U, W	-	-	-	-	-
L	P	°, Q, R, V, Z	-	-	-	-	-

Version	System side - pumps	Integrated hydronic kit, source side	0500	0550	0600	0650	0700
°	°	°	AVX345	AVX342	AVX342	AVX342	AVX342
°	°, M	J, K, U, W	AVX343	AVX343	AVX343	AVX343	AVX343
°	N	°	AVX343	AVX343	AVX343	AVX343	AVX343
°	O	J, K, U, W	AVX343	AVX343	AVX343	AVX343	AVX343
°	P	°	AVX343	AVX343	AVX343	AVX343	AVX343
°	°	Q, R, V, Z	AVX313	AVX343	AVX343	AVX343	AVX343
°	M, O	°	AVX313	AVX343	AVX343	AVX343	AVX343
°	N, P	Q, R, V, Z	AVX343	AVX343	AVX343	AVX344	AVX344
L	°	°	AVX345	AVX342	AVX342	AVX342	AVX342
L	°, M	J, K, U, W	AVX343	AVX343	AVX343	AVX343	AVX343
L	N	°	AVX343	AVX343	AVX343	AVX343	AVX343
L	O	J, K, U, W	AVX343	AVX343	AVX343	AVX343	AVX343
L	P	°	AVX343	AVX343	AVX343	AVX343	AVX343
L	°	Q, R, V, Z	AVX313	AVX343	AVX343	AVX343	AVX343
L	M, O	°	AVX313	AVX343	AVX343	AVX343	AVX343
L	N, P	Q, R, V, Z	AVX343	AVX343	AVX343	AVX344	AVX344

- not available

Version	System side - pumps	Integrated hydronic kit, source side	0200	0280	0300	0330	0350
°	°	°, J, K, Q, R, U, V, W, Z	-	-	-	-	-
°	M	°, J, K, U, W	-	-	-	-	-
°	N	°, Q, R, V, Z	-	-	-	-	-
°	O	°, J, K, U, W	-	-	-	-	-
°	P	°, Q, R, V, Z	-	-	-	-	-
L	°	°	VT9	VT9	VT9	VT9	VT9
L	°	J, K, Q, R, U, V, W, Z	VT15	VT15	VT15	VT15	VT15
L	M	°, J, K, U, W	VT15	VT15	VT15	VT15	VT15
L	N	°, Q, R, V, Z	VT15	VT15	VT15	VT15	VT15
L	O	°, J, K, U, W	VT15	VT15	VT15	VT15	VT15
L	P	°, Q, R, V, Z	VT15	VT15	VT15	VT15	VT15

Version	System side - pumps	Integrated hydronic kit, source side	0500	0550	0600	0650	0700
°	°	°, J, K, Q, R, U, V, W, Z	-	-	-	-	-
°	M	°, J, K, U, W	-	-	-	-	-
°	N	°, Q, R, V, Z	-	-	-	-	-
°	O	°, J, K, U, W	-	-	-	-	-
°	P	°, Q, R, V, Z	-	-	-	-	-
L	°	°, J, K, Q, R, U, V, W, Z	-	-	-	-	-
L	M	°, J, K, U, W	-	-	-	-	-
L	N	°, Q, R, V, Z	-	-	-	-	-
L	O	°, J, K, U, W	-	-	-	-	-
L	P	°, Q, R, V, Z	-	-	-	-	-

- not available

PR4

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
PR4	°						•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•

Electronic device for peak current reduction.

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
°	-	-	-	-	-	DREWRK0500 (1)	DREWRK0550 (1)	DREWRK0600 (1)	DREWRK0650 (1)	DREWRK0700 (1)
L	DREWRK0200 (1)	DREWRK0280 (1)	DREWRK0300 (1)	DREWRK0330 (1)	DREWRK0350 (1)	DREWRK0500 (1)	DREWRK0550 (1)	DREWRK0600 (1)	DREWRK0650 (1)	DREWRK0700 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction.

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
°	-	-	-	-	-	RIFWRK0500	RIFWRK0550	RIFWRK0600	RIFWRK0650	RIFWRK0700
L	RIFWRK0200	RIFWRK0280	RIFWRK0300	RIFWRK0330	RIFWRK0350	RIFWRK0500	RIFWRK0550	RIFWRK0600	RIFWRK0650	RIFWRK0700

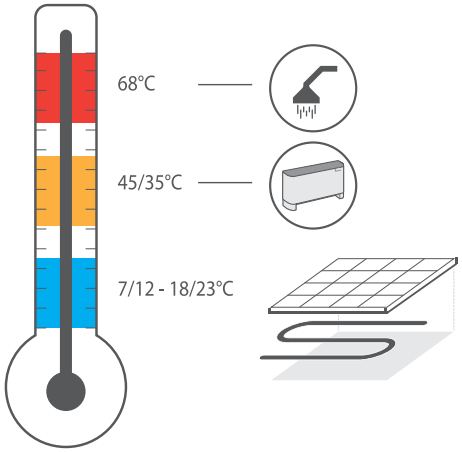
A grey background indicates the accessory must be assembled in the factory

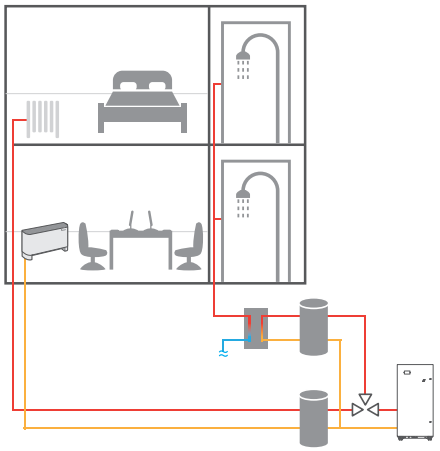
Double safety valve.

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
°	-	-	-	-	-	T6WRK2	T6WRK2	T6WRK2	T6WRK2	T6WRK2
L	T6WRK1	T6WRK1	T6WRK1	T6WRK1	T6WRK1	T6WRK2	T6WRK2	T6WRK2	T6WRK2	T6WRK2

A grey background indicates the accessory must be assembled in the factory

APPLICATION EXAMPLES





WRK units are used in building renovations, where centralised boilers need replacing, while maintaining the existing distribution system and terminals (e.g. radiators) at the same time, to ensure the production of domestic hot water. This situation is typical when operating in contexts such as public buildings, but also in the case of centralised residential systems such as condominiums, where costs must be limited without changing the distribution system, while also offering a renewable energy source, represented precisely by heat pumps. Being able to upgrade a building without involving the distribution system also eliminates the inconveniences associated with the renovation of the premises, ensuring the continuity of the property's use, saving time and money.

CONFIGURATOR

Field		Description
1,2,3		**WRK**
4,5,6,7		**Size** 0200, 0280, 0300, 0330, 0350, 0500, 0550, 0600, 0650, 0700
8		**Operating field**
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Version**
	°	Standard
	L	Standard silenced (1)
11		**Evaporator**
	°	Standard
12		**Heat recovery**
	D	With desuperheater
	°	Without heat recovery
13		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
14		**System side - pumps**
	M	Single pump low head
	N	Pump low head + stand-by pump
	O	Single pump high head
	P	Pump high head + stand-by pump
	°	Without hydronic kit
15		**Integrated hydronic kit, source side (2)**
	J	Single low-head inverter pump
	K	Single high-head inverter pump
	Q	Single high-head inverter pump + stand-by pump
	R	Single low-head inverter pump + stand-by pump
	U	Single pump low head
	V	Pump low head + stand-by pump
	W	Single pump high head
	Z	Pump high head + stand-by pump
	°	Without hydronic kit
16		**Field for future development**
	°	Field for future development

(1) The size 0200-0280-0300-0330-0350 only available in low noise version (L)
(2) Heat pumps R and Q are availables only for sizes 0500÷0700

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

WRK - H°

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	-	-	-	-	-	96,2	110,9	130,0	145,8	166,1
Input power	kW	-	-	-	-	-	21,5	24,0	28,6	33,3	37,4
Cooling total input current	A	-	-	-	-	-	48,0	50,0	62,0	86,0	89,0
EER	W/W	-	-	-	-	-	4,47	4,63	4,55	4,38	4,44
Water flow rate source side	l/h	-	-	-	-	-	20140	23075	27128	30634	34797
Pressure drop source side	kPa	-	-	-	-	-	25	25	25	24	25
Water flow rate system side	l/h	-	-	-	-	-	16552	19082	22366	25077	28566
Pressure drop system side	kPa	-	-	-	-	-	17	17	17	16	17
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	-	-	-	-	-	120,8	137,7	163,1	187,1	207,9
Input power	kW	-	-	-	-	-	26,4	29,7	35,4	41,2	45,4
Heating total input current	A	-	-	-	-	-	52,0	56,0	69,0	92,0	95,0
COP	W/W	-	-	-	-	-	4,58	4,64	4,61	4,55	4,58
Water flow rate source side	l/h	-	-	-	-	-	27658	31618	37369	42704	47563
Pressure drop source side	kPa	-	-	-	-	-	49	49	50	47	50
Water flow rate system side	l/h	-	-	-	-	-	20958	23884	28290	32459	36068
Pressure drop system side	kPa	-	-	-	-	-	28	27	28	27	28

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WRK - HL

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	38,9	54,4	65,0	74,1	83,5	96,2	110,9	130,0	145,8	166,1
Input power	kW	8,6	12,0	14,3	16,8	18,8	21,5	24,0	28,6	33,3	37,4
Cooling total input current	A	20,0	25,0	31,0	43,0	45,0	48,0	50,0	62,0	86,0	89,0
EER	W/W	4,54	4,54	4,54	4,41	4,43	4,47	4,63	4,55	4,38	4,44
Water flow rate source side	l/h	8131	11358	13570	15551	17498	20140	23075	27128	30634	34797
Pressure drop source side	kPa	19	23	24	25	26	25	25	25	24	25
Water flow rate system side	l/h	6699	9362	11186	12754	14363	16552	19082	22366	25077	28566
Pressure drop system side	kPa	13	16	16	17	17	17	17	17	16	17
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	48,4	68,6	81,6	93,4	104,0	120,8	137,7	163,1	187,1	207,9
Input power	kW	10,6	14,8	17,8	20,8	22,9	26,4	29,7	35,4	41,2	45,4
Heating total input current	A	21,0	28,0	35,0	46,0	48,0	52,0	45,0	69,0	92,0	95,0
COP	W/W	4,57	4,62	4,58	4,48	4,54	4,58	4,64	4,61	4,55	4,58
Water flow rate source side	l/h	11062	15751	18684	21290	23771	27658	31618	37369	42704	47563
Pressure drop source side	kPa	37	45	47	49	50	49	49	50	47	50
Water flow rate system side	l/h	8397	11904	14149	16207	18041	20958	23884	28290	32459	36068
Pressure drop system side	kPa	21	26	27	28	29	28	27	28	27	28

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

WRK - H°

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	-	-	-	-	-	126,3	144,8	169,8	189,7	217,3
Input power	kW	-	-	-	-	-	21,7	23,3	29,3	33,4	39,0
Cooling total input current	A	-	-	-	-	-	47,0	47,0	62,0	84,0	91,0
EER	W/W	-	-	-	-	-	5,82	6,20	5,80	5,69	5,58
Water flow rate source side	l/h	-	-	-	-	-	25317	28767	34057	38166	43828
Pressure drop source side	kPa	-	-	-	-	-	39	39	40	37	40
Water flow rate system side	l/h	-	-	-	-	-	21826	25015	29337	32770	37528
Pressure drop system side	kPa	-	-	-	-	-	29	29	29	28	29
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	-	-	-	-	-	116,4	132,7	155,6	178,3	198,1
Input power	kW	-	-	-	-	-	20,7	23,0	27,5	32,1	35,4
Heating total input current	A	-	-	-	-	-	42,0	44,0	54,0	73,0	75,0
COP	W/W	-	-	-	-	-	5,62	5,77	5,66	5,56	5,60
Water flow rate source side	l/h	-	-	-	-	-	16656	19095	22309	25455	28334
Pressure drop source side	kPa	-	-	-	-	-	18	18	18	17	18
Water flow rate system side	l/h	-	-	-	-	-	20118	22943	26905	30825	34248
Pressure drop system side	kPa	-	-	-	-	-	25	25	25	24	25

(1) Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

WRK - HL

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	50,9	71,0	84,9	96,4	109,2	126,3	144,8	169,8	189,7	217,3
Input power	kW	8,8	11,7	14,7	16,9	19,8	21,7	23,3	29,3	33,4	39,0
Cooling total input current	A	20,0	24,0	31,0	42,0	46,0	47,0	47,0	62,0	84,0	91,0
EER	W/W	5,81	6,10	5,78	5,69	5,53	5,82	6,20	5,80	5,69	5,58
Water flow rate source side	l/h	10217	14150	17036	19386	22038	25317	28767	34057	38166	43828
Pressure drop source side	kPa	30	36	37	39	41	39	39	40	37	40
Water flow rate system side	l/h	8796	12274	14672	16662	18865	21826	25015	29337	32770	37528
Pressure drop system side	kPa	22	27	28	29	30	29	29	29	28	29
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	46,4	66,1	77,8	89,0	100,1	116,4	132,7	155,6	178,3	198,1
Input power	kW	8,3	11,5	13,8	16,2	18,2	20,7	23,0	27,5	32,1	35,4
Heating total input current	A	17,0	22,0	28,0	36,0	39,0	42,0	44,0	54,0	73,0	75,0
COP	W/W	5,60	5,76	5,66	5,51	5,49	5,62	5,77	5,66	5,56	5,60
Water flow rate source side	l/h	6629	9514	11157	12694	14269	16656	19095	22309	25455	28334
Pressure drop source side	kPa	13	17	17	17	18	18	18	18	17	18
Water flow rate system side	l/h	8016	11435	13458	15390	17310	20118	22943	26905	30825	34248
Pressure drop system side	kPa	19	24	24	25	26	25	25	25	24	25

(1) Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
SEER - 12/7 (EN14825: 2018) (1)												
SEER	°	W/W	-	-	-	-	-	5,33	5,46	5,28	5,38	5,28
	L	W/W	4,75	5,14	5,04	5,04	4,97	5,33	5,46	5,28	5,38	5,28
Seasonal efficiency	°	%	-	-	-	-	-	210,2%	215,4%	208,2%	212,2%	208,2%
	L	%	187,0%	202,6%	198,6%	198,6%	195,8%	210,2%	215,4%	208,2%	212,2%	208,2
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)												
Efficiency energy class	°		-	-	-	-	-	-	-	-	-	-
	L		A+++	-	-	-	-	-	-	-	-	-
Pdesignh	°	kW	-	-	-	-	-	157	179	212	244	271
	L	kW	63	89	106	122	135	157	179	212	244	271
ηsh	°	%	-	-	-	-	-	191.0%	195.0%	194.0%	193.0%	192.0%
	L	%	181.0%	187.0%	185.0%	181.0%	182.0%	191.0%	195.0%	194.0%	193.0%	192.0%
SCOP	°	W/W	-	-	-	-	-	4,98	5,08	5,05	5,03	5,00
	L	W/W	4,73	4,88	4,83	4,73	4,75	4,98	5,08	5,05	5,03	5,00

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Electric data												
Maximum current (FLA)	°	A	-	-	-	-	-	75,0	84,0	104,0	130,0	132,0
	L	A	32,0	42,0	52,0	65,0	66,0	75,0	84,0	104,0	130,0	132,0
Peak current (LRA)	°	A	-	-	-	-	-	216,0	181,0	218,0	271,5	273,0
	L	A	144,0	139,0	166,0	206,5	207,0	216,0	181,0	218,0	271,5	273,0

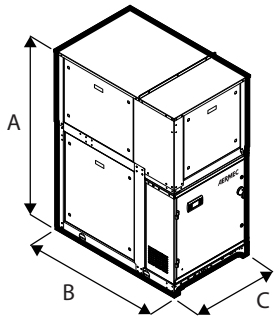
GENERAL TECHNICAL DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Compressor												
Type	°	type	-	-	-	-	-	Scroll	Scroll	Scroll	Scroll	Scroll
	L	type	Scroll									
Number	°	no.	-	-	-	-	-	3	4	4	4	4
	L	no.	2	2	2	2	2	3	4	4	4	4
Circuits	°	no.	-	-	-	-	-	2	2	2	2	2
	L	no.	2	2	2	2	2	2	2	2	2	2
Refrigerant	°	type	-	-	-	-	-	R410A	R410A	R410A	R410A	R410A
	L	type	R410A									
Refrigerant charge (1)	°	kg	-	-	-	-	-	13,0	16,0	18,0	22,0	24,0
	L	kg	6,0	8,0	9,0	10,0	11,0	13,0	16,0	18,0	22,0	24,0
Source side heat exchanger												
Type	°,L	type	Brazed plate									
Number	°	no.	-	-	-	-	-	1	1	1	1	1
	L	no.	1	1	1	1	1	1	1	1	1	1
System side heat exchanger												
Type	°,L	type	Brazed plate									
Number	°	no.	-	-	-	-	-	1	1	1	1	1
	L	no.	1	1	1	1	1	1	1	1	1	1
Source side hydraulic connections												
Connections (in/out)	°,L	Type	Grooved joints									
Sizes (in/out)	°	Ø	-	-	-	-	-	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
	L	Ø	2 1/2"									
System side hydraulic connections												
Connections (in/out)	°,L	Type	Grooved joints									
Sizes (in/out)	°	Ø	-	-	-	-	-	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
	L	Ø	2 1/2"									
Sound data calculated in cooling mode (2)												
Sound power level	°	dB(A)	-	-	-	-	-	81,6	82,2	81,6	82,7	83,4
	L	dB(A)	71,6	73,9	72,4	74,0	75,6	76,3	77,0	75,9	77,5	78,0
Sound pressure level (10 m)	°	dB(A)	-	-	-	-	-	49,9	50,5	49,9	51,0	51,7
	L	dB(A)	40,1	42,4	40,9	42,5	44,1	44,6	45,3	44,2	45,8	46,3

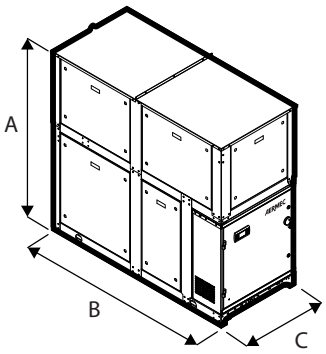
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

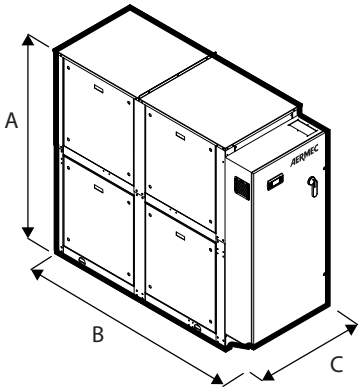
WRK 0350 °



WRK 0350 U-V-W-Z-J-R-K-Q



WRK 0700 °



Size			0200	0280	0300	0330	0350
Dimensions and weights without hydronic kit							
A	°	mm	-	-	-	-	-
	L	mm	1675	1675	1675	1675	1675
B	°	mm	-	-	-	-	-
	L	mm	1265	1265	1265	1265	1265
C	°	mm	-	-	-	-	-
	L	mm	800	800	800	800	800
Dimensions and weights with pump/s							
A	°	mm	-	-	-	-	-
	L	mm	1675	1675	1675	1675	1675
B	°	mm	-	-	-	-	-
	L	mm	1890	1890	1890	1890	1890
C	°	mm	-	-	-	-	-
	L	mm	800	800	800	800	800

Size			0500	0550	0600	0650	0700
Dimensions and weights without hydronic kit							
A	°	mm	1840	1840	1840	1840	1840
	L	mm	1885	1885	1885	1885	1885
B	°,L	mm	2155	2155	2155	2155	2155
C	°,L	mm	800	800	800	800	800
Dimensions and weights with pump/s							
A	°	mm	1840	1840	1840	1840	1840
	L	mm	1885	1885	1885	1885	1885
B	°,L	mm	3090	3090	3090	3090	3090
C	°,L	mm	800	800	800	800	800

	Version	System side - pumps	Integrated hydronic kit, source side		0200	0280	0300	0330	0350
Empty weight	°	°/M/N/O/P	°/J/K/Q/R/U/V/W/Z	kg	-	-	-	-	-
	L	°	°	kg	495	550	565	570	580
	L	°	J/K/U/W	kg	665	720	735	740	750
	L	°	Q/R/V/Z	kg	690	745	760	765	775
	L	N/P	°	kg	690	745	760	765	775
	L	M/O	°	kg	665	720	730	740	750
	L	M/O	J/K/U/W	kg	695	755	765	775	785
	L	M	Q/R/V/Z	kg	-	-	-	-	-
	L	N	J/K/U/W	kg	-	-	-	-	-
	L	O	Q/R/V/Z	kg	-	-	-	-	-
	L	P	J/K/U/W	kg	-	-	-	-	-
	L	N/P	Q/R/V/Z	kg	750	805	820	825	835

- not available

	Version	System side - pumps	Integrated hydronic kit, source side		0500	0550	0600	0650	0700
Empty weight	°	°	°	kg	755	840	865	890	920
	°	°	J/K/U/W	kg	935	1020	1045	1085	1115
	°	°	Q/R/V/Z	kg	1005	1090	1115	1170	1200
	°	M/O	°	kg	900	985	1010	1045	1075
	°	M/O	J/K/U/W	kg	990	1075	1100	1150	1180
	°	M	Q/R/V/Z	kg	-	-	-	-	-
	°	N	J/K/U/W	kg	-	-	-	-	-
	°	O	Q/R/V/Z	kg	-	-	-	-	-
	°	P	J/K/U/W	kg	-	-	-	-	-
	°	N/P	°	kg	970	1055	1080	1125	1155
	°	N/P	Q/R/V/Z	kg	1130	1215	1240	1315	1340
	L	°	°	kg	930	1015	1040	1065	1095
	L	°	J/K/U/W	kg	1155	1240	1265	1305	1335
	L	°	Q/R/V/Z	kg	1225	1310	1335	1390	1420
	L	M/O	°	kg	1120	1205	1230	1265	1295
	L	M/O	J/K/U/W	kg	1210	1295	1320	1370	1400
	L	M	Q/R/V/Z	kg	-	-	-	-	-
	L	N	J/K/U/W	kg	-	-	-	-	-
	L	O	Q/R/V/Z	kg	-	-	-	-	-
	L	P	J/K/U/W	kg	-	-	-	-	-
	L	N/P	°	kg	1190	1275	1300	1345	1375
	L	N/P	Q/R/V/Z	kg	1350	1435	1460	1535	1560

- not available

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

WWB 0300-0900

Water-water heat pumps only

Heating capacity 56,7 ÷ 265,9 kW

- **Optimised to produce high temperature hot water**
- **Can be used with any air or water cooled heat pump**
- **Max. processed water temperature: 80 °C**
- **Max inlet temperature on source side: 45 °C**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

WWB is a range of irreversible water-water heat pumps that produce high temperature water with a low or medium temperature source.
Internal unit suitable for use in centralised residential systems, in systems that serve hotels and other forms of accommodation, and for applications in the tertiary and industrial sectors.

FEATURES

Maximum energy efficiency

Aermec, which has focused for years on energy efficiency, designed the WWB units with the aim of guaranteeing high efficiency both with full and partial loads.

Operating field

With its wide operating range, it can be integrated with numerous applications and is a valid alternative to boilers and all conventional systems used to produce high temperature hot water since it also uses existing systems.
Production of hot water up to 80 °C (Max inlet temperature on source side 45 °C).

Constructional characteristics of unit

— Optimised plate heat exchangers with low pressure drops.
— 2 cooling circuits, 1 compressor per circuit.
— Scroll compressors for high condensing temperatures.
— Compact size for easier installation.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

CONTROL

Control unit accessible externally with touch-screen user interface, multilingual display of all operating parameters.
Optimised control logic for use with low and medium temperature heat pumps.
Complies with safety (EC) and electromagnetic compatibility directives.

Removable slide-out electrical panel with opening side (LH/RH side) configurator option

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
VT: Anti-vibration supports.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0300	0330	0350	0550	0600	0700	0800	0900
AER485P1	L	•	•	•	•	•	•	•	•
AERBACP	L	•	•	•	•	•	•	•	•
AERNET	L	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	L	•	•	•	•	•	•	•	•
PGD1	L	•	•	•	•	•	•	•	•

MULTICHILLER_EVO: Contact the factory for compatibility of the accessory with the type of implant envisaged.

Antivibration

Ver	0300	0330	0350	0550	0600	0700	0800	0900
L	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15

Power factor correction

Ver	0300	0330	0350	0550	0600	0700	0800	0900
L	RIFWWB0300	RIFWWB0330	RIFWWB0350	RIFWWB0550	RIFWWB0600	RIFWWB0700	RIFWWB0800	RIFWWB0900

A grey background indicates the accessory must be assembled in the factory

PR4

Model	Ver	0300	0330	0350	0550	0600	0700	0800	0900
PR4	L	•	•	•	•	•	•	•	•

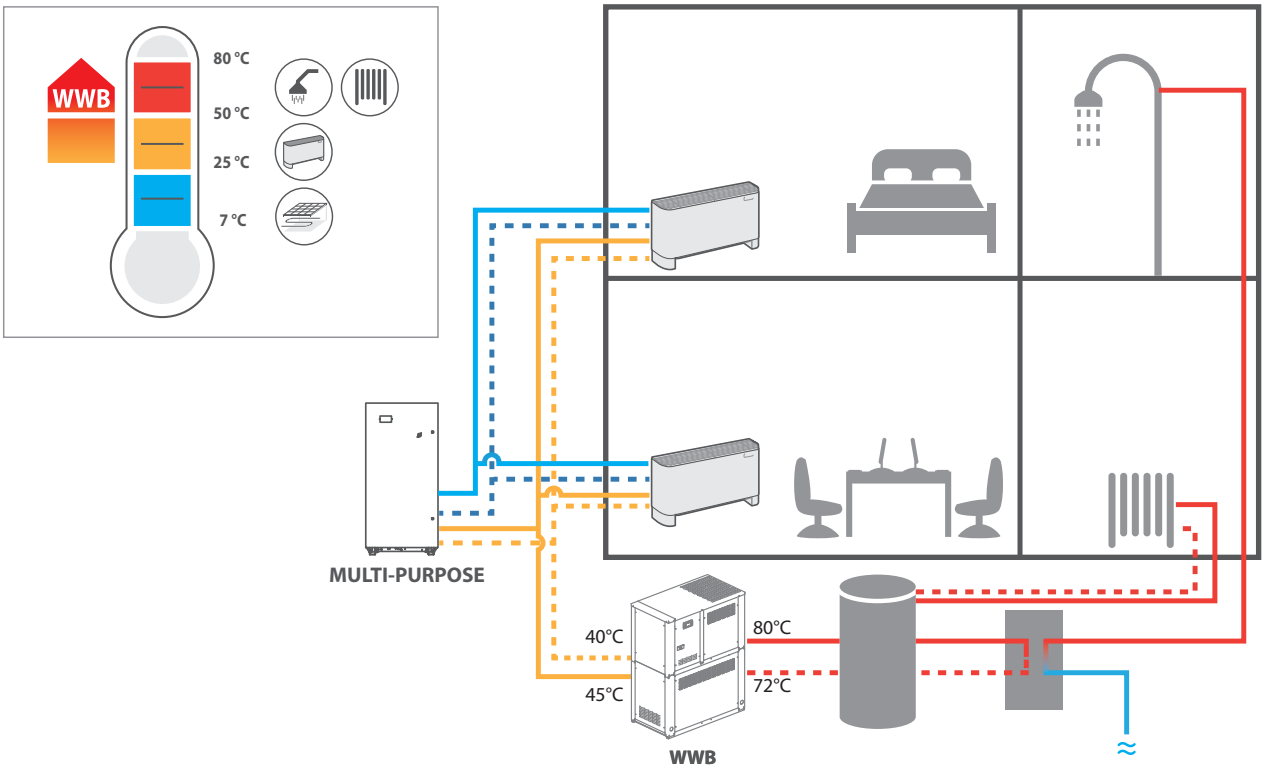
CONFIGURATOR

Field		Description
1,2,3		**WWB**
4,5,6,7		**Size** 0300, 0330, 0350, 0550, 0600, 0700, 0800, 0900
8		**Operating field (1)**
	X	Standard
9		**Model**
	H	Heat pump
10		**Version**

Field		Description
	L	Silenced
11		**Power supply**
	S	400V ~ 3 50Hz with Soft-Start
	°	400V ~ 3 50Hz
12		**Electrical panel version**
	R	Reverse opening (RH)
	°	Standard opening (LH)

(1) Evaporator water up to +5°C. Electronic thermostatic valve as standard.

Example of four-pipe system



PERFORMANCE SPECIFICATIONS

Size			0300	0330	0350	0550	0600	0700	0800	0900
Heating performances (Water user side 70 °C / 78 °C; Water source side 45 °C / 40 °C) (1)										
Heating capacity	L	kW	70,3	77,7	93,2	114,6	143,7	181,7	220,5	265,9
Input power	L	kW	16,7	18,0	21,6	27,7	34,7	44,3	55,4	66,4
Heating total input current	L	A	29,0	30,0	36,0	46,0	61,0	71,0	89,0	104,0
COP	L	W/W	4,22	4,31	4,33	4,14	4,14	4,11	3,98	4,00
Water flow rate system side	L	l/h	7721	8537	10243	12592	15787	19973	24229	29221
Pressure drop system side	L	kPa	18	22	31	21	33	24	35	24
Water flow rate source side	L	l/h	9339	10400	12491	15141	18986	23950	28791	34785
Pressure drop source side	L	kPa	12	15	10	15	8	12	16	23
Heating performances (Water user side 70 °C / 78 °C; Water source side 35 °C / 30 °C) (2)										
Heating capacity	L	kW	56,7	62,7	75,2	92,4	115,9	146,5	177,8	214,4
Input power	L	kW	16,3	17,6	21,0	27,0	33,9	43,2	54,0	64,7
Heating total input current	L	A	28,0	29,0	35,0	45,0	59,0	70,0	87,0	102,0
COP	L	W/W	3,48	3,56	3,58	3,42	3,42	3,39	3,29	3,31
Water flow rate system side	L	l/h	6228	6886	8262	10157	12734	16110	19543	23570
Pressure drop system side	L	kPa	12	14	20	14	22	15	23	16
Water flow rate source side	L	l/h	7008	7820	9396	11340	14221	17924	21486	25974
Pressure drop source side	L	kPa	7	9	6	8	4	7	9	13
Heating performances (Water user side 47 °C / 55 °C; Water source side 10 °C / 7 °C) (3)										
Heating capacity	L	kW	35,6	39,4	47,3	58,1	72,9	92,2	111,8	134,8
Input power	L	kW	9,8	10,6	12,7	16,3	20,4	26,1	32,6	39,1
Input current	L	A	16,9	17,8	21,4	27,4	35,9	42,1	52,7	61,8
COP	L	W/W	3,62	3,71	3,73	3,56	3,57	3,53	3,43	3,45
Water flow rate system side	L	l/h	3881	4291	5148	6329	7935	10039	12178	14688
Pressure drop system side	L	kPa	5	6	8	8	8	6	9	6
Water flow rate source side	L	l/h	7405	8259	9923	11988	15034	18952	22733	27478
Pressure drop source side	L	kPa	8	10	6	9	5	7	10	15

(1) Date 14511:2022; Water user side 70 °C / 78 °C; Water source side 45 °C / 40 °C
(2) Date 14511:2022; Water user side 70 °C / 78 °C; Water source side 35 °C / 30 °C
(3) Date 14511:2022; Water user side 47 °C / 55 °C; Water source side 10 °C / 7 °C

ENERGY DATA

Size			0300	0330	0350	0550	0600	0700	0800	0900
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)										
Pdesignh	L	kW	46	51	61	76	95	120	145	175
ηsh	L	%	176,00	180,00	180,00	175,00	174,00	174,00	169,00	175,00
SCOP	L	W/W	4,60	4,70	4,70	4,58	4,55	4,55	4,43	4,48
Efficiency energy class	L		A++	A++	A++	-	-	-	-	-

(1) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0300	0330	0350	0550	0600	0700	0800	0900
Power supply: S										
Electric data										
Maximum current (FLA)	L	A	30,9	32,2	38,2	50,2	64,6	79,8	94,6	113,7
Peak current (LRA)	L	A	53,4	60,5	66,3	81,1	101,9	129,9	156,1	180,9

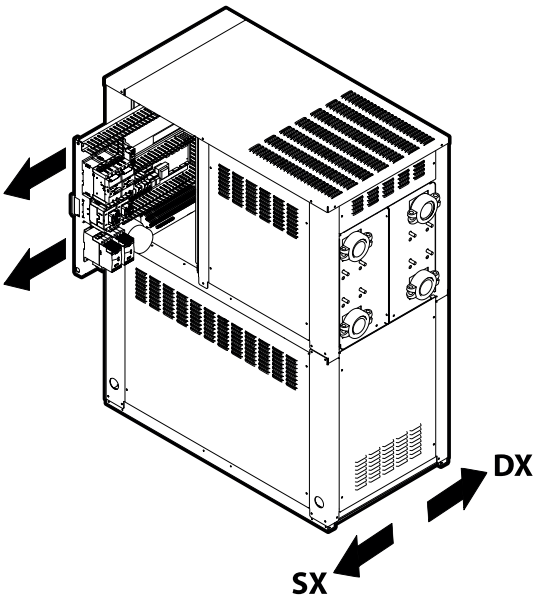
Size			0300	0330	0350	0550	0600	0700	0800	0900
Power supply: °										
Electric data										
Maximum current (FLA)	L	A	30,9	32,2	38,2	50,2	64,6	79,8	94,6	113,7
Peak current (LRA)	L	A	110,4	127,1	137,1	165,1	206,3	264,9	319,3	366,9

GENERAL TECHNICAL DATA

Size			0300	0330	0350	0550	0600	0700	0800	0900
Compressor										
Type	L	type				Scroll				
Compressor regulation	L	Type				On-Off				
Number	L	no.	2	2	2	2	2	2	2	2
Circuits	L	no.	2	2	2	2	2	2	2	2
Refrigerant	L	type				R134a				
Refrigerant load circuit 1 (1)	L	kg	2,8	2,8	3,6	4,4	6,5	7,7	8,0	9,9
Refrigerant load circuit 2 (1)	L	kg	2,8	2,8	3,5	4,3	6,3	7,5	7,8	9,7
Source side heat exchanger										
Type	L	type				Brazed plate				
Number	L	no.	1	1	1	1	1	1	1	1
Connections (in/out)	L	Type				Grooved joints				
Sizes (in/out)	L	Ø	2″	2″	2″	2″	2″	2″1/2	2″1/2	2″1/2
System side heat exchanger										
Type	L	type				Brazed plate				
Number	L	no.	1	1	1	1	1	1	1	1
Connections (in/out)	L	Type				Grooved joints				
Sizes (in/out)	L	Ø	2″	2″	2″	2″	2″	2″1/2	2″1/2	2″1/2
Sound data calculated in cooling mode (2)										
Sound power level	L	dB(A)	71,8	71,8	71,8	75,1	78,3	79,3	80,4	82,4
Sound pressure level (10 m)	L	dB(A)	40,2	40,2	40,2	43,5	46,7	47,7	48,9	50,9

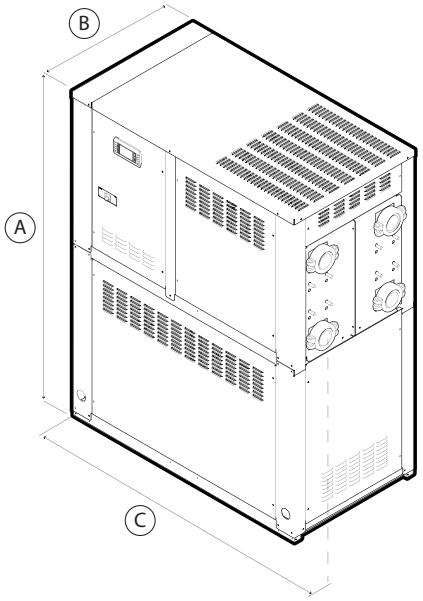
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Removal of electrical panel



Electrical panel version	Configurator option
Sx - LH side	° (Standard)
Dx - RH side	R

DIMENSIONS



Size			0300	0330	0350	0550	0600	0700	0800	0900
Dimensions and weights										
A	L	mm	1650	1650	1650	1650	1650	1650	1650	1650
B	L	mm	710	710	710	710	710	710	710	710
C	L	mm	1300	1300	1300	1300	1300	1300	1300	1300
Weights										
Weight empty + packaging	L	kg	420	425	440	455	500	715	760	820
Weight functioning	L	kg	415	420	440	460	510	730	775	840

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WWBG

Water-water heat pumps only

Heating capacity 77,2 ÷ 138,2 kW

- **Optimised to produce high temperature hot water**
- **Can be used with any air or water cooled heat pump**
- **Max. processed water temperature: 80 °C**
- **Max inlet temperature on source side: 45 °C**

DESCRIPTION

WWBG is a range of irreversible water-water heat pumps that produce high temperature water with a low or medium temperature source.
Internal unit suitable for use in centralised residential systems, in systems that serve hotels and other forms of accommodation, and for applications in the tertiary and industrial sectors.

FEATURES

Maximum energy efficiency

Aermec, which has focused for years on energy efficiency, designed the WWBG units with the aim of guaranteeing high efficiency both with full and partial loads.

Operating field

With its wide operating range, it can be integrated with numerous applications and is a valid alternative to boilers and all conventional systems used to produce high temperature hot water since it also uses existing systems.
Production of hot water up to 80 °C (Max inlet temperature on source side 45 °C).

Constructional characteristics of unit

— Optimised plate heat exchangers with low pressure drops.
— 2 cooling circuits, 1 compressor per circuit.
— Scroll compressors for high condensing temperatures.
— Compact size for easier installation.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

R513A (XP10) refrigerant gas

Thanks to the R513A (XP10) refrigerant, the environmental impact of the units is significantly reduced.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

CONTROL

Control unit accessible externally with touch-screen user interface, multilingual display of all operating parameters.
Optimised control logic for use with low and medium temperature heat pumps.
Complies with safety (EC) and electromagnetic compatibility directives.
Removable slide-out electrical panel with opening side (LH/RH side) configurator option

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
VT: Anti-vibration supports.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0330	0350	0550	0600
AER485P1	L	•	•	•	•
AERBACP	L	•	•	•	•
AERNET	L	•	•	•	•
MULTICHILLER-EVO	L	•	•	•	•
PGD1	L	•	•	•	•

MULTICHILLER_EVO: Contact the factory for compatibility of the accessory with the type of implant envisaged.

Antivibration

Ver	0330	0350	0550	0600
L	VT9	VT9	VT9	VT15

PR4

Model	Ver	0330	0350	0550	0600
PR4	L	•	•	•	•

Power factor correction

Ver	0330	0350	0550	0600
L	RIFWWBG0330	RIFWWBG0350	RIFWWBG0550	RIFWWBG0600

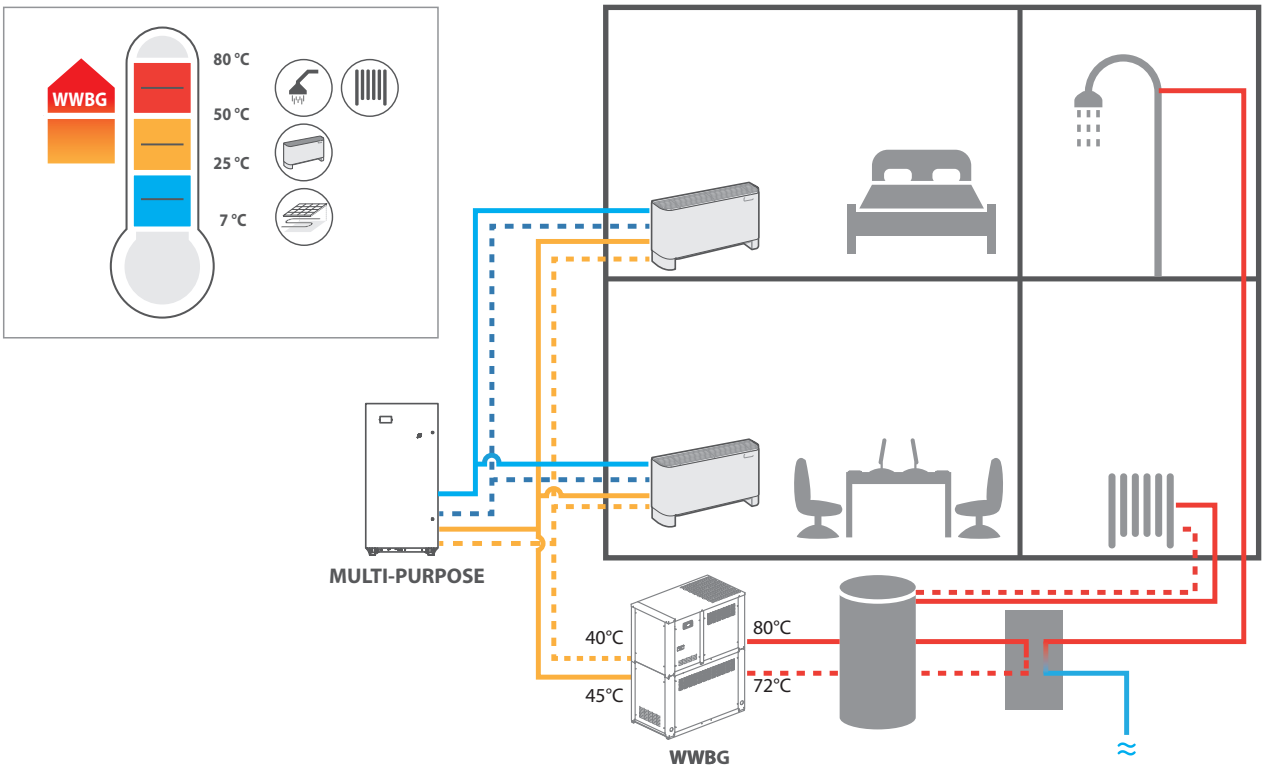
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3,4	**WWBG**
5,6,7,8	**Size** 0330, 0350, 0550, 0600
9	**Operating field**
X	Standard
10	**Model**
H	Heat pump
11	**Version**
L	Silenced

Field	Description
12	**Power supply**
S	400V ~ 3 50Hz with Soft-Start
°	400V ~ 3 50Hz
13	**Electrical panel version**
R	Reverse opening (RH)
°	Standard opening (LH)
14	**Leak detector**
G	with leak detector
°	Without leak detector

Example of four-pipe system



PERFORMANCE SPECIFICATIONS

Size			0330	0350	0550	0600
Heating performances (Water user side 70 °C / 78 °C; Water source side 45 °C / 40 °C) (1)						
Heating capacity	L	kW	77,2	92,5	115,4	138,2
Input power	L	kW	18,4	21,9	28,0	33,6
COP	L	W/W	4,19	4,22	4,13	4,11
Water flow rate system side	L	l/h	8485	10161	12667	15166
Pressure drop system side	L	kPa	10	14	21	31
Water flow rate source side	L	l/h	10279	12336	15279	18264
Pressure drop source side	L	kPa	15	10	15	7
Heating performances (Water user side 70 °C / 78 °C; Water source side 35 °C / 30 °C) (2)						
Heating capacity	L	kW	63,0	75,4	94,1	112,7
Input power	L	kW	18,2	21,6	27,6	33,1
COP	L	W/W	3,46	3,49	3,41	3,40
Water flow rate system side	L	l/h	6922	8289	10334	12372
Pressure drop system side	L	kPa	6	9	14	20
Water flow rate source side	L	l/h	7806	9373	11588	13845
Pressure drop source side	L	kPa	9	6	9	4
Heating performances (Water user side 47 °C / 55 °C; Water source side 10 °C / 7 °C) (3)						
Heating capacity	L	kW	40,0	47,9	59,8	71,6
Input power	L	kW	11,3	13,4	17,1	20,6
COP	L	W/W	3,53	3,57	3,48	3,48
Water flow rate system side	L	l/h	4343	5200	6483	7761
Pressure drop system side	L	kPa	3	4	6	8
Water flow rate source side	L	l/h	8505	10210	12631	15094
Pressure drop source side	L	kPa	10	7	10	5

(1) Date 14511:2022; Water user side 70 °C / 78 °C; Water source side 45 °C / 40 °C
(2) Date 14511:2022; Water user side 70 °C / 78 °C; Water source side 35 °C / 30 °C
(3) Date 14511:2022; Water user side 47 °C / 55 °C; Water source side 10 °C / 7 °C

ENERGY DATA

Size			0330	0350	0550	0600
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)						
Pdesignh	L	kW	51	61	76	91
ηsh	L	%	175,00	177,00	173,00	172,00
SCOP	L	W/W	4,58	4,62	4,53	4,51
Efficiency energy class	L		A+++	A+++	-	-

(1) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

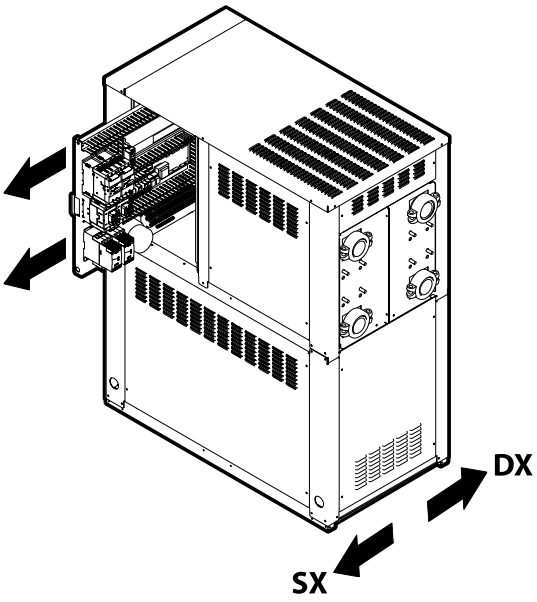
Size			0330	0350	0550	0600
Electric data						
Maximum current (FLA)	L	A	40,0	46,0	60,0	72,0
Peak current (LRA)	L	A	131,0	141,0	170,0	210,0
Peak current with Soft-start	L	A	66,0	71,0	85,0	105,0

GENERAL TECHNICAL DATA

Size			0330	0350	0550	0600
Compressor						
Type	L	type		Scroll		
Compressor regulation	L	Type		On-Off		
Number	L	no.	2	2	2	2
Circuits	L	no.	2	2	2	2
Refrigerant	L	type		R513A (XP10)		
Refrigerant load circuit 1 (1)	L	kg	3,1	3,4	4,2	5,8
Refrigerant load circuit 2 (1)	L	kg	3,1	3,4	4,2	5,8
Source side heat exchanger						
Type	L	type		Brazed plate		
Number	L	no.	1	1	1	1
Connections (in/out)	L	Type		Grooved joints		
Sizes (in/out)	L	Ø		2"		
System side heat exchanger						
Type	L	type		Brazed plate		
Number	L	no.	1	1	1	1
Connections (in/out)	L	Type		Grooved joints		
Sizes (in/out)	L	Ø		2"		
Sound data calculated in heating mode (2)						
Sound power level	L	dB(A)	71,8	71,8	76,1	78,3
Sound pressure level (10 m)	L	dB(A)	40,2	40,2	44,5	46,7
Sound pressure level (1 m)	L	dB(A)	55,7	55,7	60,0	62,2

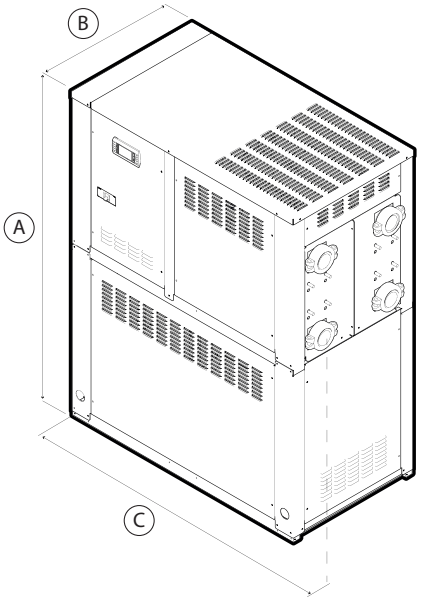
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Removal of electrical panel



Electrical panel version	Configurator option
Sx - LH side	° (Standard)
Dx - RH side	R

DIMENSIONS



Size			0330	0350	0550	0600
Dimensions and weights						
A	L	mm	1650	1650	1650	1650
B	L	mm	710	710	710	710
C	L	mm	1300	1300	1300	1300
Weights						
Weight empty + packaging	L	kg	430	445	455	500
Weight functioning	L	kg	430	445	460	510

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WWM

Water cooled heat pump reversible water side

Cooling capacity 96 kW
Heating capacity 110 kW

- Compact module
- Single or dual refrigerant circuit
- Reliable and modular
- Max 2 levels of stackable units
- Up to 36 connectable units (see the modularity options)
- Easy installation and maintenance

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
These are indoor units with hermetic scroll compressors, system side heat exchanger and plate source.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

FEATURES

The precise choice of components, the special configuration, and the possibility to connect several independent modules and manage them as if they were a single unit are all aspects that guarantee maximum output at full load, whilst ensuring continuous adaptation to the real service needs.
Bus Bar, to facilitate the electrical connections.

Modularity

Thanks to its modular construction, the installation can be adapted to suit specific system development needs whilst guaranteeing improved safety and reliability.
As a result, the cooling capacity can be easily increased over time, at a limited cost.
WWM consists of independent 96 kW modules that can be linked together to reach a capacity of 3456 kW.
With WWM, you can combine up to 36 units designed to minimise the overall dimensions.
The modules are easy to install and link together from the hydronic point of view, thanks to the connections with grooved joints.

Refrigerant circuit

The refrigerant circuit can easily be disconnected from the unit, maintaining all the functions of the hydronic circuit to ensure correct system operation.

Hydraulic components

WWM version PN10 has the **switch**; WWM version PN21 mounts the **transmitter**.
Fitted as standard, with **butterfly shut-off valves** on both hydronic lines for disconnecting the circuit when maintenance needs to be carried out.
In the event of a variable flow rate, the **motorised hydronic valves** can intercept one module or more in order to reduce the flow rate when there is a low thermal load level.

Very quiet

The WWM units stand out for their quiet operation.
Accurate unit sound-proofing, using good-quality sound absorbent material, means all the units work at low noise levels.

Units in parallel

The MULTICHILLER_EVO (accessory) allows up to 9 units to be managed in parallel mode.
This accessory allow to maximise the total efficency to the system under to work load, external air temperature conditions and water produced.
Each unit has its own electrical panel, guaranteeing continuity even if one module malfunctions or goes into lockout.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The adjustment system includes the complete management of alarms and the alarm log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
KWWM: Kit containing 4 caps with a diameter of 6" for the water manifolds.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

FACTORY FITTED ACCESSORIES

CRATE_WWMH-A: Special crate for transport

CRATE_WWM°: Special crate for transport
KITIDRO_WWM: Water filter with connection pipe (diameter 6") with drain tap and additional bulb well (diameter ½") available to the installer.
KREC_WWM: Cable entries box in order to facilitate the electrical installation.

ACCESSORIES COMPATIBILITY

Accessory	WWM05001H	WWM05001°	WWM05002H	WWM05002°
AER485P1	•	•	•	•
AERBACP	•	•	•	•
AERNET	•	•	•	•
KWWM	•	•	•	•
MULTICHILLER-EVO	•	•	•	•

For the control with MULTICHILLER EVO, nr.1 accessory AER485P1 is mandatory for every WWM of the system.

PR4

Accessory	WWM05001H	WWM05001°	WWM05002H	WWM05002°
PR4	•	•	•	•

Special crate for transport

Accessory	WWM05001H	WWM05001°	WWM05002H	WWM05002°
CRATE_WWMH-A	•	•	•	
CRATE_WWM°		•		•

■ *CRATE_WWM°: 100 kg, CRATE_WWMH-A: 130 kg*

Cable entries box

Accessory	WWM05001H	WWM05001°	WWM05002H	WWM05002°
KREC_WWM	•	•	•	•

Water filter

Accessory	WWM05001H	WWM05001°	WWM05002H	WWM05002°
KITIDRO_WWM	•	•	•	•

CONFIGURATOR

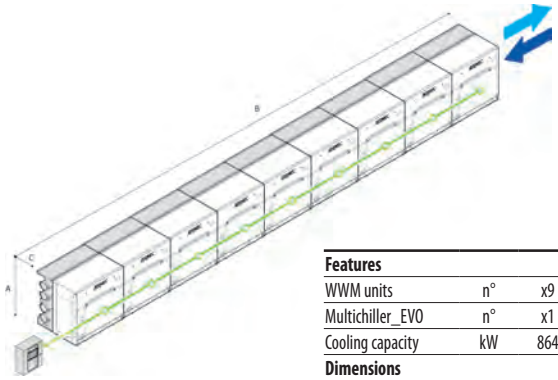
Field		Description
1,2,3		**WWM**
4,5,6,7		**Size** 0500
8		**Operating field (1)**
	°	Standard mechanic thermostatic valve
9		**Model**
	1	Single refrigerant circuit
	2	Double refrigerant circuit
10		**Hydraulic pressure rating**
	1	145 psi (PN10)
	3	300 psi (PN21)
11		**Hydraulic headers kit**
	H	6" Headers kit - PN21 standard carbon steel pipes declared in accordance with EN 10255
	°	No headers provided

Field		Description
12		**Power connection**
	B	With bus bars
	°	Without bus bars
13		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
14		**Electrical panel SCCR**
	°	10 kA control panel
15		**Peak current reduction**
	R	With power factor device (2)
	°	Without power factor device
16		**Field for future development**
	°	-

(1) Water produced up to +4 °C
(2) Factory installed

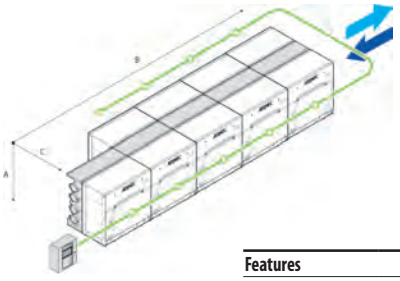
MODULARITY OPTIONS

CONFIGURATION 1: IN LINE



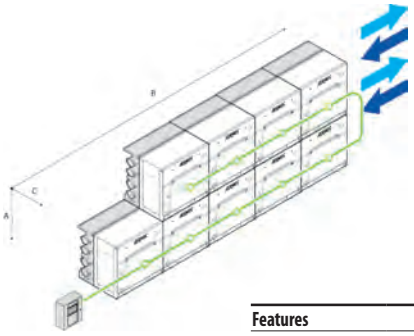
Features		
WWM units	n°	x9
Multichiller_EVO	n°	x1
Cooling capacity	kW	864
Dimensions		
A	mm	1300
B	mm	11970
C	mm	1150

CONFIGURATION 2: BACK TO BACK



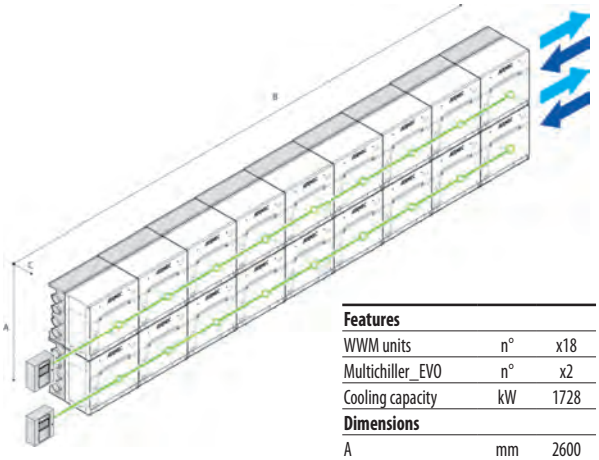
Features		
WWM units	n°	x9
Multichiller_EVO	n°	x1
Cooling capacity	kW	864
Dimensions		
A	mm	1300
B	mm	6650
C	mm	1850

CONFIGURATION 3.1: STACK IN LINE



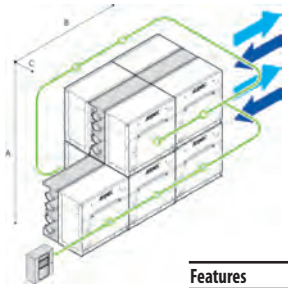
Features		
WWM units	n°	x9
Multichiller_EVO	n°	x1
Cooling capacity	kW	864
Dimensions		
A	mm	2600
B	mm	6650
C	mm	1150

CONFIGURATION 3.2: STACK IN LINE



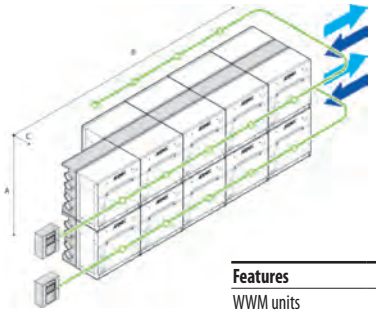
Features		
WWM units	n°	x18
Multichiller_EVO	n°	x2
Cooling capacity	kW	1728
Dimensions		
A	mm	2600
B	mm	11970
C	mm	1150

CONFIGURATION4.1: STACK IN LINE BACK TO BACK



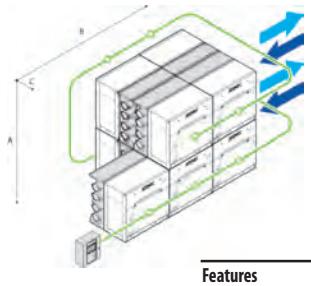
Features		
WWM units	n°	x9
Multichiller_EVO	n°	x1
Cooling capacity	kW	864
Dimensions		
A	mm	2600
B	mm	3990
C	mm	1850

CONFIGURATION 4.2: STACK IN LINE BACK TO BACK



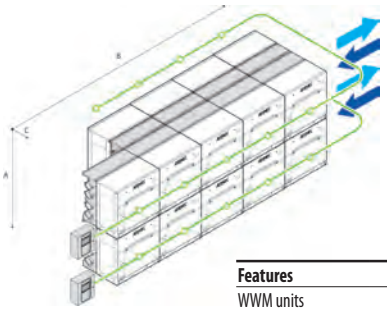
Features		
WWM units	n°	x18
Multichiller_EVO	n°	x2
Cooling capacity	kW	1728
Dimensions		
A	mm	2600
B	mm	6650
C	mm	1850

CONFIGURATION 5.1:
STACK IN LINE BACK TO BACK DOUBLE



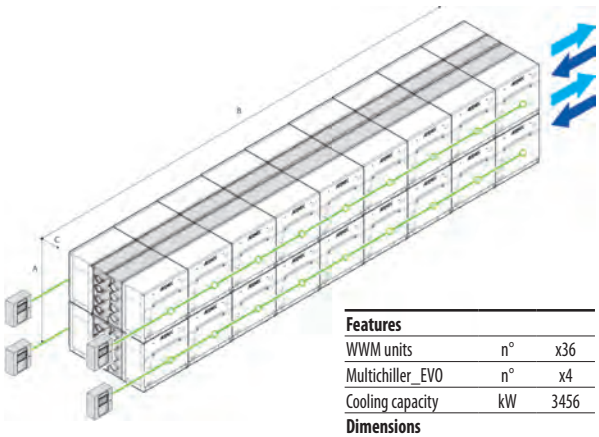
Features		
WWM units	n°	x9
Multichiller_EVO	n°	x1
Cooling capacity	kW	864
Dimensions		
A	mm	2600
B	mm	3990
C	mm	2300

CONFIGURATION 5.2:
STACK IN LINE BACK TO BACK DOUBLE



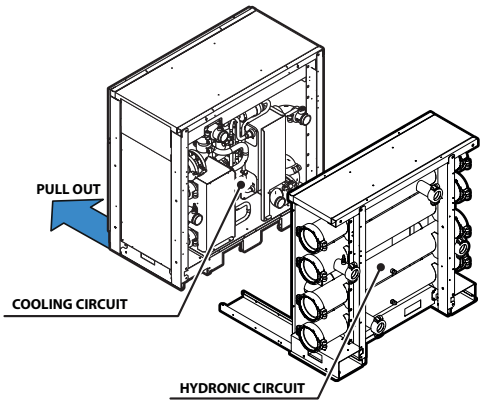
Features		
WWM units	n°	x18
Multichiller_EVO	n°	x2
Cooling capacity	kW	1728
Dimensions		
A	mm	2600
B	mm	6650
C	mm	2300

CONFIGURATION 5.3:
STACK IN LINE BACK TO BACK DOUBLE



Features		
WWM units	n°	x36
Multichiller_EVO	n°	x4
Cooling capacity	kW	3456
Dimensions		
A	mm	2600
B	mm	11970
C	mm	2300

EASY MAINTENANCE



PERFORMANCE SPECIFICATIONS

WWM - Single refrigerant circuit "1" - Double refrigerant circuit "2"

		WWM05001°	WWM05002°
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	96,0	95,2
Input power	kW	20,3	20,0
Cooling total input current	A	40,0	40,0
EER	W/W	4,74	4,76
Water flow rate source side	l/h	20046	19895
Pressure drop source side	kPa	34	23
Water flow rate system side	l/h	16528	16384
Pressure drop system side	kPa	24	17
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	109,2	110,0
Input power	kW	24,8	24,1
Heating total input current	A	48,0	48,0
COP	W/W	4,41	4,57
Water flow rate system side	l/h	18943	19092
Pressure drop system side	kPa	30	21
Water flow rate source side	l/h	24430	24809
Pressure drop source side	kPa	52	39

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY DATA

		WWM05001°	WWM05002°
SEER - 12/7 (EN14825:2018) with standard fans (1)			
SEER	W/W	6,12	5,37
Seasonal efficiency	%	241,8%	211,8%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)			
Pdesignh	kW	138	140
SCOP	W/W	4,83	4,68
ηsh	%	185.0%	179.0%

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

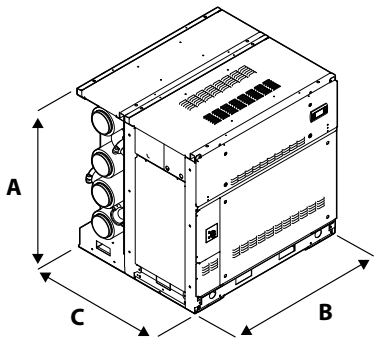
		WWM05001°	WWM05002°
Electric data			
Maximum current (FLA)	A	62,0	62,0
Peak current (LRA)	A	148,9	148,9

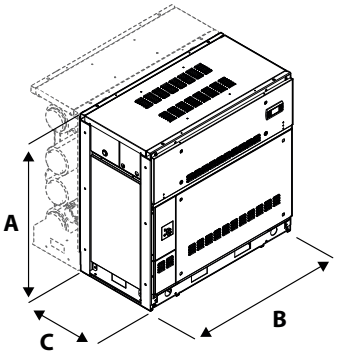
GENERAL TECHNICAL DATA

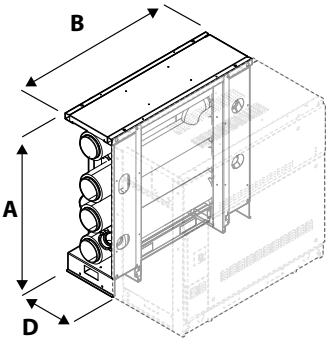
		WWM05001°	WWM05002°
Compressor			
Type	type	Scroll	Scroll
Number	no.	2	2
Circuits	no.	1	2
Refrigerant	type	R410A	R410A
Source side heat exchanger			
Type	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Type	Grooved joints	Grooved joints
Sizes (in/out)	Ø	6"	6"
System side heat exchanger			
Type	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Type	Grooved joints	Grooved joints
Sizes (in/out)	Ø	6"	6"
Sound data calculated in cooling mode (1)			
Sound power level	dB(A)	81,0	81,0
Sound pressure level (10 m)	dB(A)	49,5	49,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS







		WWM05001°	WWM05001H	WWM05002°	WWM05002H
Dimensions and weights					
A	mm	1300	1300	1300	1300
B	mm	1330	1330	1330	1330
C	mm	775	1150	775	1150
D	mm	-	452	-	452
Weights					
Weight empty + packaging	kg	700	930	700	930
Weight functioning	kg	711	1042	711	1042
Empty weight + packaging (with bus bars)	kg	736	966	736	966
Weight functioning (with bus bars)	kg	747	1078	747	1078
Hydraulic headers kit					
Weight empty + packaging	kg	-	230	-	230
Weight functioning	kg	-	330	-	330

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

NXW 0503 - 1654

Water cooled heat pump reversible water side

Cooling capacity 111 ÷ 511 kW
Heating capacity 127 ÷ 582 kW

- **Options of 1 or 2 pumps on both source and user side.**
- **Reversible on hydraulic side in heat pump**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18 °C, and the possibility to produce also negative temperature water down to -10°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Option integrated hydronic kit, source and user side

The built-in hydronic module includes the main water circuit components; it is available in varius configurations with one or two pumps with high or low head both on the system side and the source side, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO

Microprocessor adjustment, with display LCD which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and the ad adjustment includes complete management of the alarms and their log.
You also have the possibility to:
— Check two units in parallel Master-Slave
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.
DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

ACCESSORIES COMPATIBILITY

Model	Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
AER485P1	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

Antivibration

Version	System side - pumps	Integrated hydronic kit, source side	0503	0553	0604	0654	0704	0754	0804
°	°	°	AVX319	AVX319	AVX301	AVX301	AVX301	AVX303	AVX310
°	°	J, K, U, W	AVX320	AVX320	AVX320	AVX320	AVX320	AVX312	AVX651
°	M, O	°	AVX320	AVX320	AVX320	AVX320	AVX320	AVX312	AVX651
°	°	V, Z	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
°	M	J, K, U, V, W, Z	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
°	N	°, J, K, U, W	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
°	O	J, K, U, V, W, Z	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
°	P	°, J, K, U, W	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
°	N, P	V, Z	AVX309	AVX309	AVX310	AVX310	AVX310	AVX312	AVX651
L	°	°	AVX309	AVX309	AVX310	AVX303	AVX303	AVX310	AVX314
L	°	J, K, U, W	AVX321	AVX321	AVX311	AVX311	AVX651	AVX651	AVX652
L	M, O	°	AVX321	AVX321	AVX311	AVX311	AVX651	AVX651	AVX652
L	°	V, Z	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	M	J, K, U, W	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	N	°	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	O	J, K, U, W	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	P	°	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	M	V, Z	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	N	J, K, U, W	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	O	V, Z	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	P	J, K, U, W	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	N, P	V, Z	AVX312	AVX312	AVX312	AVX310	AVX651	AVX651	AVX652

Version	System side - pumps	Integrated hydronic kit, source side	0904	1004	1254	1404	1504	1654
°	°	°	AVX314	AVX316	AVX316	AVX315	AVX330	AVX330
°	°	J, K, U, W	AVX655	AVX653	AVX654	AVX654	AVX334	AVX337
°	M, N, O	°	AVX655	AVX653	AVX654	AVX654	AVX334	AVX337
°	°	V, Z	AVX655	AVX653	AVX654	AVX654	AVX337	-
°	M, O	J, K, U, W	AVX665	AVX653	AVX654	AVX654	AVX337	AVX335
°	M, O	V, Z	AVX655	AVX653	AVX654	AVX654	AVX340	-
°	N	J, K, U, W	AVX665	AVX653	AVX654	AVX654	AVX340	AVX335
°	N	V, Z	AVX665	AVX653	AVX654	AVX654	AVX335	-
°	P	°	AVX655	AVX653	AVX654	AVX654	-	-
°	P	J, K, U, V, W, Z	AVX665	AVX653	AVX654	AVX654	-	-
L	°	°	AVX314	AVX315	AVX315	AVX317	AVX331	AVX331
L	°	J, K, U, W	AVX653	AVX654	AVX659	AVX659	AVX335	AVX338
L	M, O	°	AVX653	AVX654	AVX659	AVX659	AVX335	AVX338
L	°	V, Z	AVX653	AVX654	AVX659	AVX659	AVX338	-
L	M	J, K, U, W	AVX653	AVX654	AVX659	AVX659	AVX338	AVX339
L	N	°	AVX653	AVX654	AVX659	AVX659	AVX338	AVX339
L	O	J, K, U, W	AVX653	AVX654	AVX659	AVX659	AVX338	AVX339
L	M, N, O	V, Z	AVX653	AVX654	AVX659	AVX659	AVX339	-
L	N	J, K, U, W	AVX653	AVX654	AVX659	AVX659	AVX339	AVX341
L	P	°, J, K, U, V, W, Z	AVX653	AVX654	AVX659	AVX659	-	-

- not available

PR4

Model	Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
PR4	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

Power factor correction

Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
°, L	RIF98	RIF98	RIF95	RIF95	RIF95	RIF95	RIF95	RIF96	RIF97	RIF97	RIF97	RIF97	RIF97

A grey background indicates the accessory must be assembled in the factory

Device for peak current reduction

Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
°, L	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)	DRE801 (1)	DRE901 (1)	DRE1001 (1)	DRE1251 (1)	DRE1401 (1)	DRE1500 (1)	DRE1650 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**NXW**
4,5,6,7	**Size** 0503, 0553, 0604, 0654, 0704, 0754, 0804, 0904, 1004, 1254, 1404, 1504, 1654
8	**Operating field**
X	Electronic thermostatic expansion valve
Y	Low temperature mechanic thermostatic valve (1)
°	Standard mechanic thermostatic valve (2)
9	**Model**
K	Heat pump reversible on the water side with low pressure drops (3)
°	Heat pump reversible on the water side
10	**Version**
°	Standard
L	Standard silenced
11	**Evaporator**
E	Evaporating unit (4)
°	Standard
12	**Heat recovery**
D	With desuperheater (5)
T	With total recovery (6)
°	Without heat recovery
13	**Power supply**
5	500V ~ 3 50Hz with magnet circuit breakers (7)
°	400V ~ 3 50Hz with magnet circuit breakers
14	**System side - pumps**
M	Single pump low head
N	Pump low head + stand-by pump
O	Single pump high head
P	Pump high head + stand-by pump (8)
°	Without hydronic kit
15	**Integrated hydronic kit, source side**
J	Single low-head inverter pump (8)
K	Single high-head inverter pump (8)
U	Single pump low head
V	Pump low head + stand-by pump (9)
W	Pump high head
Z	Pump high head + stand-by pump (9)
°	Without hydronic kit

(1) Water produced from 4 °C ÷ -10 °C; for the avalability with the heat recovery we advise you to contact us
(2) Water produced from 4 °C ÷ 18 °C
(3) Only for sizes from 0704 ÷ 0904
(4) Shipped with holding charge only.
(5) The desuperheater must be isolated in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(6) Options not available for condensing unit, and for models with pump/s
(7) Only for 0804 ÷ 1004 sizes
(8) Not available for size 1504 ÷ 1654
(9) Not available for size 1654

PERFORMANCE SPECIFICATIONS

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°,L	kW	111,8	120,7	148,7	166,7	188,7	222,7	257,6	291,6	325,7	354,6	384,6	453,9	511,4
Input power	°,L	kW	23,0	24,8	30,6	34,4	38,9	45,6	53,0	60,3	66,5	72,6	78,7	92,3	104,0
Cooling total input current	°,L	A	48,0	51,0	58,0	63,0	86,0	94,0	102,0	120,0	138,0	140,0	143,0	160,0	178,0
EER	°,L	W/W	4,87	4,86	4,86	4,85	4,85	4,88	4,86	4,84	4,90	4,88	4,89	4,92	4,92
Water flow rate source side	°,L	l/h	23047	24886	30656	34332	38866	45790	52970	60075	67065	73041	79190	93374	105103
Pressure drop source side	°,L	kPa	25	29	29	37	37	45	60	38	29	34	36	36	47
Water flow rate system side	°,L	l/h	19243	20789	25600	28692	32472	38314	44327	50169	56011	60993	66147	78063	87938
Pressure drop system side	°,L	kPa	30	35	32	40	43	47	49	55	35	36	36	36	40
Heating performance 40 °C / 45 °C (2)															
Heating capacity	°,L	kW	127,6	137,8	170,0	190,3	215,4	253,7	293,5	332,9	371,5	404,7	438,7	517,1	582,0
Input power	°,L	kW	27,6	29,9	36,3	40,9	46,4	54,5	63,3	72,3	79,0	86,2	93,3	109,5	123,4
Heating total input current	°,L	A	57,0	60,0	68,0	73,0	100,0	109,0	119,0	140,0	161,0	163,0	166,0	186,0	207,0
COP	°,L	W/W	4,62	4,61	4,69	4,66	4,64	4,66	4,64	4,60	4,70	4,69	4,70	4,72	4,71
Water flow rate source side	°,L	l/h	29340	31697	39235	43975	49768	58721	67938	76891	85844	93480	101380	119642	134776
Pressure drop source side	°,L	kPa	70	81	75	94	101	110	115	129	82	85	85	85	94
Water flow rate system side	°,L	l/h	22142	23905	29490	33021	37384	44030	50933	57790	64513	70265	76175	89802	101065
Pressure drop system side	°,L	kPa	23	27	27	34	34	42	55	35	27	31	33	33	43

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,L	W/W	5,50	5,85	5,79	5,77	5,84	5,81	5,52	6,30	6,42	6,37	6,38	6,49	6,48
Seasonal efficiency	°,L	%	217,0%	231,0%	228,6%	227,8%	230,6%	229,4%	217.8%	248,8%	253,8%	251,6%	252,0%	256,4%	256,2%
SEPR - (EN 14825: 2018) High temperature (2)															
SEPR	°	W/W	-	-	-	-	-	-	-	7,90	7,90	7,80	7,80	8,00	8,00
	L	W/W	-	-	-	-	-	-	-	7,93	7,90	7,78	7,80	8,00	8,02
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (3)															
Pdesignh	°,L	kW	164	177	218	244	277	326	377	-	-	-	-	-	-
SCOP	°,L	W/W	5,10	5,05	5,18	5,10	5,10	5,10	5,08	-	-	-	-	-	-
ηsh	°,L	%	196.0%	194.0%	199.0%	196.0%	196.0%	196.0%	195.0%	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

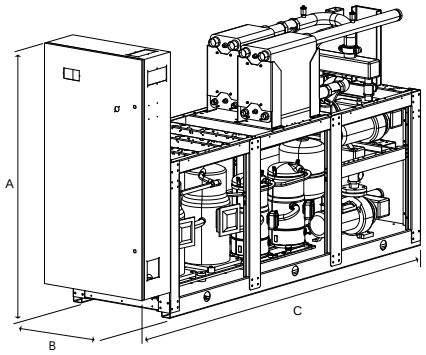
Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Electric data															
Maximum current (FLA)	°,L	A	75,0	80,0	96,0	107,0	122,0	146,0	169,0	193,0	217,0	231,0	248,0	267,0	296,0
Peak current (LRA)	°,L	A	240,0	245,0	227,0	238,0	289,0	319,0	341,0	398,0	422,0	490,0	504,0	601,0	630,0

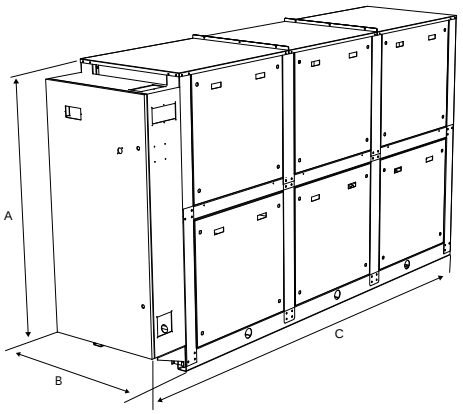
GENERAL TECHNICAL DATA

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Compressor															
Type	°,L	type	Scroll												
Compressor regulation	°,L	Type	On-Off												
Number	°,L	no.	3	3	4	4	4	4	4	4	4	4	4	4	4
Circuits	°,L	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,L	type	R410A												
Refrigerant charge (1)	°,L	kg	13,2	12,5	15,6	15,6	18,0	22,0	26,0	33,0	38,0	44,0	44,0	46,0	53,0
Source side heat exchanger															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Size (in)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3"
Size (out)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3"
System side heat exchanger															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Size (in)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"
Size (out)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"
Sound data calculated in cooling mode (2)															
Sound power level	°	dB(A)	78,0	79,0	79,0	80,0	82,0	86,0	88,0	88,0	88,0	90,0	90,0	93,0	95,0
	L	dB(A)	72,0	73,0	73,0	74,0	76,0	80,0	82,0	82,0	82,0	84,0	84,0	86,0	87,0
Sound pressure level (10 m)	°	dB(A)	46,4	47,4	47,4	48,4	50,4	54,3	56,3	56,3	56,3	58,3	58,3	61,3	63,3
	L	dB(A)	40,3	41,3	41,3	42,3	44,3	48,3	50,3	50,3	50,3	52,3	52,3	54,3	55,3

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS





Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Dimensions and weights															
A	°	mm	1835	1835	1835	1835	1835	1775	1775	1820	1820	1820	1820	1820	1820
	L	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
B	°,L	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
C	°	mm	1795	1795	1795	1795	1795	2420	2420	2420	2420	2420	2420	2420	2420
	L	mm	2090	2090	2090	2090	2090	2420	2420	2420	2420	2420	2420	2420	2420
Dimensions and weights with pump/s															
A	°	mm	1775	1775	1775	1775	1775	1775	1775	1820	1820	1820	1820	1820	1820
	L	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
B	°,L	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
C	°,L	mm	3020	3020	3020	3020	3020	3480	3480	3480	3480	3480	3480	3480	3480
Dimensions and weights															
Empty weight	°	kg	578	582	682	690	727	882	989	1180	1417	1461	1539	1613	1721
	L	kg	750	755	854	863	900	1054	1187	1378	1615	1659	1737	1811	1919

The weight of the unit does not include the hydronic kit and accessories.

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NXW

Reversible water-cooled heat pump, gas side

Cooling capacity 106 ÷ 477 kW
Heating capacity 125 ÷ 565 kW

- **Installation versatility also for geothermal applications.**
- **Options of 1 or 2 pumps on both source and user side.**
- **Production of hot water up to 55 °C**

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
These are indoor units with hermetic scroll compressors, system side heat exchanger and plate source.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Option integrated hydronic kit, source and user side

Possibility of integrated hydronic kit containing the main hydraulic components and available with various configurations.

CONTROL PCO

Microprocessor adjustment, with display LCD which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and the ad adjustment includes complete management of the alarms and their log.
You also have the possibility to:
— Check two units in parallel Master-Slave
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.
DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

ACCESSORIES COMPATIBILITY

Model	Ver	0503	0553	0604	0654	0704	0754	0804
AER485P1	°,L	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•
PGD1	°,L	•	•	•	•	•	•	•

Model	Ver	0904	1004	1254	1404	1504	1654
AER485P1	°,L	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•
PGD1	°,L	•	•	•	•	•	•

Antivibration

Version	System side - pumps	Integrated hydronic kit, source side	0503	0553	0604	0654	0704	0754	0804
°	°	°	AVX319	AVX319	AVX301	AVX301	AVX302	AVX310	AVX310
°	°	J, K, U, W	AVX320	AVX320	AVX320	AVX309	AVX309	AVX651	AVX651
°	M, O	°	AVX320	AVX320	AVX320	AVX309	AVX309	AVX651	AVX651
°	°	V, Z	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
°	M	J, K, U, W	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
°	N	°	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
°	O	J, K, U, W	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
°	P	°	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
°	M	V, Z	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
°	N	J, K, U, W	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
°	O	V, Z	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
°	P	J, K, U, W	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
°	N, P	V, Z	AVX309	AVX309	AVX312	AVX312	AVX312	AVX651	AVX651
L	°	°	AVX309	AVX309	AVX310	AVX303	AVX304	AVX314	AVX314
L	°	J, K, U, W	AVX311	AVX311	AVX311	AVX311	AVX651	AVX652	AVX665
L	M, O	°	AVX311	AVX311	AVX311	AVX311	AVX651	AVX652	AVX665
L	°	V, Z	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	M	J, K, U, W	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	N	°	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	O	J, K, U, W	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	P	°	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	M	V, Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665
L	N	J, K, U, V, W, Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665
L	O	V, Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665
L	P	J, K, U, V, W, Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665

Version	System side - pumps	Integrated hydronic kit, source side	0904	1004	1254	1404	1504	1654
°	°	°	AVX314	AVX316	AVX315	AVX317	AVX330	AVX331
°	°	J, K, U, W	AVX665	AVX654	AVX654	AVX654	AVX337	AVX336
°	M, O	°	AVX665	AVX654	AVX654	AVX654	AVX337	AVX336
°	°	V, Z	AVX665	AVX654	AVX654	AVX654	AVX336	-
°	M	J, K, U, W	AVX665	AVX654	AVX654	AVX654	AVX336	AVX335
°	N	°	AVX665	AVX654	AVX654	AVX654	AVX336	AVX335
°	O	J, K, U, W	AVX665	AVX654	AVX654	AVX654	AVX336	AVX335
°	M, O	V, Z	AVX665	AVX654	AVX654	AVX654	AVX335	-
°	N	J, K, U, W	AVX665	AVX654	AVX654	AVX654	AVX335	AVX339
°	N	V, Z	AVX665	AVX654	AVX654	AVX654	-	-
°	P	°, J, K, U, V, W, Z	AVX665	AVX654	AVX654	AVX654	-	-
L	°	°	AVX315	AVX317	AVX317	AVX318	AVX331	AVX333
L	°	J, K, U, W	AVX653	AVX659	AVX659	AVX659	AVX338	AVX338
L	°	V, Z	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	M	°, J, K, U, W	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	N	°	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	O	°, J, K, U, W	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	M, O	V, Z	AVX653	AVX659	AVX659	AVX659	AVX339	-
L	N	J, K, U, W	AVX653	AVX659	AVX659	AVX659	AVX339	AVX341
L	N	V, Z	AVX653	AVX659	AVX659	AVX659	AVX341	-
L	P	°, J, K, U, V, W, Z	AVX653	AVX659	AVX659	AVX659	-	-

- not available

PR4

Model	Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
PR4	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

Power factor correction

Ver	0503	0553	0604	0654	0704	0754	0804
°, L	RIF98	RIF98	RIF95	RIF95	RIF95	RIF95	RIF95

A grey background indicates the accessory must be assembled in the factory

Ver	0904	1004	1254	1404	1504	1654
°, L	RIF96	RIF97	RIF97	RIF97	RIF97	RIF97

A grey background indicates the accessory must be assembled in the factory

Device for peak current reduction

Ver	0503	0553	0604	0654	0704	0754	0804
°, L	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)	DRE801 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	0904	1004	1254	1404	1504	1654
°, L	DRE901 (1)	DRE1001 (1)	DRE1251 (1)	DRE1401 (1)	DRE1500 (1)	DRE1650 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NXW**
4,5,6,7		**Size** 0503, 0553, 0604, 0654, 0704, 0754, 0804, 0904, 1004, 1254, 1404, 1504, 1654
8		**Operating field (1)**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Version**
	°	Standard
	L	Standard silenced
11		**Evaporator**
	°	Standard
12		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
13		**Power supply**
	5	500V ~ 3 50Hz with magnet circuit breakers (3)
	°	400V ~ 3 50Hz with magnet circuit breakers
14		**System side - pumps**
	M	Single pump low head
	N	Pump low head + stand-by pump
	O	Single pump high head
	P	Pump high head + stand-by pump (4)
	°	Without hydronic kit
15		**Integrated hydronic kit, source side**
	J	Single low-head inverter pump
	K	Single high-head inverter pump
	U	Single pump low head
	V	Pump low head + stand-by pump (5)
	W	Pump high head
	Z	Pump high head + stand-by pump (5)
	°	Without hydronic kit

(1) Water produced from 4 °C ÷ 18 °C
(2) The desuperheater must be isolated in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) Only for 0804 ÷ 1004 sizes
(4) The hydronic kit P is not available for sizes 1504 and 1654
(5) The hydronic kits V and Z are not available for size 1654

PERFORMANCE SPECIFICATIONS

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°,L	kW	105,9	113,8	140,8	159,8	180,7	211,6	242,7	277,7	313,6	341,7	369,7	423,6	477,0
Input power	°,L	kW	23,8	25,7	31,1	35,3	40,2	47,1	54,2	62,2	70,4	76,6	82,7	94,8	106,7
Cooling total input current	°,L	A	49,0	52,0	60,0	65,0	87,0	95,0	104,0	122,0	140,0	144,0	147,0	164,0	183,0
EER	°,L	W/W	4,45	4,43	4,52	4,52	4,50	4,49	4,47	4,47	4,45	4,46	4,47	4,47	4,47
Water flow rate source side	°,L	l/h	22173	23854	29402	33334	37744	44198	50635	58078	65694	71514	77333	88547	99702
Pressure drop source side	°,L	kPa	25	29	28	35	35	42	55	36	28	32	34	41	44
Water flow rate system side	°,L	l/h	18212	19586	24225	27490	31098	36424	41750	47764	53949	58759	63570	72837	82027
Pressure drop system side	°,L	kPa	17	20	19	24	24	29	38	24	19	22	24	29	30
Heating performance 40 °C / 45 °C (2)															
Heating capacity	°,L	kW	125,4	135,8	165,8	187,6	210,4	269,6	310,2	325,2	365,6	399,8	434,0	500,6	565,2
Input power	°,L	kW	27,9	30,2	36,8	41,8	46,9	55,6	64,6	72,6	80,8	88,6	96,4	111,2	124,9
Heating total input current	°,L	A	54,0	57,0	66,0	72,0	94,0	105,0	115,0	135,0	154,0	160,0	165,0	181,0	202,0
COP	°,L	W/W	4,49	4,49	4,51	4,49	4,48	4,85	4,80	4,48	4,52	4,51	4,50	4,50	4,52
Water flow rate source side	°,L	l/h	28545	30928	37776	42774	47928	62567	71944	74067	83306	91109	98905	114256	129207
Pressure drop source side	°,L	kPa	43	49	46	58	58	46	61	58	46	52	58	66	71
Water flow rate system side	°,L	l/h	21762	23561	28776	32552	36508	46797	53844	56470	63485	69420	75355	86926	98135
Pressure drop system side	°,L	kPa	24	28	26	33	32	31	40	33	26	30	32	41	43

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,L	W/W	5,39	5,38	5,53	5,60	5,38	5,60	5,27	5,77	5,88	5,94	5,97	6,43	6,44
Seasonal efficiency	°,L	%	212,6%	212,2%	218,2%	221,0%	212,2%	221,0%	207.8%	227,8%	232,2%	234,5%	235,6%	254,2%	254,7%
SEPR - (EN 14825: 2018) High temperature (2)															
SEPR	°,L	W/W	-	-	-	-	-	-	-	7,03	7,06	7,06	7,03	-	-
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (3)															
Pdesignh	°,L	kW	161	175	213	241	271	320	368	-	-	-	-	-	-
SCOP	°,L	W/W	4,95	4,93	4,95	4,93	4,93	4,90	4,80	-	-	-	-	-	-
ηsh	°,L	%	190.0%	189.0%	190.0%	189.0%	189.0%	188.0%	184.0%	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

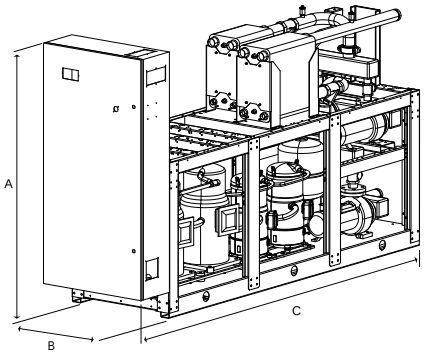
Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Electric data															
Maximum current (FLA)	°,L	A	75,0	80,0	96,0	107,0	122,0	146,0	169,0	193,0	217,0	231,0	248,0	267,0	296,0
Peak current (LRA)	°,L	A	240,0	245,0	227,0	238,0	289,0	319,0	341,0	398,0	422,0	490,0	504,0	601,0	630,0

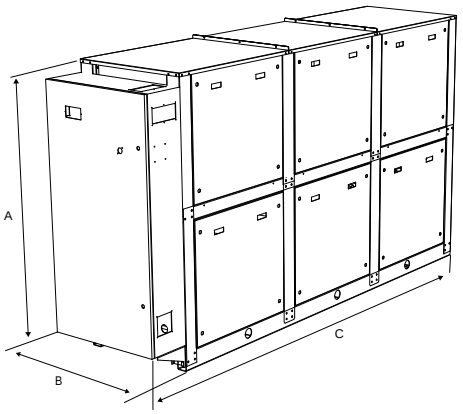
GENERAL TECHNICAL DATA

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Compressor															
Type	°,L	type	Scroll												
Compressor regulation	°,L	Type	On-Off												
Number	°,L	no.	3	3	4	4	4	4	4	4	4	4	4	4	4
Circuits	°,L	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,L	type	R410A												
Refrigerant charge (1)	°,L	kg	13,0	13,0	17,0	17,0	20,0	22,0	26,0	36,0	54,0	54,0	58,0	60,0	62,0
Source side heat exchanger															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Size (in)	°,L	Ø	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"	3"	3"	3"	3"	3"
Size (out)	°,L	Ø	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"	3"	3"	3"	3"	3"
System side heat exchanger															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Size (in)	°,L	Ø	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"	3"	3"	3"	3"	3"
Size (out)	°,L	Ø	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"	3"	3"	3"	3"	3"
Sound data calculated in cooling mode (2)															
Sound power level	°	dB(A)	78,0	79,0	79,0	80,0	82,0	86,0	88,0	88,0	88,0	90,0	90,0	93,0	95,0
	L	dB(A)	72,0	73,0	73,0	74,0	76,0	80,0	82,0	82,0	82,0	84,0	84,0	86,0	87,0
Sound pressure level (10 m)	°	dB(A)	46,4	47,4	47,4	48,4	50,4	54,3	56,3	56,3	56,3	58,3	58,3	61,3	63,3
	L	dB(A)	40,3	41,3	41,3	42,3	44,3	48,3	50,3	50,3	50,3	52,3	52,3	54,3	55,3

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS





Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Dimensions and weights															
A	°	mm	1835	1835	1835	1835	1835	1775	1775	1820	1820	1820	1820	1820	1820
	L	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
B	°,L	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
C	°	mm	1795	1795	1795	1795	1795	2420	2420	2420	2420	2420	2420	2420	2420
	L	mm	2090	2090	2090	2090	2090	2420	2420	2420	2420	2420	2420	2420	2420
Dimensions and weights with pump/s															
A	°	mm	1775	1775	1775	1775	1775	1775	1775	1820	1820	1820	1820	1820	1820
	L	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
B	°,L	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
C	°,L	mm	3020	3020	3020	3020	3020	3480	3480	3480	3480	3480	3480	3480	3480
Dimensions and weights															
Empty weight	°	kg	628	633	734	743	791	948	1042	1275	1545	1577	1657	1687	1825
	L	kg	801	805	907	915	963	1121	1240	1473	1743	1774	1855	1885	2023

The weight of the unit does not include the hydronic kit and accessories.

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NGW 0500-2600

Water cooled heat pump reversible water side

Cooling capacity 116,3 ÷ 790,2 kW
Heating capacity 131,3 ÷ 904,6 kW

- **Production of hot water up to 60 °C**
- **Options of 1 or 2 pumps on both source and user side.**
- **Reversible on hydraulic side in heat pump**

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Units with hermetic scroll compressors and plate heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

FEATURES

Operating field

Full load functioning with production of chilled water from -2 to 20 °C, with the possibility of also producing water at negative temperatures down to -10 °C at the evaporator and hot water at the condenser up to 60 °C.
(for more information, refer to the technical documentation).

Compressors

The compressors, optimised for low compression ratios in tandem and trio two-circuit configuration, ensure high efficiency especially at part loads, enabling them to exceed the minimum seasonal energy efficiency requirements for the design of low energy systems in both winter and summer.

Dual-circuit unit

The units are two-circuit to ensure continuity of operation in case one of the circuits fails.

Option integrated hydronic kit, source and user side

The hydronic kit is available in different configurations with one or two pumps, both on the evaporator and condenser side, in order to have a cost-saving solution that also facilitates final installation.

Refrigerant HFC R32

Thanks to the R32 refrigerant (A2L slightly flammable), the environmental impact of the units is significantly reduced.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.
The unit is fitted with:

— Refrigerant gas detector and safety valves with exchange valve as standard
— Electrical control board completely separate from compressor compartment
— Only the version with hood is available

The machine can be installed in class 3 areas according to EN 378-3.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

CONTROL

Microprocessor control, complete with a 6-button multifunction keypad for simple and intuitive navigation between the various screens, making it possible to edit the operating parameters and fully manage alarms and their history.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
SI485: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AVX: Spring anti-vibration supports.
SAENGW: External air probe for climate control curve.
KITFILTRO_2"1/2: The kit, supplied in a wooden crate, contains all the necessary elements for quick and efficient installation: water filter, 2"1/2 flexible coupling and insulation shell.
KITFILTRO_4": The kit, supplied in a wooden crate, contains all the necessary elements for quick and efficient installation: Y-water filter, 4" pipe, flexible coupling and insulation shell.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with SI485 communication interface when the serial port is occupied by another device.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

ACCESSORIES COMPATIBILITY

Accessories

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
AERNET	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SI485	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
PR4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with SI485 communication interface when the serial port is occupied by another device.

Antivibration

Hydronic kit integrated on chilled water utility side	Integrated hydronic kit, source side	0500	0550	0600	0650	0700	0750	0800	0900	1000
00	00	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380
00	IA, IB, IC, ID, IE, IF, IG, JA, JB, JC, JD, JE, JF, JG, UA, UB, UC, UD, UE, UF, UG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
DA, DB, DC, DD, DE, DF, DG	00, IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
PA, PB, PC, PD, PE, PF, PG	00, IA, IB, IC, ID, IE, IF, IG, JA, JB, JC, JD, JE, JF, JG, UA, UB, UC, UD, UE, UF, UG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
DA, DB, DC, DD, DE, DF, DG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX391	AVX382	AVX382	AVX382

Hydronic kit integrated on chilled water utility side	Integrated hydronic kit, source side	1200	1400	1500	1600	1800	2000	2200	2450	2600
00	00	AVX389	AVX389	AVX389	AVX389	AVX389	AVX393	AVX390	AVX390	AVX390
00	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX381	AVX383	AVX383	AVX383	AVX384	AVX384	AVX386	AVX386
PA, PB, PC, PD, PE, PF, PG	00	AVX381	AVX381	AVX383	AVX383	AVX383	AVX384	AVX384	AVX386	AVX386
00	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	00	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
PA, PB, PC, PD, PE, PF, PG	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX382	AVX382	AVX383	AVX383	AVX384	AVX385	AVX385	AVX385
PA, PB, PC, PD, PE, PF, PG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX381	AVX382	AVX382	AVX383	AVX383	AVX384	AVX385	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX382	AVX382	AVX382	AVX392	AVX392	AVX385	AVX385	AVX385	AVX387

Device for peak current reduction

0500	0550	0600	0650	0700	0750	0800	0900	1000
DRENGW0500	DRENGW0550	DRENGW0600	DRENGW0650	DRENGW0700	DRENGW0750	DRENGW0800	DRENGW0900	DRENGW1000

A grey background indicates the accessory must be assembled in the factory

1200	1400	1500	1600	1800	2000	2200	2450	2600
DRENGW1200	DRENGW1400	DRENGW1500	DRENGW1600	DRENGW1800	DRENGW2000	DRENGW2200	DRENGW2450	DRENGW2600

A grey background indicates the accessory must be assembled in the factory

water filter kit

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
KITFILTRO_2"1/2	•	•	•	•	•	•												

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
KITFILTRO_4"							•	•	•	•	•	•	•	•	•	•	•	•

CONFIGURATOR

Configuration options

Field	Description
1,2,3	**NGW**
4,5,6,7	**Size** 0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1200, 1400, 1500, 1600, 1800, 2000, 2200, 2450, 2600
8	**Operating field**
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	**Model**
°	Heat pump reversible on the water side
10	**Evaporator**
E	Evaporating unit
°	Standard
11	**Heat recovery**
D	With desuperheater
°	Without heat recovery
12	**Power supply**
°	400V ~ 3 50Hz with magnet circuit breakers
13,14	**Hydronic kit integrated on chilled water utility side**
00	Without hydronic kit
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump (3)
DB	Pump B + stand-by pump (3)
DC	Pump C + stand-by pump (3)
DD	Pump D + stand-by pump (4)
DE	Pump E + stand-by pump (4)
DF	Pump F + stand-by pump (4)
DG	Pump G + stand-by pump (4)
	Kit with n° 1 pump
PA	Pump A (3)
PB	Pump B (3)
PC	Pump C (3)
PD	Pump D (4)
PE	Pump E (4)
PF	Pump F (4)
PG	Pump G (4)
15,16	**Integrated hydronic kit, source side**
00	Without hydronic kit
	Kit with n° 1 inverter pump to fixed speed
IA	Pump A equipped with inverter device to work at fixed speed (3)
IB	Pump B equipped with inverter device to work at fixed speed (3)
IC	Pump C equipped with inverter device to work at fixed speedr (3)
ID	Pump D equipped with inverter device to work at fixed speed (4)
IE	Pump E equipped with inverter device to work at fixed speed (4)
IF	Pump F equipped with inverter device to work at fixed speed (4)
IG	Pump G equipped with inverter device to work at fixed speed (4)
	Kit with n° 1 inverter pump + stand-by pump to fixed speed
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (3)
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed (3)
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed (3)
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed (4)
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed (4)
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (4)
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (4)
	Kit with n° 1 pump
UA	Pump A (3)

Field	Description
UB	Pump B (3)
UC	Pump C (3)
UD	Pump D (4)
UE	Pump E (4)
UF	Pump F (4)
UG	Pump G (4)
	Pump n° 1 pump + stand-by pump
VA	Pump A + stand-by pump (3)
VB	Pump B + stand-by pump (3)
VC	Pump C + stand-by pump (3)
VD	Pump D + stand-by pump (4)
VE	Pump E + stand-by pump (4)
VF	Pump F + stand-by pump (4)
VG	Pump G + stand-by pump (4)

(1) Water produced from -2 °C ÷ 20 °C
(2) Water produced from -10 °C ÷ 10 °C
(3) Only for 0500 - 0750 sizes
(4) Only for 0800 - 2600 sizes

PERFORMANCE SPECIFICATIONS

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Cooling performance 12 °C / 7 °C (1)																				
Cooling capacity	°	kW	116,3	126,3	142,0	157,8	174,4	208,3	242,3	272,8	310,2	333,6	385,4	430,0	488,0	532,0	614,8	703,9	747,1	790,2
Input power	°	kW	23,1	25,8	28,6	32,0	35,4	41,8	48,3	55,2	61,1	68,2	78,4	89,9	99,2	110,8	128,0	144,9	156,9	169,0
Cooling total input current	°	A	46,0	50,0	56,0	63,0	69,0	82,0	92,0	102,0	112,0	122,0	139,0	158,0	174,0	193,0	223,0	252,0	271,0	290,0
EER	°	W/W	5,02	4,91	4,97	4,93	4,93	4,98	5,02	4,94	5,08	4,89	4,92	4,78	4,92	4,80	4,80	4,86	4,76	4,67
Water flow rate source side	°	l/h	23858	26011	29172	32446	35868	42774	49770	56140	63592	68752	79371	88890	100428	109848	126942	145015	154345	163659
Pressure drop source side	°	kPa	26	30	33	33	35	35	23	27	23	28	30	38	36	42	45	49	56	63
Water flow rate system side	°	l/h	20000	21737	24440	27149	30009	35846	41678	46918	53358	57360	66276	73940	83902	91467	105717	121028	128461	135873
Pressure drop system side	°	kPa	18	21	23	23	25	25	15	19	16	20	21	27	25	30	32	35	39	43

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Heating performance 40 °C / 45 °C (1)																				
Heating capacity	°	kW	131,3	144,6	160,4	178,4	197,7	236,2	275,0	308,6	348,8	377,8	437,4	490,5	553,8	606,7	700,9	800,5	852,7	904,6
Input power	°	kW	29,5	33,4	36,2	40,5	44,9	53,0	61,0	68,9	76,7	85,8	99,0	113,7	125,5	140,1	161,4	182,2	197,5	212,2
COP	°	W/W	4,46	4,33	4,43	4,41	4,40	4,45	4,50	4,48	4,55	4,40	4,42	4,31	4,41	4,33	4,34	4,39	4,32	4,26
Water flow rate system side	°	l/h	22789	25088	27829	30948	34307	40989	47727	53585	60562	65594	75963	85177	96178	105356	121721	139011	148077	157091
Pressure drop system side	°	kPa	24	28	30	30	32	32	21	24	21	26	28	35	33	39	42	45	51	58
Water flow rate source side	°	l/h	29818	32608	36390	40424	44800	53701	62474	70101	79473	85435	99053	110507	125500	136976	158407	181617	192771	204032
Pressure drop source side	°	kPa	41	48	51	52	55	57	33	42	37	44	48	59	56	68	71	78	87	98

(1) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Energy index

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	°	W/W	7,45	7,37	7,46	7,57	7,62	7,15	7,68	7,47	7,83	7,76	7,90	7,73	7,98	7,71	7,93	7,93	7,80	7,63
Seasonal efficiency	°	%	295,1	291,8	295,4	299,9	301,9	282,9	304,2	295,7	310,2	307,3	313	306,3	316,3	305,4	314	314,1	309,1	302,1
SEER - 23/18 (EN 14825: 2018)																				
SEER	°	W/W	10,71	10,82	10,79	11,02	11,06	9,83	10,66	10,29	11,04	10,96	11,37	11,04	11,80	11,35	11,68	12,21	11,84	11,43
Seasonal efficiency	°	%	425,30	429,80	428,50	437,90	439,20	390,20	423,30	408,50	438,50	435,50	451,70	438,80	469,00	451,10	464,00	485,20	470,50	454,10
SEPR - (EN 14825: 2018) High temperature (2)																				
SEPR	°	W/W	7,71	7,60	7,81	7,80	7,54	7,38	7,76	7,52	7,93	7,66	7,89	7,41	7,84	7,50	7,86	7,74	7,62	7,42
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)																				
SCOP	°	W/W	6,71	6,61	6,51	6,62	6,84	6,60	7,03	6,85	7,06	6,86	6,96	6,71	6,83	6,67	6,63	7,01	6,79	6,73
ηsh	°	%	260,20	256,30	252,50	256,60	265,40	255,80	273,00	265,80	274,20	266,50	270,30	260,50	265,30	258,90	257,20	272,40	263,70	261,30
Pdesignh	°	kW	138	151	169	187	207	247	287	324	367	397	458	513	579	634	732	836	890	943
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (4)																				
SCOP	°	W/W	4,91	4,78	4,82	4,93	4,93	4,80	5,04	4,96	5,00	4,85	4,93	4,80	4,86	4,74	4,83	5,40	5,31	5,27
ηsh	°	%	188,50	183,30	184,90	189,30	189,00	184,10	193,70	190,20	191,80	186,00	189,30	184,10	186,20	181,50	185,20	207,90	204,20	202,60
Pdesignh	°	kW	128	141	156	174	192	229	267	300	340	369	425	478	539	591	684	777	829	880

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Electric data

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Electric data																				
Maximum current (FLA)	°	A	73,0	81,0	89,0	99,0	108,0	127,0	145,0	163,0	181,0	198,0	228,0	258,0	288,0	318,0	367,0	416,0	446,0	476,0
Peak current (LRA)	°	A	239,0	204,0	210,0	265,0	274,0	293,0	359,0	377,0	395,0	412,0	538,0	568,0	598,0	628,0	677,0	726,0	756,0	786,0

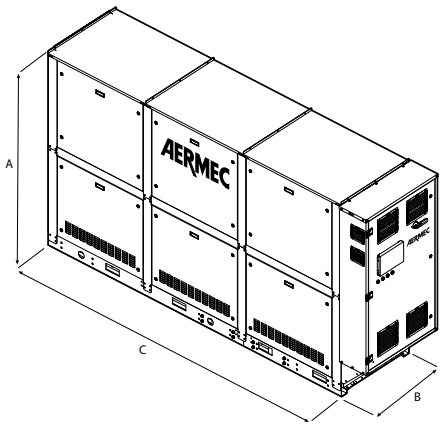
GENERAL TECHNICAL DATA

General data

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Compressor																				
Type	°	type	Scroll																	
Compressor regulation	°	Type	On-Off																	
Number	°	no.	3	4	4	4	4	4	4	4	4	4	4	4	4	4	5	6	6	6
Circuits	°	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°	type	R32																	
Refrigerant load circuit 1 (1)	°	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Refrigerant load circuit 2 (1)	°	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Source side heat exchanger																				
Type	°	type	Brazed plate																	
Number	°	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°	Type	Grooved joints																	
Size (in)	°	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
Size (out)	°	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
System side heat exchanger																				
Type	°	type	Brazed plate																	
Number	°	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°	Type	Grooved joints																	
Size (in)	°	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
Size (out)	°	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
Sound data calculated in cooling mode (2)																				
Sound power level	°	dB(A)	79,0	80,0	80,0	80,0	81,0	82,0	82,0	83,0	84,0	85,0	87,0	88,0	90,0	91,0	91,0	91,0	92,0	92,0
Sound pressure level (10 m)	°	dB(A)	47,3	48,3	48,3	48,3	49,3	50,2	50,2	51,2	52,2	53,2	55,2	56,2	58,2	59,2	59,1	59,1	60,1	60,1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Dimensions and weights

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Dimensions and weights																				
A	°	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
B	°	mm	800	800	800	800	800	850	850	850	850	850	850	850	850	850	900	900	900	900
C	°	mm	2090	2090	2090	2090	2090	2500	2500	2500	2500	2500	2500	2500	2500	2500	3600	3600	3600	3600
Empty weight	°	kg	920	980	995	1015	1040	1095	1225	1285	1405	1470	1585	1655	1860	1970	2330	2550	2610	2670
Dimensions and weights with pump/s																				
A	°	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
B	°	mm	800	800	800	800	800	850	850	850	850	850	850	850	900	900	900	900	900	900
C	°	mm	2950	2950	2950	2950	2950	3600	3600	3600	3600	3600	3600	3600	3600	3600	4700	4700	4700	4700

The weight of the unit does not include the hydronic kit and accessories.

■ *For the version with hydronic kit please contact headquarters.*

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Tel. 0442633111 - Telefax 044293577
www.aermec.com

NGW 0500H-2600H

Reversible water-cooled heat pump, gas side

Cooling capacity 107 ÷ 746,4 kW
Heating capacity 126,3 ÷ 879,3 kW

- **Production of hot water up to 60 °C**
- **Installation versatility also for geothermal applications.**
- **Options of 1 or 2 pumps on both source and user side.**
- **Reversible in heat pump on refrigerant circuit.**

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Units with hermetic scroll compressors and plate heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

FEATURES

Operating field

Full load functioning with production of chilled water from -2 to 20 °C, with the possibility of also producing water at negative temperatures down to -10 °C at the evaporator and hot water at the condenser up to 60 °C.
(for more information, refer to the technical documentation).

Compressors

The compressors, optimised for low compression ratios in tandem and trio two-circuit configuration, ensure high efficiency especially at part loads, enabling them to exceed the minimum seasonal energy efficiency requirements for the design of low energy systems in both winter and summer.

Dual-circuit unit

The units are two-circuit to ensure continuity of operation in case one of the circuits fails.

Option integrated hydronic kit, source and user side

The hydronic kit is available in different configurations with one or two pumps, both on the evaporator and condenser side, in order to have a cost-saving solution that also facilitates final installation.

Refrigerant HFC R32

Thanks to the R32 refrigerant (A2L slightly flammable), the environmental impact of the units is significantly reduced.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.
The unit is fitted with:

— Refrigerant gas detector and safety valves with exchange valve as standard
— Electrical control board completely separate from compressor compartment
— Only the version with hood is available

The machine can be installed in class 3 areas according to EN 378-3.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

CONTROL

Microprocessor control, complete with a 6-button multifunction keypad for simple and intuitive navigation between the various screens, making it possible to edit the operating parameters and fully manage alarms and their history.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
SI485: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AVX: Spring anti-vibration supports.
SAENGW: External air probe for climate control curve.
KITFILTRO_2"1/2: The kit, supplied in a wooden crate, contains all the necessary elements for quick and efficient installation: water filter, 2"1/2 flexible coupling and insulation shell.
KITFILTRO_4": The kit, supplied in a wooden crate, contains all the necessary elements for quick and efficient installation: Y-water filter, 4" pipe, flexible coupling and insulation shell.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with SI485 communication interface when the serial port is occupied by another device.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

ACCESSORIES COMPATIBILITY

Accessories

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
AERNET	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SI485	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
PR4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with SI485 communication interface when the serial port is occupied by another device.

Antivibration

Hydronic kit integrated on chilled water utility side	Integrated hydronic kit, source side	0500	0550	0600	0650	0700	0750	0800	0900	1000
00	00	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380
00	IA, IB, IC, ID, IE, IF, IG, JA, JB, JC, JD, JE, JF, JG, UA, UB, UC, UD, UE, UF, UG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
DA, DB, DC, DD, DE, DF, DG	00, IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
PA, PB, PC, PD, PE, PF, PG	00, IA, IB, IC, ID, IE, IF, IG, JA, JB, JC, JD, JE, JF, JG, UA, UB, UC, UD, UE, UF, UG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
DA, DB, DC, DD, DE, DF, DG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX391	AVX382	AVX382	AVX382

Hydronic kit integrated on chilled water utility side	Integrated hydronic kit, source side	1200	1400	1500	1600	1800	2000	2200	2450	2600
00	00	AVX389	AVX389	AVX389	AVX389	AVX389	AVX393	AVX390	AVX390	AVX390
00	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX381	AVX383	AVX383	AVX383	AVX384	AVX384	AVX386	AVX386
PA, PB, PC, PD, PE, PF, PG	00	AVX381	AVX381	AVX383	AVX383	AVX383	AVX384	AVX384	AVX386	AVX386
00	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	00	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
PA, PB, PC, PD, PE, PF, PG	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX382	AVX382	AVX383	AVX383	AVX384	AVX385	AVX385	AVX385
PA, PB, PC, PD, PE, PF, PG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX381	AVX382	AVX382	AVX383	AVX383	AVX384	AVX385	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX382	AVX382	AVX382	AVX392	AVX392	AVX385	AVX385	AVX385	AVX387

External air sensor

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
SAENGW	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Device for peak current reduction

0500	0550	0600	0650	0700	0750	0800	0900	1000
DRENGW0500	DRENGW0550	DRENGW0600	DRENGW0650	DRENGW0700	DRENGW0750	DRENGW0800	DRENGW0900	DRENGW1000

A grey background indicates the accessory must be assembled in the factory

1200	1400	1500	1600	1800	2000	2200	2450	2600
DRENGW1200	DRENGW1400	DRENGW1500	DRENGW1600	DRENGW1800	DRENGW2000	DRENGW2200	DRENGW2450	DRENGW2600

A grey background indicates the accessory must be assembled in the factory

Water filter kit

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
KITFILTRO_2"1/2	•	•	•	•	•	•												

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
KITFILTRO_4"							•	•	•	•	•	•	•	•	•	•	•	•

CONFIGURATOR

Configuration options

Field	Description
1,2,3	**NGW**
4,5,6,7	**Size** 0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1200, 1400, 1500, 1600, 1800, 2000, 2200, 2450, 2600
8	**Operating field**
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	**Model (3)**
H	Reversible heat pump, gas side
10	**Evaporator**
°	Standard
11	**Heat recovery**
D	With desuperheater
°	Without heat recovery
12	**Power supply**
°	400V ~ 3 50Hz with magnet circuit breakers
13,14	**Hydronic kit integrated on chilled water utility side**
00	Without hydronic kit
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump (4)
DB	Pump B + stand-by pump (4)
DC	Pump C + stand-by pump (4)
DD	Pump D + stand-by pump (5)
DE	Pump E + stand-by pump (5)
DF	Pump F + stand-by pump (5)
DG	Pump G + stand-by pump (5)
	Kit with n° 1 pump
PA	Pump A (4)
PB	Pump B (4)
PC	Pump C (4)
PD	Pump D (5)
PE	Pump E (5)
PF	Pump F (5)
PG	Pump G (5)
15,16	**Integrated hydronic kit, source side**
00	Without hydronic kit
	Kit with n° 1 inverter pump to fixed speed
IA	Pump A equipped with inverter device to work at fixed speed (4)
IB	Pump B equipped with inverter device to work at fixed speed (4)
IC	Pump C equipped with inverter device to work at fixed speedr (4)
ID	Pump D equipped with inverter device to work at fixed speed (5)
IE	Pump E equipped with inverter device to work at fixed speed (5)
IF	Pump F equipped with inverter device to work at fixed speed (5)
IG	Pump G equipped with inverter device to work at fixed speed (5)
	Kit with n° 1 inverter pump + stand-by pump to fixed speed
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4)
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4)
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4)
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5)
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5)
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5)
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5)
	Kit with n° 1 pump
UA	Pump A (4)
UB	Pump B (4)

Field	Description
UC	Pump C (4)
UD	Pump D (5)
UE	Pump E (5)
UF	Pump F (5)
UG	Pump G (5)
	Pump n° 1 pump + stand-by pump
VA	Pump A + stand-by pump (4)
VB	Pump B + stand-by pump (4)
VC	Pump C + stand-by pump (4)
VD	Pump D + stand-by pump (5)
VE	Pump E + stand-by pump (5)
VF	Pump F + stand-by pump (5)
VG	Pump G + stand-by pump (5)

(1) Water produced from -2 °C ÷ 20 °C
(2) Water produced from -10 °C ÷ 10 °C
(3) Not available for the condenserless "E"
(4) Only for 0500 - 0750 sizes
(5) Only for 0800 - 2600 sizes

PERFORMANCE SPECIFICATIONS

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Cooling performance 12 °C / 7 °C (1)																				
Cooling capacity	H	kW	107,0	116,5	131,0	145,6	161,0	192,0	224,1	252,8	285,3	312,6	361,4	405,2	458,1	501,6	578,8	661,4	703,9	746,4
Input power	H	kW	24,4	27,0	29,9	33,5	37,1	44,1	50,3	57,2	63,9	70,9	81,5	92,5	103,0	114,1	132,0	150,0	161,2	172,6
Cooling total input current	H	A	46,0	50,0	56,0	63,0	69,0	82,0	92,0	102,0	112,0	122,0	139,0	158,0	174,0	193,0	223,0	252,0	271,0	290,0
EER	H	W/W	4,38	4,31	4,38	4,35	4,34	4,35	4,45	4,42	4,47	4,41	4,43	4,38	4,45	4,40	4,39	4,41	4,37	4,33
Water flow rate source side	H	l/h	22477	24529	27493	30595	33839	40348	46960	53028	59761	65602	75759	85059	95925	105189	121421	138586	147677	156768
Pressure drop source side	H	kPa	25	29	31	32	33	33	20	25	22	26	28	36	33	40	42	46	52	59
Water flow rate system side	H	l/h	18406	20041	22537	25048	27701	33030	38529	43476	49070	53766	62145	69667	78757	86242	99517	113722	121034	128345
Pressure drop system side	H	kPa	16	19	20	21	22	22	13	17	14	17	19	23	22	26	28	30	34	39

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Heating performance 40 °C / 45 °C (1)																				
Heating capacity	H	kW	126,3	137,9	153,5	171,3	189,8	226,8	263,2	296,7	333,6	365,9	423,3	476,1	537,1	589,7	680,3	775,8	827,5	879,3
Input power	H	kW	30,7	34,0	37,6	42,0	46,5	55,3	62,6	70,9	78,9	87,4	100,4	114,0	126,9	140,5	162,7	185,1	199,0	213,0
COP	H	W/W	4,11	4,06	4,08	4,08	4,08	4,10	4,20	4,18	4,23	4,19	4,21	4,18	4,23	4,20	4,18	4,19	4,16	4,13
Water flow rate source side	H	l/h	28011	30483	34010	37920	42038	50310	58607	66067	74467	81529	94494	106176	120167	131791	151939	173447	184814	196191
Pressure drop source side	H	kPa	35	42	44	45	47	48	28	36	31	38	41	51	49	58	62	67	76	86
Water flow rate system side	H	l/h	21919	23928	26641	29720	32926	39358	45687	51511	57935	63543	73504	82679	93270	102408	118150	134728	143707	152693
Pressure drop system side	H	kPa	22	26	27	27	29	29	17	22	19	23	24	31	29	35	37	40	46	52

(1) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Energy index

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	H	W/W	6,48	6,44	6,55	6,59	6,61	6,36	6,68	6,56	6,73	6,60	6,76	6,75	6,86	6,74	6,78	6,83	6,89	6,84
Seasonal efficiency	H	%	256,10	254,70	259,10	260,60	261,30	251,50	264,10	259,30	266,30	261,00	267,50	267,00	271,30	266,40	268,20	270,00	272,40	270,50
SEER - 23/18 (EN 14825: 2018)																				
SEER	H	W/W	9,24	9,35	9,44	9,48	9,49	8,75	9,30	9,06	9,49	9,22	9,56	9,56	9,86	9,67	9,73	9,68	9,70	9,90
Seasonal efficiency	H	%	366,40	370,90	374,50	376,30	376,60	346,80	368,90	359,30	376,40	365,60	379,20	379,50	391,30	383,90	386,30	384,10	385,10	393,00
SEPR - (EN 14825: 2018) High temperature (2)																				
SEPR	H	W/W	6,83	6,75	6,84	6,93	6,79	6,70	6,89	6,80	6,95	6,67	6,93	6,95	7,15	6,92	6,95	7,04	7,14	6,94
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)																				
SCOP	H	W/W	5,41	5,55	5,45	5,58	5,54	5,41	5,62	5,63	5,77	5,78	5,81	5,75	5,85	5,82	5,80	5,74	5,75	5,69
ηsh	H	%	208,40	214,00	210,00	215,00	213,60	208,20	216,90	217,10	222,60	223,00	224,50	221,90	225,90	224,60	224,10	221,70	221,90	219,50
Pdesignh	H	kW	126	138	154	171	190	226	263	296	333	365	423	475	536	589	679	774	826	877
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (4)																				
SCOP	H	W/W	4,70	4,72	4,75	4,87	4,83	4,72	4,86	4,82	4,87	4,84	4,87	4,85	4,87	4,80	4,85	5,00	4,95	4,94
ηsh	H	%	180,10	180,70	181,90	186,90	185,30	180,80	186,30	184,90	186,70	185,40	186,60	185,80	186,90	183,80	186,00	192,00	189,90	189,50
Pdesignh	H	kW	121	133	148	164	183	218	252	286	321	352	406	456	514	565	652	742	797	848

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Electric data

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Electric data																				
Maximum current (FLA)	H	A	73,0	81,0	89,0	99,0	108,0	127,0	145,0	163,0	181,0	198,0	228,0	258,0	288,0	318,0	367,0	416,0	446,0	476,0
Peak current (LRA)	H	A	239,0	204,0	210,0	265,0	274,0	293,0	359,0	377,0	395,0	412,0	538,0	568,0	598,0	628,0	677,0	726,0	756,0	786,0

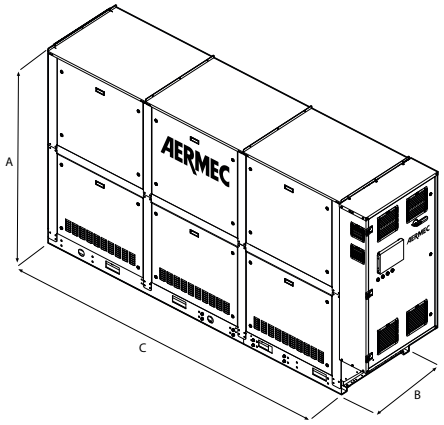
GENERAL TECHNICAL DATA

General data

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Compressor																				
Type	H	type	Scroll																	
Compressor regulation	H	Type	On-Off																	
Number	H	no.	3	4	4	4	4	4	4	4	4	4	4	4	4	4	5	6	6	6
Circuits	H	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	H	type	R32																	
Refrigerant load circuit 1 (1)	H	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Refrigerant load circuit 2 (1)	H	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Source side heat exchanger																				
Type	H	type	Brazed plate																	
Number	H	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	H	Type	Grooved joints																	
Size (in)	H	Ø	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″
Size (out)	H	Ø	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″
System side heat exchanger																				
Type	H	type	Brazed plate																	
Number	H	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	H	Type	Grooved joints																	
Size (in)	H	Ø	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″
Size (out)	H	Ø	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″
Sound data calculated in cooling mode (2)																				
Sound power level	H	dB(A)	79,0	80,0	80,0	80,0	81,0	82,0	82,0	83,0	84,0	85,0	87,0	88,0	90,0	91,0	91,0	91,0	92,0	92,0
Sound pressure level (10 m)	H	dB(A)	47,3	48,3	48,3	48,3	49,3	50,2	50,2	51,2	52,2	53,2	55,2	56,2	58,2	59,2	59,1	59,1	60,1	60,1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Dimensions and weights

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Dimensions and weights																				
A	H	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
B	H	mm	800	800	800	800	800	850	850	850	850	850	850	850	850	850	900	900	900	900
C	H	mm	2090	2090	2090	2090	2090	2500	2500	2500	2500	2500	2500	2500	2500	2500	3600	3600	3600	3600
Empty weight	H	kg	920	980	995	1015	1040	1095	1225	1285	1405	1470	1585	1655	1860	1970	2330	2550	2610	2670
Dimensions and weights with pump/s																				
A	H	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
B	H	mm	800	800	800	800	800	850	850	850	850	850	850	850	900	900	900	900	900	900
C	H	mm	2950	2950	2950	2950	2950	3600	3600	3600	3600	3600	3600	3600	3600	3600	4700	4700	4700	4700

The weight of the unit does not include the hydronic kit and accessories.

■ *For the version with hydronic kit please contact headquarters.*

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WS

Water cooled heat pump reversible water side

Cooling capacity 147 ÷ 700 kW
Heating capacity 164 ÷ 778 kW

- **High efficiency all in Class A Eurovent**
- **Optimised for low condenser temperatures**
- **Optimised for geothermal applications**
- **Available also with R513A (XP10) refrigerant**

DESCRIPTION
Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS
° Standard
L Standard silenced

FEATURES

Operating field
Full-load operation with the production of chilled water from 4 to 16°C, and the possibility to produce negative temperature water (down to -6°C) on the evaporator and hot water (up to 50 °C) on the condenser.
(for more information, refer to the technical documentation).

Units mono or dual-circuit
Depending on the size, the units are one-circuit or two-circuit models to ensure maximum efficiency with full loads as well as partial loads and guarantee operation continuity if one of the circuits stop.
They are equipped with screw compressors and system and source side plate heat exchangers.

CONTROL PCO_5
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
Adjustment includes complete management of the alarms and their log.
Possibility to control two units in a Master-Slave configuration
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES
AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
AKW: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
AER485P1	°,L	•	•	•	•	•								
AER485P1 x n° 2 (1)	°,L						•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Evaporator: E													
°, L	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661
Evaporator: °													
°, L	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661

Power factor correction

Ver	0601	0701	0801	0901	1101	1202	1402
°, L	-	RIF161	RIF161	RIF201	RIF241	RIF161 x2	RIF161 x2

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	1602	1802	2002	2202	2502	2802
°, L	RIF161 x2	RIF201 x 2	RIF201+RIF241	RIF241 x2	RIF301 x2	RIF301 x2

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	0601	0701	0801	0901	1101	1202	1402
L	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Ver	1602	1802	2002	2202	2502	2802
L	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2		**WS**
3,4,5,6		**Size** 0601, 0701, 0801, 0901, 1101, 1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
7		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (1)
8		**Model**
	°	Heat pump reversible on the water side
9		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (4)
	°	Without heat recovery
10		**Version**
	°	Standard
	L	Standard silenced
11		**Evaporator**
	E	Evaporating unit (5)
	°	Standard
12		**Power supply**
	2	230V ~ 3 50Hz with fuses
	4	230V ~ 3 50Hz with magnet circuit breakers
	5	500V ~ 3 50Hz with fuses
	8	400V ~ 3 50Hz with magnet circuit breakers
	9	500V ~ 3 50Hz with magnet circuit breakers
	°	400V ~ 3 50Hz with fuses

(1) Water produced from 4 °C ÷ 16 °C
(2) Water produced from 4 °C ÷ -6 °C; for the avalability with the heat recovery we advise you to contact us
(3) In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) Option not available for condenserless unit.
(5) Shipped with holding charge only.

PERFORMANCE SPECIFICATIONS

WS - °/L

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°/L	kW	147,7	186,9	212,2	233,8	299,0	308,6	369,1	421,6	469,8	545,6	599,8	654,3	700,4
Input power	°/L	kW	29,1	36,6	81,8	46,0	58,7	605,6	72,8	83,2	92,7	106,7	117,2	128,1	136,8
Cooling total input current	°/L	A	56,0	67,0	74,0	83,0	95,0	110,0	133,0	149,0	167,0	179,0	190,0	219,0	235,0
EER	°/L	W/W	5,08	5,11	5,07	5,08	5,09	5,10	5,07	5,06	5,07	5,11	5,12	5,11	5,12
Water flow rate source side	°/L	l/h	30238	38269	43508	47922	61258	63078	75593	86332	96177	111478	122506	133608	142894
Pressure drop source side	°/L	kPa	33	23	22	22	25	47	36	39	43	48	52	58	65
Water flow rate system side	°/L	l/h	25421	32148	36495	40212	51431	53088	63476	72492	80788	93813	103143	112508	120438
Pressure drop system side	°/L	kPa	23	17	15	16	18	33	25	27	30	33	35	39	44
Heating performance 40 °C / 45 °C (2)															
Heating capacity	°/L	kW	164,9	208,7	237,3	261,4	334,0	343,7	412,1	470,6	524,2	607,2	667,2	727,6	778,0
Input power	°/L	kW	36,8	46,3	52,9	58,1	74,2	76,9	92,2	105,5	117,7	135,5	148,8	162,8	174,1
Heating total input current	°/L	A	70,0	84,0	94,0	105,0	120,0	138,0	168,0	188,0	210,0	225,0	240,0	275,0	296,0
COP	°/L	W/W	4,48	4,51	4,49	4,50	4,50	4,47	4,47	4,46	4,46	4,48	4,48	4,47	4,47
Water flow rate system side	°/L	l/h	28611	36218	41197	45370	57987	59660	71552	81718	91025	105442	115854	126347	135087
Pressure drop system side	°/L	kPa	29	21	19	20	23	42	32	35	38	43	46	52	58
Water flow rate source side	°/L	l/h	37525	47456	53873	59360	75920	78366	93702	107011	119257	138485	152256	166081	177787
Pressure drop source side	°/L	kPa	49	37	33	34	39	73	54	59	65	72	77	85	96

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Performance specifications Evaporating units

WS - E

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Evaporator: E															
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°/L	kW	134,5	167,9	189,2	216,7	264,4	276,7	333,2	381,0	431,7	489,8	542,5	591,7	629,6
Input power	°/L	kW	34,7	42,2	48,2	55,0	67,0	69,3	84,4	96,5	109,9	122,0	134,1	146,8	157,0
Cooling total input current	°/L	A	63,0	75,0	85,0	96,0	111,0	127,0	151,0	170,0	192,0	207,0	222,0	252,0	270,0
EER	°/L	W/W	3,88	3,98	3,92	3,94	3,94	3,99	3,95	3,95	3,93	4,01	4,05	4,03	4,01
Water flow rate system side	°/L	l/h	23108	28849	32512	37238	45248	47546	57251	65458	74169	84147	93212	101661	108175
Pressure drop system side	°/L	kPa	18	13	12	12	14	25	19	20	23	25	27	30	34

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°/L	W/W	5,58	5,80	6,09	6,04	5,96	6,22	6,24	6,39	6,39	6,38	6,38	6,42	6,39
Seasonal efficiency	°/L	%	220,2%	229,0%	240,6%	238.6%	235,2%	245,7%	246,6%	252,5%	252,6%	252,1%	252,2%	253,9%	252,7%
SEPR - (EN 14825: 2018) High temperature (2)															
SEPR	°/L	W/W	-	-	-	-	7,77	7,97	7,99	8,11	8,01	8,04	8,01	8,05	8,01
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)															
Pdesignh	°/L	kW	229	290	330	363	-	-	-	-	-	-	-	-	-
SCOP	°/L	W/W	5,98	6,10	6,30	6,25	-	-	-	-	-	-	-	-	-
ηsh	°/L	%	231.0%	236.0%	244.0%	242.0%	-	-	-	-	-	-	-	-	-

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.
(3) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

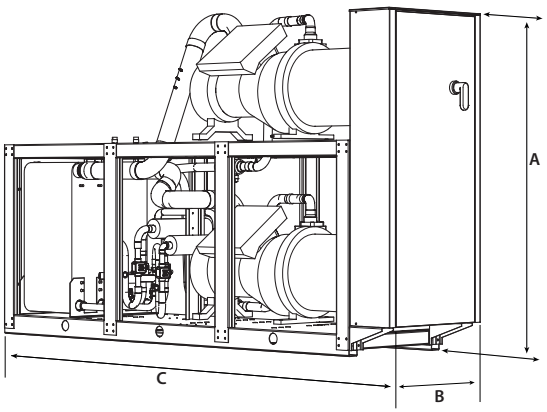
Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Electric data															
Maximum current (FLA)	°/L	A	90,7	98,0	112,0	128,0	156,0	168,0	196,0	224,0	256,0	284,0	312,0	354,0	380,0
Peak current (LRA)	°/L	A	147,0	140,0	163,0	192,0	246,0	194,1	198,5	228,0	262,6	316,6	324,7	388,1	448,1

GENERAL TECHNICAL DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Compressor															
Type	°,L	type							Screw						
Compressor regulation	°,L	Type							On-Off						
Number	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Circuits	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R134a						
Refrigerant charge (1)	°,L	kg	18,0	22,0	22,0	25,0	38,0	36,0	42,0	44,0	50,0	59,0	68,0	70,0	80,0
System side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Source side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Sizes (in/out)	°,L	Ø							3"						
Source side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Sizes (in/out)	°,L	Ø							3"						
Sound data calculated in cooling mode (2)															
Sound power level	°	dB(A)	86,1	86,8	87,1	87,8	87,1	89,1	89,8	90,1	90,8	90,5	90,1	91,3	91,8
	L	dB(A)	78,1	78,8	79,1	79,9	78,1	81,1	81,8	82,1	82,9	82,1	81,1	83,4	84,1
Sound pressure level (10 m)	°	dB(A)	54,3	55,0	55,3	56,0	55,3	57,2	57,9	58,3	59,0	58,6	58,2	59,3	59,9
	L	dB(A)	46,3	47,0	47,3	48,1	46,3	49,2	50,0	50,2	51,0	50,2	49,2	51,5	52,2

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Dimensions and weights															
A	°	mm	1775	1775	1775	1775	1775	1975	1975	1975	2005	1985	2065	2065	2065
	L	mm	1775	1775	1775	1775	1775	2120	2120	2120	2120	2120	2120	2120	2120
B	°,L	mm	810	810	810	810	810	810	810	810	810	810	810	810	810
C	°,L	mm	2960	2960	2960	2960	3360	2960	2960	2960	2960	3360	3360	3360	3360
Empty weight	°	kg	1101	1251	1301	1357	1788	1738	2071	2140	2212	2648	3050	3131	3131
	L	kg	1229	1379	1429	1485	1934	1966	2299	2368	2440	2905	3307	3388	3388

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HWS

Water cooled heat pump reversible water side

Cooling capacity 147 ÷ 369 kW
Heating capacity 165 ÷ 778 kW

- **High efficiency all in Class A Eurovent**
- **Unit optimised for high condenser temperatures.**
- **Optimised for geothermal applications**
- **Available also with R513A (XP10) refrigerant**

DESCRIPTION
Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS
° Standard
L Standard silenced

FEATURES

Operating field
Full-load operation with the production of chilled water 4-16 °C, and the possibility to produce also hot water for the condenser up to 60 °C.
(for more information, refer to the technical documentation).

Units mono or dual-circuit
Depending on the size, the units are one-circuit or two-circuit models to ensure maximum efficiency with full loads as well as partial loads and guarantee operation continuity if one of the circuits stop.
They are equipped with screw compressors and system and source side plate heat exchangers.

Integral acoustic enclosure
For all versions, if required, it is available the integral acoustic enclosure, which can further reduce the sound level.

CONTROL PCO_5
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
Adjustment includes complete management of the alarms and their log.
Possibility to control two units in a Master-Slave configuration
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES
AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
AKW: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
AER485P1	°,L	•	•	•	•	•								
AER485P1 x n° 2 (1)	°,L						•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Heat recovery	Evaporator	0601	0701	0801	0901	1101
°	°	°	AVX651	AVX651	AVX652	AVX652	AVX656
°	°, D	E	-	AVX668	AVX668	AVX668	AVX669
°	D	°	-	AVX651	AVX652	AVX652	AVX654
°	T	°	-	AVX652	AVX655	AVX655	AVX657
L	°	°	AVX651	AVX651	AVX652	AVX652	AVX656
L	°, D	E	-	AVX668	AVX668	AVX668	AVX669
L	D	°	-	AVX651	AVX652	AVX652	AVX654
L	T	°	-	AVX652	AVX655	AVX655	AVX657

Version	Heat recovery	Evaporator	1202	1402	1602	1802	2002
°	°	°	AVX658	AVX658	AVX658	AVX659	AVX667
°	°	E	-	AVX670	AVX670	AVX670	AVX671
°	D	°	AVX658	AVX658	-	-	-
°	D	E	-	AVX670	-	-	-
°	T	°	-	AVX662	-	-	-
L	°	°	AVX658	AVX658	AVX658	AVX659	AVX667
L	°	E	-	AVX670	AVX670	AVX670	AVX671
L	D	°	AVX658	AVX658	-	-	-
L	D	E	-	AVX670	-	-	-
L	T	°	-	AVX662	-	-	-

Version	Heat recovery	Evaporator	2202	2502	2802
°	°	°	AVX661	AVX661	AVX661
°	°	E	AVX672	AVX672	AVX672
°	D	°, E	-	-	-
°	T	°	-	-	-
L	°	°	AVX661	AVX661	AVX661
L	°	E	AVX672	AVX672	AVX672
L	D	°, E	-	-	-
L	T	°	-	-	-

- not available

Power factor correction

Ver	0601	0701	0801	0901	1101	1202	1402
°, L	-	RIF161	RIF161	RIF201	RIF241	-	RIF161 x2

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	1602	1802	2002	2202	2502	2802
°, L	RIF161 x2	RIF201 x 2	RIF201+RIF241	RIF241 x2	RIF301 x2	RIF301 x2

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
L	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**HWS**
4,5,6,7		**Size** 0601, 0701, 0801, 0901, 1101, 1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
8		**Operating field**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve
9		**Model**
	°	Heat pump reversible on the water side
10		**Heat recovery**
	D	With desuperheater (1)
	T	With total recovery (2)
	°	Without heat recovery
11		**Version**
	°	Standard
	L	Standard silenced

Field		Description
12		**Evaporator**
	E	Evaporating unit (3)
	°	Standard
13		**Power supply**
	2	230V ~ 3 50Hz with fuses
	4	230V ~ 3 50Hz with magnet circuit breakers
	5	500V ~ 3 50Hz with fuses
	8	400V ~ 3 50Hz with magnet circuit breakers
	9	500V ~ 3 50Hz with magnet circuit breakers
	°	400V ~ 3 50Hz with fuses

(1) The temperature of the water in the heat exchanger inlet must never drop below 35°C. The desuperheater is not available for sizes 0601 and 1202.
(2) The desuperheater and total recovery are not available for sizes 0601 and 1202; T are not compatible with E.
(3) Shipped with holding charge only. Option not available for size 0601 and 1202.

PERFORMANCE SPECIFICATIONS

HWS - °/L

Size			0601	0701	0801	0901	1101	1202	1402
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	°,L	kW	146,7	178,8	212,7	233,7	293,7	293,7	356,6
Input power	°,L	kW	31,7	38,0	43,2	49,2	59,7	63,5	76,8
Cooling total input current	°,L	A	56,0	66,0	74,0	82,0	101,0	112,0	132,0
EER	°,L	W/W	4,63	4,70	4,92	4,75	4,92	4,62	4,64
Water flow rate source side	°,L	l/h	30474	37085	43795	48419	60454	60948	73996
Pressure drop source side	°,L	kPa	40	27	27	26	31	53	50
Water flow rate system side	°,L	l/h	25256	30754	36596	40204	50513	50513	61337
Pressure drop system side	°,L	kPa	29	20	20	19	23	38	36
Heating performance 40 °C / 45 °C (2)									
Heating capacity	°,L	kW	163,9	199,3	234,8	260,1	324,0	327,5	397,5
Input power	°,L	kW	38,0	45,4	51,6	58,8	71,4	76,3	92,2
Heating total input current	°,L	A	66,0	78,0	88,0	97,0	120,0	133,0	157,0
COP	°,L	W/W	4,31	4,39	4,55	4,42	4,54	4,29	4,31
Water flow rate source side	°,L	l/h	36968	45016	53566	58847	73936	73936	89780
Pressure drop source side	°,L	kPa	62	43	43	41	49	81	77
Water flow rate system side	°,L	l/h	28421	34581	40752	45134	56255	56843	69010
Pressure drop system side	°,L	kPa	35	23	23	23	27	46	43

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Size			1602	1802	2002	2202	2502	2802
Heating performance 40 °C / 45 °C (1)								
Heating capacity	°,L	kW	465,7	522,8	584,8	646,9	730,9	799,6
Input power	°,L	kW	104,0	121,3	133,2	145,1	165,9	181,5
Heating total input current	°,L	A	176,0	195,0	218,0	241,0	277,0	280,0
COP	°,L	W/W	4,48	4,31	4,39	4,46	4,41	4,40
Water flow rate source side	°,L	l/h	106378	118198	133036	147873	166735	182932
Pressure drop source side	°,L	kPa	86	88	96	103	114	137
Water flow rate system side	°,L	l/h	80851	90770	101543	112315	126902	138328
Pressure drop system side	°,L	kPa	48	50	54	58	65	79

(1) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Performance specifications Evaporating units

HWS - E

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Evaporator: E															
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°,L	kW	-	163,0	192,0	212,0	263,0	-	326,0	385,0	428,0	481,0	539,0	601,0	676,0
Input power	°,L	kW	-	41,0	47,0	54,0	66,0	-	82,0	93,0	108,0	120,0	132,0	146,0	159,0
Cooling total input current	°,L	A	-	72,0	81,0	90,0	113,0	-	144,0	162,0	180,0	204,0	226,0	254,0	272,0
EER	°,L	W/W	-	3,98	4,09	3,93	3,98	-	3,98	4,14	3,96	4,01	4,08	4,12	4,25
Water flow rate system side	°,L	l/h	-	28005	32988	36424	45186	-	56011	66147	73535	82641	92606	103259	116144
Pressure drop system side	°,L	kPa	-	20	20	19	23	-	36	40	41	45	48	53	62

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0601	0701	0801	0901	1101	1202	1402
SEER - 12/7 (EN14825: 2018) (1)									
SEER	°,L	W/W	5,01	5,28	5,57	5,43	5,59	5,36	5,42
Seasonal efficiency	°,L	%	197,4%	208,2%	219.8%	214.2%	220,6%	211,4%	213,6%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)									
Pdesignh	°,L	kW	215	257	293	330	-	-	-
SCOP	°,L	W/W	4,55	4,60	4,73	4,58	-	-	-
ηsh	°,L	%	174.0%	176.0%	181.0%	175.0%	-	-	-

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

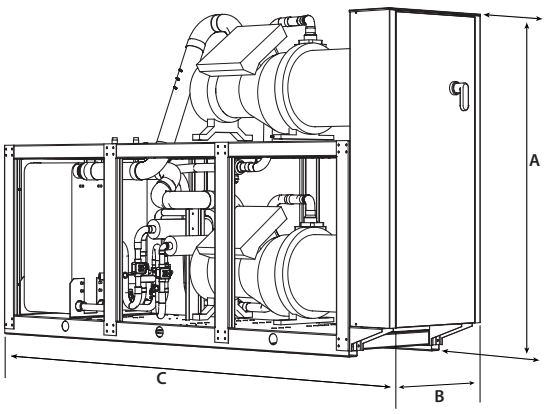
Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Electric data															
Maximum current (FLA)	°,L	A	105,0	124,0	144,0	162,0	182,0	210,0	248,0	288,0	324,0	344,0	364,0	430,0	430,0
Peak current (LRA)	°,L	A	180,0	163,0	192,0	229,0	300,0	285,0	287,0	336,0	391,0	462,0	482,0	575,0	575,0

GENERAL TECHNICAL DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Compressor															
Type	°,L	type							Screw						
Compressor regulation	°,L	Type							On-Off						
Number	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Circuits	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R134a						
System side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Source side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Sizes (in/out)	°,L	Ø							3"						
Source side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Sizes (in/out)	°,L	Ø							3"						
Sound data calculated in cooling mode (1)															
Sound power level	°	dB(A)	85,0	86,0	86,0	86,0	92,0	88,0	89,0	89,0	89,0	93,0	95,0	95,0	95,0
	L	dB(A)	77,0	78,0	78,0	78,0	84,0	80,0	81,0	81,0	81,0	85,0	87,0	87,0	87,0
Sound pressure level (10 m)	°	dB(A)	53,2	54,2	54,2	54,2	60,2	56,2	57,2	57,2	57,2	61,1	63,1	63,1	63,1
	L	dB(A)	45,2	46,2	46,2	46,2	52,2	48,1	49,1	49,1	49,1	53,1	55,1	55,1	55,1

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Dimensions and weights															
A	°	mm	1775	1775	1775	1775	1775	1975	1975	1975	2005	1985	2065	2065	2065
	L	mm	1775	1775	1775	1775	1775	2120	2120	2120	2120	2120	2120	2120	2120
B	°¸L	mm	810	810	810	810	810	810	810	810	810	810	810	810	810
C	°¸L	mm	2960	2960	2960	2960	3360	2960	2960	2960	2960	3360	3360	3360	3360
Empty weight	°¸L	kg	1101	1251	1301	1357	1788	1738	2028	2097	2169	2598	3000	3095	3095

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HWSG

Water cooled heat pump reversible water side

Cooling capacity 110 ÷ 396 kW
Heating capacity 122 ÷ 595 kW

- **Use of the new ecological gas R1234ze**
- **Unit optimised for high condenser temperatures.**
- **Production of hot water from condenser up to 65° C.**

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Production of chilled water up to 4°C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 65°C.

Units mono or dual-circuit

Depending on the size, the units are one-circuit or two-circuit models to ensure maximum efficiency with full loads as well as partial loads and guarantee operation continuity if one of the circuits stop.
They are equipped with screw compressors and system and source side plate heat exchangers dedicated to use of the new HFO R1234ze gas.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:
ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430, with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL

pCO^5 control type
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
Adjustment includes complete management of the alarms and their log.
Possibility to control two units in a Master-Slave configuration
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

ACCESSORIES COMPATIBILITY

Model	Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
AER485P1	°,L	•	•	•	•	•								
AER485P1 x n° 2 (1)	°,L						•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
°, L	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661

CONFIGURATOR

Field	Description
1,2,3,4	**HWSG**
5,6,7,8	**Size** 0601, 0701, 0801, 0901, 1101, 1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
9	**Operating field**
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
10	**Model**
°	Optimised for high condenser temperatures
11	**Heat recovery**
D	With desuperheater (3)
T	With total recovery (3)
°	Without heat recovery
12	**Version**
°	Standard
L	Standard silenced
13	**Evaporator**
°	Standard
14	**Power supply**
°	400V ~ 3 50Hz with fuses

(1) Water produced from 4 °C ÷ 16 °C
(2) Water produced from -5 °C ÷ 4 °C
(3) Order management

PERFORMANCE SPECIFICATIONS

HWSG - °/L

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	°,L	kW	110,5	135,1	156,5	176,0	215,8	221,7	271,4	315,9	354,9	396,8
Input power	°,L	kW	23,2	27,7	31,3	35,6	43,2	46,2	57,0	63,9	73,6	80,7
Cooling total input current	°,L	A	48,0	55,0	61,0	66,0	82,0	96,0	111,0	122,0	132,0	149,0
EER	°,L	W/W	4,77	4,87	5,00	4,94	4,99	4,80	4,76	4,94	4,82	4,92
Water flow rate system side	°,L	l/h	19007	23236	26907	30255	37102	38143	46690	54329	61030	68240
Pressure drop system side	°,L	kPa	16	11	10	11	12	24	32	21	23	25
Water flow rate source side	°,L	l/h	22875	27903	32183	36261	44378	45808	56089	64986	73289	81668
Pressure drop source side	°,L	kPa	23	16	15	15	17	34	47	31	34	36
Heating performance 40 °C / 45 °C (2)												
Heating capacity	°,L	kW	122,8	149,7	172,4	194,4	237,8	245,8	301,0	348,2	393,1	437,6
Input power	°,L	kW	27,7	33,1	37,3	42,5	51,6	55,2	68,3	76,4	88,0	96,5
Heating total input current	°,L	A	58,0	65,0	72,0	78,0	97,0	114,0	131,0	145,0	157,0	176,0
COP	°,L	W/W	4,43	4,52	4,62	4,57	4,61	4,45	4,41	4,56	4,47	4,53
Water flow rate system side	°,L	l/h	21319	25989	29942	33756	41288	42668	52248	60463	68263	75995
Pressure drop system side	°,L	kPa	20	14	13	13	15	29	41	27	30	31
Water flow rate source side	°,L	l/h	27820	34012	39384	44285	54307	55832	68342	79522	89331	99885
Pressure drop source side	°,L	kPa	35	24	22	23	26	50	69	46	50	54

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Size			2202	2502	2802
Heating performance 40 °C / 45 °C (1)					
Heating capacity	°,L	kW	488,6	540,8	595,5
Input power	°,L	kW	106,1	119,3	131,9
Heating total input current	°,L	A	196,0	225,0	240,0
COP	°,L	W/W	4,60	4,53	4,52
Water flow rate system side	°,L	l/h	84852	93902	103410
Pressure drop system side	°,L	kPa	34	37	45
Water flow rate source side	°,L	l/h	112042	123541	136133
Pressure drop source side	°,L	kPa	58	62	75

(1) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002
SEER - 12/7 (EN14825: 2018) (1)												
Seasonal efficiency	°,L	%	205,9%	214,4%	222,6%	221,7%	221,9%	210,8%	211,5%	228,3%	223,0%	226,4%
SEER	°,L	W/W	5,22	5,44	5,64	5,62	5,62	5,35	5,36	5,78	5,65	5,74
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)												
Pdesignh	°,L	kW	155	188	217	245	299	309	379	-	-	-
SCOP	°,L	W/W	4,52	4,62	4,72	4,69	4,69	4,63	4,60	-	-	-
ηsh	°,L	%	173.0%	177.0%	181.0%	179.0%	181.0%	177.0%	176.0%	-	-	-

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

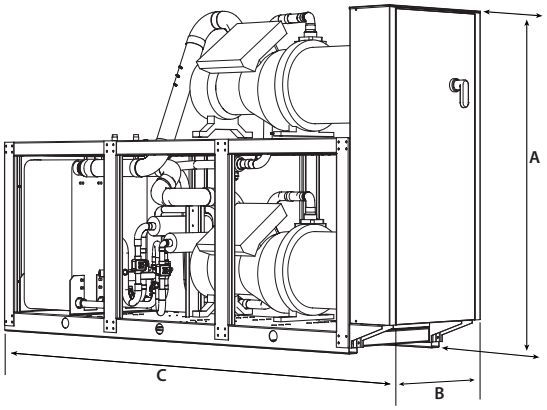
Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Electric data															
Maximum current (FLA)	°,L	A	75,6	95,6	104,4	115,9	143,2	151,2	191,2	208,8	231,8	259,1	286,4	323,8	352,0
Peak current (LRA)	°,L	A	180,0	163,0	192,0	229,0	267,0	255,6	258,6	296,4	344,9	372,2	410,2	475,9	490,0

GENERAL TECHNICAL DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Compressor															
Type	°,L	type							Screw						
Compressor regulation	°,L	Type							On/Off						
Number	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Circuits	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R1234ze						
Refrigerant load circuit 1 (1)	°,L	kg	18,0	20,0	22,0	25,0	38,0	18,0	20,5	21,5	25,0	25,0	33,0	35,0	39,0
Refrigerant load circuit 2 (1)	°,L	kg	-	-	-	-	-	18,0	20,0	22,0	25,0	30,0	18,0	20,5	21,5
System side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Source side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Size (in) (2)	°,L	Ø							3″						
Size (out) (2)	°,L	Ø							3″						
Source side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Size (in)	°,L	Ø							3″						
Size (out)	°,L	Ø							3″						
Sound data calculated in cooling mode (3)															
Sound power level	°	dB(A)	87,0	86,0	86,0	86,0	92,0	89,0	90,0	89,0	89,0	93,0	95,0	95,0	95,0
	L	dB(A)	78,9	78,0	78,0	78,0	84,0	81,0	81,9	81,0	81,0	85,0	87,0	87,0	87,0
Sound pressure level (10 m)	°	dB(A)	55,2	54,2	54,2	54,2	60,2	57,2	58,1	57,2	57,2	61,1	63,1	63,1	63,1
	L	dB(A)	47,1	46,2	46,2	46,2	52,2	49,1	50,0	49,1	49,1	53,1	55,1	55,1	55,1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Size
(3) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Dimensions and weights															
A	°	mm	1775	1775	1775	1775	1775	1975	1975	1975	2005	1985	2065	2065	2065
	L	mm	1775	1775	1775	1775	1775	2120	2120	2120	2120	2120	2120	2120	2120
B	°,L	mm	810	810	810	810	810	810	810	810	810	810	810	810	810
C	°,L	mm	2960	2960	2960	2960	3360	2960	2960	2960	2960	3360	3360	3360	3360
Empty weight	°	kg	1101	1251	1301	1357	1788	1738	2028	2097	2169	2598	3000	3095	3095
	L	kg	1229	1379	1429	1485	1934	1966	2256	2325	2397	2855	3257	3352	3352

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www.aermec.com

WSH

Reversible water-cooled heat pump, gas side

Cooling capacity 165,8 ÷ 269,7 kW
Heating capacity 183,3 ÷ 300,3 kW

- **Reversing valve**
- **Optional electronic expansion valve which allows: cooling down to -6 °C**
- **Modulating capacity control 25-100%**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
High-efficiency screw compressors, with silent functioning and with cooling capacity adjustment via continuous modulation from 40 to 100%. (25-100% with electronic valve OPTION which is to be requested when placing the order)
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-16 °C, and the possibility to produce also negative temperature water down to -6 °C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
Adjustment includes complete management of the alarms and their log.
Possibility to control two units in a Master-Slave configuration
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
AKW: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	0701	0801	0901	1101
AER485P1	°,L	•	•	•	•
AERBACP	°,L	•	•	•	•
AERNET	°,L	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•
PRV3	°,L	•	•	•	•

Antivibration

Ver	0701	0801	0901	1101
°, L	AVX665	AVX665	AVX665	AVX666

Power factor correction

Ver	0701	0801	0901	1101
°, L	RIF161	RIF161	RIF201	RIF241

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	0701	0801	0901	1101
L	AKW (1)	AKW (1)	AKW (1)	AKW (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**WSH**
4,5,6,7		**Size** 0701, 0801, 0901, 1101, 1402, 1602, 1802, 2002, 2202, 2502
8		**Operating field**
	X	Low temperature electronic thermostatic valve (1)
	°	Standard mechanic thermostatic valve (2)
9		**Model**
	°	Reversible heat pump, gas side
10		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
11		**Version**
	°	Standard
	L	Standard silenced
12		**Condenser**
	°	PED regulation
13		**Power supply**
	2	230V ~ 3 50Hz with fuses
	4	230V ~ 3 50Hz with magnet circuit breakers (4)
	5	500V ~ 3 50Hz with fuses
	8	400V ~ 3 50Hz with magnet circuit breakers
	9	500V ~ 3 50Hz with magnet circuit breakers
	°	400V ~ 3 50Hz

(1) Water produced up to +4 °C. For different temperature please contact the factory.
(2) Water produced up to +4 °C
(3) In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) Not available for size 2502

PERFORMANCE SPECIFICATIONS

WSH - °/L

Size			0701	0801	0901	1101
Cooling performance 12 °C / 7 °C (1)						
Cooling capacity	°,L	kW	165,8	195,7	216,7	269,7
Input power	°,L	kW	37,1	42,3	48,3	58,8
Cooling total input current	°,L	A	65,0	73,0	81,0	100,0
EER	°,L	W/W	4,47	4,63	4,48	4,59
Water flow rate source side	°,L	l/h	34669	40687	45310	56133
Pressure drop source side	°,L	kPa	30	31	30	36
Water flow rate system side	°,L	l/h	28521	33675	37283	46389
Pressure drop system side	°,L	kPa	23	24	22	27
Heating performance 40 °C / 45 °C (2)						
Heating capacity	°,L	kW	183,3	210,3	237,3	300,3
Input power	°,L	kW	45,4	51,6	58,7	74,4
Heating total input current	°,L	A	81,0	91,0	101,0	131,0
COP	°,L	W/W	4,04	4,08	4,05	4,03
Water flow rate source side	°,L	l/h	40419	46517	52342	66297
Pressure drop source side	°,L	kPa	42	42	39	51
Water flow rate system side	°,L	l/h	31805	36498	41190	52140
Pressure drop system side	°,L	kPa	24	23	23	29

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0701	0801	0901	1101
SEER - 12/7 (EN14825: 2018) (1)						
SEER	°,L	W/W	5,04	5,47	5,29	5,11
Seasonal efficiency	°,L	%	198,6%	215,8%	208.6%	201,3%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)						
Pdesignh	°,L	kW	249	285	322	-
SCOP	°,L	W/W	4,20	4,25	4,23	-
ηsh	°,L	%	160.0%	162.0%	161.0%	-

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

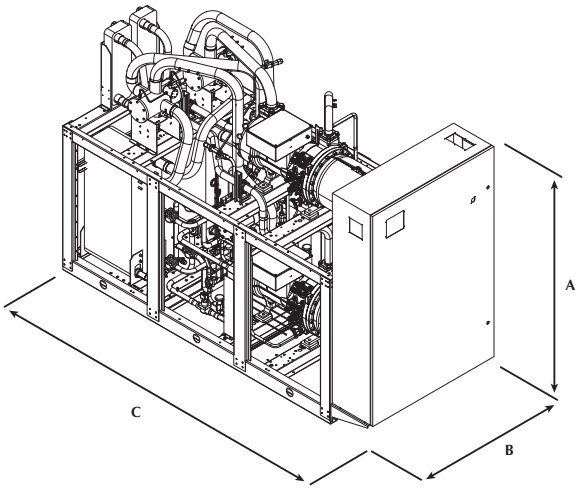
Size			0701	0801	0901	1101
Electric data						
Maximum current (FLA)	°,L	A	124,0	144,0	162,0	182,0
Peak current (LRA)	°,L	A	163,0	192,0	229,0	300,0

GENERAL TECHNICAL DATA

Size			0701	0801	0901	1101
Compressor						
Type	°,L	type		Bi-vite		
Compressor regulation	°,L	Type		On-Off		
Number	°,L	no.	1	1	1	1
Circuits	°,L	no.	1	1	1	1
Refrigerant	°,L	type		R134a		
System side heat exchanger						
Type	°,L	type		Brazed plate		
Number	°,L	no.	1	1	1	1
Connections (in/out)	°,L	Type		Grooved joints		
Sizes (in/out)	°,L	Ø		3″		
Source side heat exchanger						
Type	°,L	type		Brazed plate		
Number	°,L	no.	1	1	1	1
Connections (in/out)	°,L	Type		Grooved joints		
Sizes (in/out)	°,L	Ø		3″		
Sound data calculated in cooling mode (1)						
Sound power level	°	dB(A)	86,0	86,0	86,0	92,0
	L	dB(A)	78,0	78,0	78,0	84,0
Sound pressure level (10 m)	°	dB(A)	54,1	54,1	54,1	60,1
	L	dB(A)	46,1	46,1	46,1	52,1

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0701	0801	0901	1101
Dimensions and weights						
A	°	mm	2050	2050	2050	2050
	L	mm	2120	2120	2120	2120
B	°,L	mm	809	809	809	809
C	°,L	mm	2960	2960	2960	3360
Empty weight	°	kg	1391	1443	1506	1946
	L	kg	1622	1674	1737	2206

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Tel. 0442633111 - Telefax 044293577
www.aermec.com

WFGI

Water cooled heat pump reversible water side

Cooling capacity 217 ÷ 1765 kW
Heating capacity 243 ÷ 1960 kW

- **Production of hot water from condenser up to 65° C.**
- **Production of negative chilled water down to -8°C.**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency

FEATURES

Operating field

Production of chilled water up to 20 °C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 65 °C depending on the model.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10°C.

Mono, bi-tri circuit unit

Unit with 1-2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.
All units are equipped with an inverter compressor combined with an on-off compressor (two-circuit sizes) or two on/off compressors (three-circuit sizes), with R1234ze (A2L) refrigerant.
The R515B refrigerant with this type of gas is also available on the configurator. Performances do not vary when the refrigerant gas available on the configurator varies.
For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO_5

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Adjustment includes complete management of the alarms and their log.
The possibility to controll several units in Master - Slave parallel mode up to a maximum of 4 compressors.
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A								•		•		•	•	•	•	•	•				
AER485P1 x n° 3 (1)	°,A																		•	•	•	•
AERBACP	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°																		•	•	•	•
	A	•	•	•	•	•	•	•		•		•										
AERSET	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Set-up	Heat recovery	1101	1251	1401
°	°, L	°, D, T	-	-	-
A	°	°	AVX680	AVX680	AVX681
A	L	°	AVX681	AVX681	AVX681
A	°, L	D, T	-	-	-

Version	Set-up	Heat recovery	1601	1801	2101
°	°, L	°, D, T	-	-	-
A	°	°	AVX687	AVX687	AVX682
A	L	°	AVX682	AVX682	AVX682
A	°, L	D, T	-	-	-

Version	Set-up	Heat recovery	2401	2502	2801
°	°, L	°, D, T	-	-	-
A	°	°	AVX685	AVX673	AVX683
A	L	°	AVX683	AVX674	AVX683
A	°, L	D, T	-	AVX674	-

Version	Set-up	Heat recovery	2802	3201	3202
°	°, L	°, D, T	-	-	-
A	°, L	°	AVX674	AVX683	AVX679
A	°, L	D, T	AVX674	-	AVX679

Version	Set-up	Heat recovery	3602	4202	4802
°	°, L	°, D, T	-	-	-
A	°	°, D	AVX679	AVX679	AVX678
A	L	°	AVX679	AVX679	AVX678
A	°	T	AVX679	AVX678	AVX678
A	L	D, T	AVX679	AVX678	AVX678

Version	Set-up	Heat recovery	5602	6402	6703
°	°, L	°, D, T	-	-	Contact us.
A	°, L	°, D, T	AVX678	AVX678	Contact us.

Version	Set-up	Heat recovery	7203	8403	9603
°	°, L	°, D, T	Contact us.	Contact us.	Contact us.
A	°, L	°, D, T	Contact us.	Contact us.	Contact us.

- not available

Power factor correction

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	-	-	-	-	-	-	-	RIFWFI2502	-	RIFWFI2802	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603
A	RIFWFI3202	RIFWFI3602	RIFWFI4202	RIFWFI4802	RIFWFI5602	RIFWFI6402	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603

A grey background indicates the accessory must be assembled in the factory

For the size of the units with the RIF accessory we ask you to contact the headquarters.

Isolating kit

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15	ISG1	ISG15

A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	ISG7	ISG8	ISG8	ISG8
A	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3,4		**WFGI**
5,6,7,8		**Size** 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
9		**Model**
	H	Optimised for high condensation
	°	Standard condensation
10		**Version**
	°	Standard (1)
	A	High efficiency
11		**Operating field**
	X	Electronic thermostatic expansion valve
	Z	Double electronic thermostatic for low temperature
12		**Set-up**
	K	Super low noise with hood (2)
	L	Silenced with hood
	°	Standard without hood

Field		Description
13		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (3)
	°	Without heat recovery
14		**Evaporator**
	°	Standard
15		**Power supply**
	8	400V ~ 3 50Hz with magnet circuit breakers (4)
	°	400V ~ 3 50Hz with fuses
16		**Refrigerant gas (5)**
	G	R515B
	°	R1234ze

(1) Only for sizes from 6703 to 9603
(2) Only for units with R515B
(3) Not available for the condenserless "E"
(4) Not available for 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2801, 3201 size
(5) Performances do not vary when the refrigerant gas available on the configurator varies.

MODEL PERFORMANCE DATA (°) - FOR TEMPERATURES WATER PRODUCED UP TO +55°C

WFGI 1101 - 3201 - model (°) version A - gas R1234ze

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	216,8	255,6	285,6	324,6	366,2	407,0	484,9	545,9	586,5
Input power	kW	41,8	50,3	55,3	62,1	73,8	83,3	92,6	102,6	112,2
Cooling total input current	A	74,0	87,0	95,0	106,0	125,0	140,0	152,0	170,0	187,0
EER	W/W	5,19	5,08	5,17	5,23	4,96	4,89	5,24	5,32	5,23
Water flow rate source side	l/h	44248	52351	58332	66233	75332	83987	98906	111058	119737
Pressure drop source side	kPa	30	33	29	26	22	21	24	24	21
Water flow rate system side	l/h	37296	43987	49124	55816	62963	69984	83363	93854	100830
Pressure drop system side	kPa	22	24	24	15	18	13	20	26	14
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	243,2	292,8	321,7	365,6	419,7	467,2	540,0	606,5	655,5
Input power	kW	55,2	66,1	70,6	77,1	94,3	106,3	118,0	131,1	142,3
Heating total input current	A	97,0	114,0	120,0	131,0	159,0	178,0	193,0	215,0	236,0
COP	W/W	4,41	4,43	4,56	4,74	4,45	4,40	4,58	4,63	4,61
Water flow rate system side	l/h	42220	50823	55848	63486	72879	81140	93796	105337	113866
Pressure drop system side	kPa	27	31	27	23	20	20	22	22	19
Water flow rate source side	l/h	55079	66427	73525	84200	95108	105386	123347	139074	149713
Pressure drop source side	kPa	48	56	54	34	41	29	45	58	32

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI 2502 - 9603 - model (°) version A - gas R1234ze

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	506,3	571,0	664,9	737,9	869,3	989,2	1096,6	1223,1	1323,2	1463,2	1605,2	1765,9
Input power	kW	96,8	107,6	125,2	143,4	166,7	185,8	206,7	234,8	238,3	265,7	299,4	337,5
Cooling total input current	A	171,0	192,0	215,0	245,0	273,0	311,0	346,0	396,0	407,0	468,0	519,0	591,0
EER	W/W	5,23	5,31	5,31	5,15	5,22	5,32	5,30	5,21	5,55	5,51	5,36	5,23
Water flow rate source side	l/h	102932	115945	135099	150773	177155	200809	223021	249142	267794	296179	326287	360505
Pressure drop source side	kPa	61	55	46	30	45	50	36	51	11	24	23	22
Water flow rate system side	l/h	87066	98181	114326	126885	149451	170077	188509	210265	227441	251516	275910	303500
Pressure drop system side	kPa	45	35	33	41	32	44	34	43	26	31	29	17
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	564,4	631,4	731,6	821,0	966,2	1093,4	1212,3	1370,1	1454,7	1611,8	1770,0	1960,8
Input power	kW	124,9	136,1	155,8	181,8	211,1	235,7	260,5	299,0	300,1	334,7	374,9	420,6
Heating total input current	A	218,0	241,0	264,0	306,0	343,0	390,0	431,0	498,0	507,0	582,0	643,0	732,0
COP	W/W	4,52	4,64	4,70	4,52	4,58	4,64	4,65	4,58	4,85	4,82	4,72	4,66
Water flow rate system side	l/h	97998	109633	127054	142602	167814	189909	210585	237978	252762	280014	307509	340678
Pressure drop system side	kPa	56	50	41	27	41	45	32	46	10	22	20	20
Water flow rate source side	l/h	129450	145407	168838	187634	221376	252011	278815	314719	336930	373381	407768	449226
Pressure drop source side	kPa	99	76	73	89	70	96	73	96	56	69	63	37

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI 6703 - 9603 - model (°) version ° - gas R1234ze

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1309,2	1445,9	1559,4	1729,0
Input power	kW	242,2	267,6	299,6	340,9
Cooling total input current	A	396,0	475,0	525,0	588,0
EER	W/W	5,40	5,40	5,20	5,07
Water flow rate source side	l/h	265488	293277	318297	354161
Pressure drop source side	kPa	44	39	34	41
Water flow rate system side	l/h	225045	248539	268020	297184
Pressure drop system side	kPa	27	29	22	26
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1443,5	1597,2	1729,1	1928,5
Input power	kW	304,0	336,2	373,6	425,5
Heating total input current	A	493,0	592,0	650,0	729,0
COP	W/W	4,75	4,75	4,63	4,53
Water flow rate system side	l/h	250744	277455	300382	335030
Pressure drop system side	kPa	39	35	30	37
Water flow rate source side	l/h	333379	368962	396107	439877
Pressure drop source side	kPa	59	64	49	58

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
SEER - 12/7 (EN14825: 2018) (1)										
Seasonal efficiency	%	343,60	349,90	351,60	353,90	361,00	361,00	360,80	362,20	361,40
SEER	W/W	8,67	8,82	8,87	8,92	9,10	9,10	9,10	9,13	9,11
SEPR - (EN 14825: 2018) High temperature (2)										
SEPR	W/W	9,70	9,80	9,60	9,30	9,80	9,40	9,50	9,20	9,10

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °														
SEER - 12/7 (EN14825: 2018) (1)														
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	335.7%	337.9%	329.7%	326.0%
	A	%	340.8%	345.4%	342.7%	347.3%	346.2%	347.8%	355.7%	349.1%	355.8%	353.7%	354.5%	349.3%
SEER	°	W/W	-	-	-	-	-	-	-	-	8,47	8,52	8,32	8,23
	A	W/W	8,60	8,71	8,64	8,76	8,73	8,77	8,97	8,80	8,97	8,92	8,94	8,81
SEPR - (EN 14825: 2018) High temperature (2)														
SEPR	°	W/W	-	-	-	-	-	-	-	-	8,80	8,70	8,60	8,70
	A	W/W	9,30	9,40	8,90	9,00	9,10	9,10	9,20	9,20	8,90	8,90	9,00	9,00

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			1101	1251	1401
Model: °					
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)					
Pdesignh	°	kW	-	-	-
	A	kW	300,00	368,00	399,00
SCOP	°	W/W	-	-	-
	A	W/W	5,25	5,25	5,33
ηsh	°	%	-	-	-
	A	%	202,00	202,00	205,00

(1) Efficiencies for average temperature applications (55 °C)

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
Electric data																							
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	682,4	765,6	849,2	957,6
	A	A	158,9	180,6	184,4	201,3	220,8	247,5	280,9	309,0	315,2	331,4	342,7	368,6	408,3	456,2	523,3	582,2	663,0	682,4	765,4	849,2	957,6
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1063,0	1177,0	1391,0	1583,0
	A	A	23,0	23,0	23,0	23,0	23,0	23,0	23,0	498,0	23,0	592,0	23,0	641,0	689,0	837,0	934,0	1124,0	1287,0	1063,0	1177,0	1391,0	1583,0

MODEL PERFORMANCE DATA (H) - FOR TEMPERATURES WATER PRODUCED UP TO +65°C

WFGI 1101 - 3201 - model (H) version A - gas R1234ze

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	220,0	254,8	289,6	327,4	357,5	399,0	482,6	542,2	593,6
Input power	kW	41,7	49,5	57,4	64,3	73,6	83,0	96,5	109,7	118,6
Cooling total input current	A	76,0	87,0	99,0	109,0	123,0	138,0	158,0	181,0	197,0
EER	W/W	5,28	5,14	5,04	5,09	4,85	4,81	5,00	4,94	5,00
Water flow rate source side	l/h	44780	52069	59378	67087	73813	82562	99166	111592	122023
Pressure drop source side	kPa	30	33	29	26	22	21	24	24	21
Water flow rate system side	l/h	37844	43840	49813	56306	61471	68609	82982	93228	102044
Pressure drop system side	kPa	22	24	24	15	18	13	20	26	14
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	242,3	283,1	322,4	364,4	402,1	448,3	537,9	604,7	657,2
Input power	kW	50,8	60,1	69,5	77,0	88,8	100,0	114,2	129,4	134,3
Heating total input current	A	91,0	105,0	118,0	130,0	148,0	165,0	186,0	211,0	222,0
COP	W/W	4,77	4,71	4,64	4,73	4,53	4,48	4,71	4,67	4,89
Water flow rate system side	l/h	42056	49149	55968	63270	69832	77853	93424	105035	114165
Pressure drop system side	kPa	27	29	26	23	19	19	22	22	19
Water flow rate source side	l/h	55990	65269	74006	83856	91549	101626	123761	139042	152399
Pressure drop source side	kPa	48	54	54	33	40	28	45	59	32

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI 2502 - 9603 - model (H) version A - gas R1234ze

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	511,3	581,3	664,4	741,3	869,2	988,5	1083,6	1218,4	1312,3	1450,5	1588,3	1759,4
Input power	kW	100,0	114,5	129,9	146,9	170,3	191,3	214,6	243,5	249,2	279,2	314,2	360,4
Cooling total input current	A	182,0	205,0	225,0	248,0	291,0	326,0	370,0	411,0	449,0	491,0	556,0	651,0
EER	W/W	5,11	5,08	5,11	5,04	5,10	5,17	5,05	5,00	5,27	5,20	5,06	4,88
Water flow rate source side	l/h	104337	118851	135775	151933	177734	201586	222077	249762	267707	296196	325814	363151
Pressure drop source side	kPa	61	55	46	30	45	50	36	51	11	24	23	22
Water flow rate system side	l/h	87940	99961	114232	127463	149434	169953	186288	209453	225564	249326	273015	302384
Pressure drop system side	kPa	45	35	33	41	32	44	34	43	26	31	29	17
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	563,1	641,8	731,2	822,8	961,9	1089,6	1200,8	1381,7	1445,1	1599,5	1759,3	1964,0
Input power	kW	120,6	137,4	154,1	177,9	203,8	229,4	255,3	289,7	297,6	333,6	372,8	425,2
Heating total input current	A	216,0	243,0	263,0	295,0	344,0	385,0	434,0	479,0	530,0	579,0	651,0	763,0
COP	W/W	4,67	4,67	4,75	4,63	4,72	4,75	4,70	4,77	4,86	4,79	4,72	4,62
Water flow rate system side	l/h	97770	111434	126975	142910	167067	189246	208586	239997	251090	277882	305657	341230
Pressure drop system side	kPa	54	49	41	26	40	44	31	47	10	22	20	20
Water flow rate source side	l/h	130239	148043	169179	189222	222144	252647	276929	320765	334856	370130	405298	448896
Pressure drop source side	kPa	99	76	73	90	70	96	74	100	56	69	64	37

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI 6703 - 9603 - model (H) version ° - gas R1234ze

Size		6703	7203	8403	9603
Model: H					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1298,6	1433,8	1544,1	1739,6
Input power	kW	252,7	280,5	312,9	362,4
Cooling total input current	A	449,0	491,0	553,0	649,0
EER	W/W	5,14	5,11	4,93	4,80
Water flow rate source side	l/h	265376	293300	317856	359510
Pressure drop source side	kPa	44	39	34	41
Water flow rate system side	l/h	223228	246460	265406	299001
Pressure drop system side	kPa	27	29	22	26
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1433,5	1584,7	1718,0	1945,1
Input power	kW	300,7	334,3	369,6	428,4
Heating total input current	A	530,0	579,0	649,0	761,0
COP	W/W	4,77	4,74	4,65	4,54
Water flow rate system side	l/h	249013	275290	298460	337909
Pressure drop system side	kPa	39	35	30	36
Water flow rate source side	l/h	331388	365876	394002	443875
Pressure drop source side	kPa	59	64	49	58

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
SEER - 12/7 (EN14825: 2018) (1)										
Seasonal efficiency	%	314,30	316,20	304,40	314,40	296,40	301,70	310,30	314,20	317,80
SEER	W/W	7,93	7,98	7,69	7,94	7,49	7,62	7,83	7,93	8,02
SEPR - (EN 14825: 2018) High temperature (2)										
SEPR	W/W	9,10	9,00	8,70	8,90	8,40	8,40	8,80	8,60	8,90

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H														
SEER - 12/7 (EN14825: 2018) (1)														
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	287.7%	286.9%	287.6%	281.6%
	A	%	294.9%	295.7%	300.5%	291.4%	301.0%	304.5%	309.3%	298.9%	302.4%	297.7%	302.9%	295.0%
SEER	°	W/W	-	-	-	-	-	-	-	-	7,27	7,25	7,27	7,12
	A	W/W	7,45	7,47	7,59	7,36	7,60	7,69	7,81	7,55	7,64	7,52	7,65	7,45
SEPR - (EN 14825: 2018) High temperature (2)														
SEPR	°	W/W	-	-	-	-	-	-	-	-	8,20	8,20	8,30	8,30
	A	W/W	8,60	8,60	8,50	8,60	8,50	8,60	8,50	8,60	8,60	8,50	8,70	8,70

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			1101	1251	1401
Model: H					
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)					
Pdesignh	°	kW	-	-	-
	A	kW	296,00	348,00	395,00
SCOP	°	W/W	-	-	-
	A	W/W	5,45	5,43	5,23
ηsh	°	%	-	-	-
	A	%	210,00	209,00	201,00

(1) Efficiencies for average temperature applications (55 °C)

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
Electric data																							
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	853,0	939,0	1047,0	1178,0
	A	A	155,0	177,0	201,0	222,0	262,0	296,0	349,0	343,0	390,0	389,0	415,0	422,0	488,0	559,0	644,0	719,0	797,0	853,0	939,0	1047,0	1178,0
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1179,0	1297,0	1527,0	1737,0
	A	A	23,0	23,0	23,0	23,0	23,0	23,0	23,0	494,0	23,0	545,0	23,0	661,0	730,0	885,0	1002,0	1198,0	1357,0	1179,0	1297,0	1527,0	1737,0

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

Model performance data (°) - for condensing temperatures up to 55°C

Model output data WFGI° - AE - gas R1234ze

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C - gas R1234ze (1)										
Cooling capacity	kW	198,0	231,1	256,8	292,1	326,6	363,6	437,8	493,2	519,6
Input power	kW	51,6	61,8	66,8	75,1	88,4	100,0	109,4	123,5	136,2
Cooling total input current	A	92,0	108,0	115,0	128,0	151,0	168,9	184,0	206,0	227,0
EER	W/W	3,83	3,74	3,85	3,89	3,69	3,64	4,00	3,99	3,82
Evaporator water flow rate	l/h	34021	39713	44127	50189	56115	62473	75211	84731	89274
Pressure drop evaporator side	kPa	17	20	19	12	15	11	17	21	12
Length of refrigerant lines from/to 0 - 10 m										
Gas line (C1)	Ø	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW	453,9	510,4	593,1	659,9	765,6	890,9	975,6	1082,9	1179,9	1316,9	1449,4	1574,0
Input power	kW	116,3	128,9	149,1	172,3	195,5	215,5	242,5	277,6	290,6	321,6	361,5	409,6
Cooling total input current	A	207,0	229,0	256,0	293,0	327,0	370,0	411,0	471,0	488,0	555,0	616,0	700,0
EER	W/W	3,90	3,96	3,98	3,83	3,92	4,13	4,02	3,90	4,06	4,09	4,01	3,84
Evaporator water flow rate	l/h	77982	87695	101893	113381	131535	153062	167617	186047	202720	226251	249032	270431
Pressure drop evaporator side	kPa	36	28	26	33	27	35	26	33	20	26	25	14
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model output data WFGI° - °E - gas R1234ze

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C - gas R1234ze (1)					
Cooling capacity	kW	1146,9	1278,8	1388,3	1517,0
Input power	kW	291,2	322,2	361,3	409,8
Cooling total input current	A	489,0	556,0	615,0	700,0
EER	W/W	3,94	3,97	3,84	3,70
Evaporator water flow rate	l/h	197057	219704	238518	260630
Pressure drop evaporator side	kPa	20	23	17	21
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model performance data (H) - for condensing temperatures up to 60°C

Model output data - model WFGIH - AE - gas R1234ze

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C - gas R1234ze (1)										
Cooling capacity	kW	198,0	231,1	256,8	292,1	326,6	363,6	437,8	493,2	519,6
Input power	kW	51,6	61,8	66,8	75,1	88,4	100,0	109,4	123,5	136,2
Cooling total input current	A	92,0	108,0	115,0	128,0	151,0	168,9	184,0	206,0	227,0
EER	W/W	3,83	3,74	3,85	3,89	3,69	3,64	4,00	3,99	3,82
Evaporator water flow rate	l/h	34021	39713	44127	50189	56115	62473	75211	84731	89274
Pressure drop evaporator side	kPa	17	20	19	12	15	11	17	21	12
Length of refrigerant lines from/to 0 - 10 m										
Gas line (C1)	Ø	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW	453,9	510,4	593,1	659,9	765,6	890,9	975,6	1082,9	1179,9	1316,9	1449,4	1574,0
Input power	kW	116,3	128,9	149,1	172,3	195,5	215,5	242,5	277,6	290,6	321,6	361,5	409,6
Cooling total input current	A	207,0	229,0	256,0	293,0	327,0	370,0	411,0	471,0	488,0	555,0	616,0	700,0
EER	W/W	3,90	3,96	3,98	3,83	3,92	4,13	4,02	3,90	4,06	4,09	4,01	3,84
Evaporator water flow rate	l/h	77982	87695	101893	113381	131535	153062	167617	186047	202720	226251	249032	270431
Pressure drop evaporator side	kPa	36	28	26	33	27	35	26	33	20	26	25	14
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model output data - model WFGIH - °E - gas R1234ze

Size		6703	7203	8403	9603
Model: H					
Cooling performance 12 °C / 7 °C - gas R1234ze (1)					
Cooling capacity	kW	1146,9	1278,8	1388,3	1517,0
Input power	kW	291,2	322,2	361,3	409,8
Cooling total input current	A	489,0	556,0	615,0	700,0
EER	W/W	3,94	3,97	3,84	3,70
Evaporator water flow rate	l/h	197057	219704	238518	260630
Pressure drop evaporator side	kPa	20	23	17	21
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

GENERAL TECHNICAL DATA

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor																							
Type	°,A	type	Screw																				
Compressor regulation	°,A	Type	I	I	I	I	I	I	I	I / 1	I	I / 1	I	I / 1	I / 1	I / 1	I / 1	I / 1	I / 1	I / 1	I / 1	I / 1	I / 1
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type	R1234ze																				
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	59,0	57,0	72,0	66,0	61,0	85,0	81,0	50,0	110,0	53,0	104,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	-	-	-	-	-	-	-	50,0	-	53,0	-	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 3 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger																							
Type	°,A	type	Shell and tube																				
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Type	Grooved joints																				
Source side heat exchanger																							
Type	°,A	type	Shell and tube																				
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Type	Grooved joints																				

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

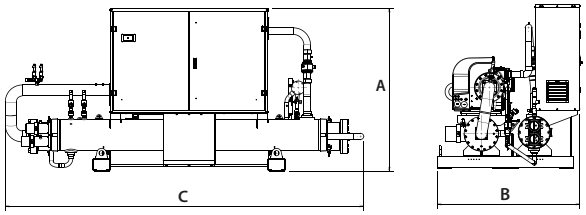
Sound data calculated with functioning in cooling mode - R1234ze gas

Size		1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Refrigerant gas: °																						
Standard equipment																						
Sound power level (1)	dB(A)	94,0	95,8	96,1	97,0	97,1	97,2	97,3	97,3	97,3	97,7	98,0	98,8	98,8	98,9	98,9	99,3	100,0	99,5	100,6	101,0	102,0
Silenced equipment																						
Sound power level (1)	dB(A)	90,0	91,8	92,1	93,0	93,1	93,2	93,3	93,3	93,3	93,7	94,0	94,8	94,8	94,9	94,9	95,3	96,0	95,5	96,6	97,0	98,0

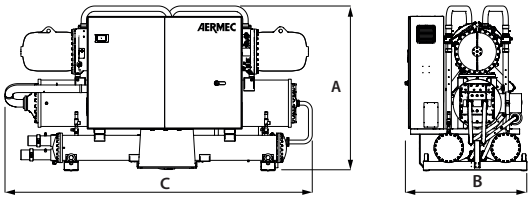
(1) Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

DIMENSIONS

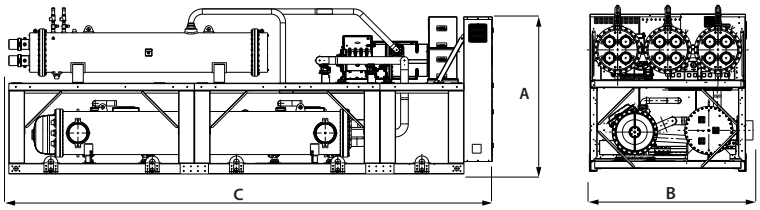
1101 - 3201



2502 - 6402



6703 - 9603



Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H, °																							
Dimensions and weights - standard configuration																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1510	1560	1610	1610	1610	1610	1610	1645	1630	1645	1630	1675	1675	1685	1875	1875	2000	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4380	4380	4395	4500	4580	4580	5650	5650	5650	5650
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8740	9680	9900	10000
	A	kg	2020	2030	2230	2410	2450	2670	3090	3710	3530	3980	3570	5160	5220	5710	6440	6680	6770	9730	11440	11980	12060
Dimensions and weights - quiet configuration																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1645	1630	1675	1675	1685	1875	1875	2000	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	6840	6840	6840
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9270	10240	10510	10610
	A	kg	2180	2190	2390	2570	2610	2830	3280	4020	3720	4290	3760	5500	5560	6050	6810	7080	7170	10260	12000	12590	12670

■ *For the sizes of D-T-E versions please contact the factory.*

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www.aermec.com

WFGN

Water cooled heat pump reversible water side

Cooling capacity 136 ÷ 1727 kW
Heating capacity 153 ÷ 1921 kW

- **Production of hot water up to 55°C.**
- **Production of negative chilled water down to -8°C.**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency

FEATURES

Operating field

Production of chilled water up to 16 °C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 55 °C.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10°C.

Mono, bi-tri circuit unit

Unit with 1-2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.
They are equipped with screw compressors and system and source side shell and tube heat exchangers dedicated to use of the new HFO R1234ze gas (A2L).
The R515B refrigerant with this type of gas is also available on the configurator. Performances do not vary when the refrigerant gas available on the configurator varies.
For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO_5

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Adjustment includes complete management of the alarms and their log.
The possibility to controll several units in Master - Slave parallel mode up to a maximum of 4 compressors.
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•	•	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A											•		•		•	•	•	•	•	•				
AER485P1 x n° 3 (1)	°,A																					•	•	•	•
AERBACP	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERSET	A	•	•	•	•	•	•	•	•	•	•		•		•										
MULTICHILLER-EVO	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Set-up	Heat recovery	0701	0801	0901	1101	1251
°	°, L	°, D, T	-	-	-	-	-
A	°, L	°	AVX680	AVX680	AVX680	AVX681	AVX681
A	°, L	D, T	-	-	-	-	-

Version	Set-up	Heat recovery	1401	1601	1801	2101	2401
°	°, L	°, D, T	-	-	-	-	-
A	°	°	AVX681	AVX682	AVX682	AVX683	AVX683
A	L	°	AVX681	AVX682	AVX685	AVX683	AVX683
A	°, L	D, T	-	-	-	-	-

Version	Set-up	Heat recovery	2502	2801	2802	3201	3202
°	°, L	°, D, T	-	-	-	-	-
A	°	°	AVX673	AVX683	AVX674	AVX683	AVX679
A	L	°	AVX674	AVX683	AVX674	AVX683	AVX678
A	°	D	AVX674	-	AVX674	-	AVX679
A	°	T	AVX674	-	AVX674	-	AVX678
A	L	D, T	AVX674	-	AVX674	-	AVX678

Version	Set-up	Heat recovery	3602	4202	4802	5602	6402
°	°, L	°, D, T	-	-	-	-	-
A	°	°, D	AVX679	AVX678	AVX678	AVX678	AVX678
A	°	T	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	°, D	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	T	AVX678	AVX678	AVX676	AVX676	AVX676

Version	Set-up	Heat recovery	6703	7203	8403	9603
°	°, L	°, D, T	Contact us.	Contact us.	Contact us.	Contact us.
A	°, L	°, D, T	Contact us.	Contact us.	Contact us.	Contact us.

Power factor correction

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801
A	RIFWFN0701	RIFWFN0801	RIFWFN0901	RIFWFN1101	RIFWFN1251	RIFWFN1401	RIFWFN1601	RIFWFN1801	RIFWFN2101	RIFWFN2401	RIFWFN2502	RIFWFN2801

Ver	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	-	-	RIFWFN6703	RIFWFN7203	RIFWFN8403	RIFWFN9603
A	RIFWFN2802	RIFWFN3201	RIFWFN3202	RIFWFN3602	RIFWFN4202	RIFWFN4802	RIFWFN5602	RIFWFN6402	RIFWFN6703	RIFWFN7203	RIFWFN8403	RIFWFN9603

For the size of the units with the RIF accessory we ask you to contact the headquarters.

Isolating kit

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801
A	ISG10	ISG10	ISG10	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15

Ver	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	-	-	ISG5	ISG5	ISG6	ISG6
A	ISG1	ISG15	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

CONFIGURATOR

Field	Description
1,2,3,4	**WFGN**
5,6,7,8	**Size** 0701, 0801, 0901, 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
9	**Model**
°	Heat pump reversible on the water side
10	**Version**
°	Standard (1)
A	High efficiency
11	**Operating field**
X	Electronic thermostatic expansion valve
Z	Double electronic thermostatic for low temperature
12	**Set-up**
K	Super low noise with hood (2)
L	Silenced with hood
°	Standard
13	**Heat recovery**
D	With desuperheater (3)
T	With total recovery (3)
°	Without heat recovery
14	**Evaporator**
E	Evaporating unit
°	Standard
15	**Power supply**
2	230V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (4)
4	230V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (4)
5	500V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (4)
8	400V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit
9	500V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (4)
°	400V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit
16	**Refrigerant gas (5)**
G	R515B
°	R1234ze

(1) Only for sizes from 6703 to 9603
(2) Only for units with R515B
(3) Not available for the condenserless "E"
(4) The 230V and 500V power supplies are only available for sizes 0701 - 0801 - 0901 - 1101 - 1251 - 1401 - 2502 - 2802
(5) Performances do not vary when the refrigerant gas available on the configurator varies.

PERFORMANCE SPECIFICATIONS

WFGN 0701-3201 - version A - gas R1234ze

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	136,1	154,8	173,8	221,3	239,8	272,3	335,7	370,1	434,3	490,7	545,3	596,9
Input power	kW	26,0	29,7	33,8	41,4	45,0	51,2	61,5	69,0	78,1	88,5	100,0	109,9
Cooling total input current	A	52,0	57,0	63,0	70,0	83,0	96,0	107,0	119,0	130,0	156,0	173,0	193,0
EER	W/W	5,24	5,21	5,15	5,35	5,33	5,32	5,46	5,37	5,56	5,55	5,45	5,43
Water flow rate system side	l/h	23410	26632	29906	38077	41247	46844	57740	63636	74675	84359	93748	102619
Pressure drop system side	kPa	22	25	24	22	21	22	16	20	15	21	25	15
Water flow rate source side	l/h	27751	31586	35551	44983	48779	55416	68103	75234	87855	99259	110576	121174
Pressure drop source side	kPa	21	20	19	24	21	18	18	18	19	19	19	18
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	153,1	172,4	196,2	245,2	267,2	303,2	369,1	408,3	478,4	547,5	601,0	663,0
Input power	kW	32,6	37,2	42,4	51,8	56,4	64,2	76,0	85,4	96,3	109,6	123,2	137,5
Heating total input current	A	64,0	71,0	79,0	87,0	103,0	119,0	131,0	146,0	160,0	191,0	210,0	240,0
COP	W/W	4,69	4,63	4,63	4,74	4,73	4,73	4,86	4,78	4,97	4,99	4,88	4,82
Water flow rate system side	l/h	26569	29919	34065	42555	46384	52636	64078	70908	83096	95098	104400	115170
Pressure drop system side	kPa	20	18	17	22	19	16	16	16	17	18	17	17
Water flow rate source side	l/h	35233	39544	45008	56537	61580	69831	85443	94274	111358	127787	139586	153205
Pressure drop source side	kPa	49	55	55	48	47	48	34	44	34	48	57	34

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGN 2502-9603 - version A - gas R1234ze

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	489,1	556,6	675,8	750,2	879,3	995,4	1100,3	1217,3	1315,3	1454,9	1594,7	1727,0
Input power	kW	91,4	103,5	125,1	138,3	159,8	180,3	202,1	225,0	236,7	262,9	296,7	326,6
Cooling total input current	A	166,0	192,0	214,0	237,0	261,0	312,0	346,0	388,0	386,0	466,0	515,0	577,0
EER	W/W	5,35	5,38	5,40	5,42	5,50	5,52	5,45	5,41	5,56	5,53	5,38	5,29
Water flow rate system side	l/h	84115	95704	116204	128995	151168	171142	189154	209277	226089	250084	274117	296820
Pressure drop system side	kPa	42	33	34	42	35	44	33	41	25	31	30	17
Water flow rate source side	l/h	99161	112842	136932	152026	177654	200961	222817	246414	266044	294386	324122	352026
Pressure drop source side	kPa	53	50	49	31	51	51	42	62	19	18	18	21
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	545,1	618,4	747,2	833,5	967,0	1093,6	1204,7	1333,7	1457,0	1601,3	1761,4	1921,0
Input power	kW	116,1	130,9	155,9	173,0	198,3	224,8	248,9	277,7	293,3	326,6	365,9	400,0
Heating total input current	A	208,0	240,0	264,0	291,0	320,0	383,0	421,0	473,0	473,0	571,0	627,0	702,0
COP	W/W	4,70	4,73	4,79	4,82	4,88	4,87	4,84	4,80	4,97	4,90	4,81	4,80
Water flow rate system side	l/h	94650	107376	129767	144768	167936	189943	209256	231650	253135	278220	306025	333765
Pressure drop system side	kPa	49	45	44	28	45	46	37	55	17	16	16	19
Water flow rate source side	l/h	126174	143007	173413	193793	225352	255129	279883	310087	339613	372508	407744	443369
Pressure drop source side	kPa	95	74	77	96	79	98	73	91	56	70	66	37

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGN 6703-9603 - version ° - gas R1234ze

Size		6703	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1300,7	1439,0	1554,8	1692,4
Input power	kW	239,3	265,4	297,1	329,6
Cooling total input current	A	396,0	475,0	525,0	588,0
EER	W/W	5,44	5,42	5,23	5,13
Water flow rate system side	l/h	223578	247357	267235	290895
Pressure drop system side	kPa	26	29	22	26
Water flow rate source side	l/h	263609	291721	317119	346049
Pressure drop source side	kPa	39	39	33	39
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1444,7	1588,0	1725,3	1890,3
Input power	kW	296,0	328,4	364,3	404,7
Heating total input current	A	485,0	583,0	639,0	716,0
COP	W/W	4,88	4,83	4,74	4,67
Water flow rate system side	l/h	250963	275857	299728	328385
Pressure drop system side	kPa	36	35	29	35
Water flow rate source side	l/h	335840	368447	397507	434518
Pressure drop source side	kPa	59	65	48	58

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801
SEER - 12/7 (EN14825: 2018) (1)												
SEER	W/W	6,71	6,96	6,87	6,43	6,80	6,79	6,69	6,69	7,01	6,99	6,58
Seasonal efficiency	%	265,30	275,30	271,70	254,00	269,00	268,40	264,60	264,70	277,20	276,70	260,30
SEPR - (EN 14825: 2018) High temperature (2)												
SEPR	W/W	8,20	8,00	8,20	8,00	8,00	8,00	8,00	7,90	8,10	8,10	8,10

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			6703	7203	8403	9603
SEER - 12/7 (EN14825: 2018) (1)						
SEER	°,A	W/W	7,11	7,14	7,03	6,94
Seasonal efficiency	°,A	%	281,30	282,50	278,30	274,40
SEPR - (EN 14825: 2018) High temperature (2)						
SEPR	°,A	W/W	8,10	8,20	8,20	8,30

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			0701	0801	0901	1101	1251	1401
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)								
Pdesignh	°	kW	-	-	-	-	-	-
	A	kW	197,00	219,00	253,00	312,00	339,00	384,00
SCOP	°	W/W	-	-	-	-	-	-
	A	W/W	4,65	4,70	4,65	4,75	5,00	4,98
ηsh	°	%	-	-	-	-	-	-
	A	%	178,00	180,00	178,00	182,00	192,00	191,00

(1) Efficiencies for average temperature applications (55 °C)

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

WFGN - version AE - gas R1234ze

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Evaporator: E													
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW	121,0	137,5	154,5	196,6	214,1	243,2	297,4	329,0	390,9	442,4	480,9	529,0
Input power	kW	31,4	35,9	40,9	50,0	54,7	62,2	74,1	83,1	93,9	106,2	119,1	131,5
Cooling total input current	A	58,0	65,0	73,0	83,0	97,0	111,0	125,0	140,0	154,0	183,0	203,0	226,0
EER	W/W	3,85	3,83	3,77	3,93	3,92	3,91	4,02	3,96	4,16	4,17	4,04	4,02
Evaporator water flow rate	l/h	20792	23621	26548	33776	36780	41778	51103	56534	67168	76005	110092	90893
Pressure drop evaporator side	kPa	31	35	35	31	31	32	22	29	22	30	35	21
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	42,0	54,0	54,0	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	28,0	35,0	35,0	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Evaporator: E													
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW	435,2	495,4	598,4	665,6	796,3	895,9	964,3	1068,0	1165,6	1325,4	1443,9	1565,4
Input power	kW	109,2	124,2	148,1	164,9	188,7	212,3	238,2	262,9	279,7	316,3	354,8	392,2
Cooling total input current	A	193,0	222,0	250,0	279,0	310,0	365,0	405,0	451,0	459,0	545,0	603,0	673,0
EER	W/W	3,99	3,99	4,04	4,04	4,22	4,22	4,05	4,06	4,17	4,19	4,07	3,99
Evaporator water flow rate	l/h	74770	85110	102813	114362	136819	153933	165685	183500	200259	227721	248077	268953
Pressure drop evaporator side	kPa	60	48	49	63	50	63	45	56	34	46	43	24
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

WFGN - version °E - gas R1234ze

Size			6703	7203	8403	9603
Evaporator: E						
Cooling performance 12 °C / 7 °C - gas R1234ze (1)						
Cooling capacity		kW	1129,2	1283,0	1378,4	1504,1
Input power		kW	282,3	319,1	356,8	394,8
Cooling total input current		A	463,0	549,0	606,0	676,0
EER		W/W	4,00	4,02	3,86	3,81
Evaporator water flow rate		l/h	194017	220439	236821	258428
Pressure drop evaporator side		kPa	35	41	30	36
Length of refrigerant lines from/to 0 - 10 m						
Gas line (C1)		Ø	76,0	88,9	88,9	88,9
Gas line (C2)		Ø	76,0	88,9	88,9	88,9
Gas line (C3)		Ø	76,0	88,9	88,9	88,9
Liquid line (C1)		Ø	54,0	54,0	54,0	54,0
Liquid line (C2)		Ø	54,0	54,0	54,0	54,0
Liquid line (C3)		Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ELECTRIC DATA

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402
Electric data																					
Maximum current (FLA)	A	106,0	119,0	136,0	162,0	183,0	208,0	243,0	275,0	305,0	350,0	365,0	389,0	416,0	427,0	486,0	549,0	609,0	700,0	777,0	854,0
Peak current (LRA)	A	163	192	229	300	314	341	436	465	586	650	440	805	486	917	601	650	792	890	1070	1210

Size			6703	7203	8403	9603
Electric data						
Maximum current (FLA)	°,A	A	913,0	1050,0	1166,0	1281,0
Peak current (LRA)	°,A	A	998	1129	1334	1502

GENERAL TECHNICAL DATA

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
Compressor																
Type	°,A	type								Screw						
Compressor regulation	°,A	Type								On-Off						
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	2	1	2	1
Circuits	°,A	no.	1	1	1	1	1	1	1	1	1	1	2	1	2	1
Refrigerant	°,A	type								R1234ze						
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A	kg	41,0	41,0	38,0	59,0	57,0	72,0	66,0	61,0	85,0	81,0	50,0	110,0	53,0	104,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A	kg	-	-	-	-	-	-	-	-	-	-	50,0	-	53,0	-
Refrigerant load circuit 3 (1)	°,A	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
System side heat exchanger																
Type	°,A	type								Shell and tube						
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Type								Grooved joints						
Source side heat exchanger																
Type	°,A	type								Shell and tube						
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	2	1	2	1
Connections (in/out)	°,A	Type								Grooved joints						

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor												
Type	°,A	type						Screw				
Compressor regulation	°,A	Type						On-Off				
Number	°,A	no.	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type						R1234ze				
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 3 (1)	°	kg	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger												
Type	°,A	type						Shell and tube				
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Type						Grooved joints				
Source side heat exchanger												
Type	°,A	type						Shell and tube				
Number	°,A	no.	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Type						Grooved joints				

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

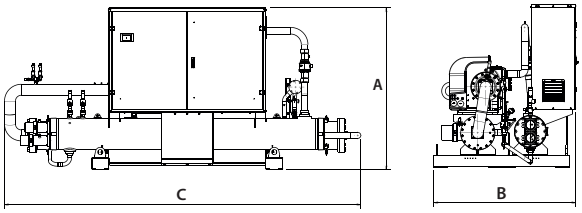
SOUND DATA

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Refrigerant gas: °																										
Standard equipment																										
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	97,0	97,2	99,5	100,0
	A	dB(A)	87,7	88,0	87,7	89,1	90,3	91,3	90,5	90,7	93,2	92,5	93,5	94,8	94,0	94,2	94,0	94,5	95,0	95,5	97,5	98,0	97,0	97,2	99,5	100,0
Silenced equipment																										
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93,0	93,2	95,5	96,0
	A	dB(A)	83,7	84,0	83,7	85,1	86,3	87,3	86,5	86,7	89,2	88,5	89,5	90,8	90,0	90,2	90,0	90,5	91,0	91,5	93,5	94,0	93,0	93,2	95,5	96,0

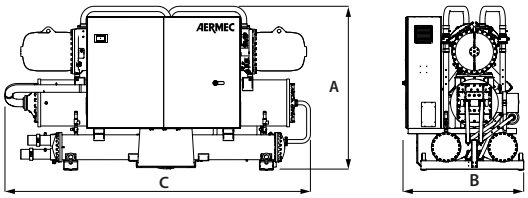
(1) Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

DIMENSIONS

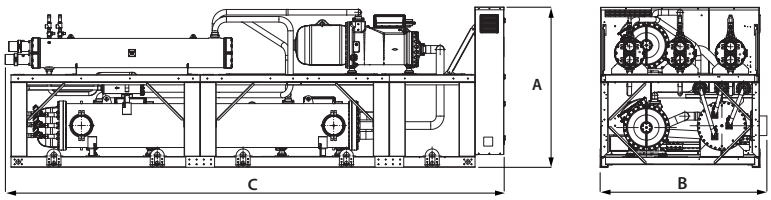
0701 - 3201



2502 - 6402



6703 - 9603



Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402
Set-up: L																					
Dimensions and weights																					
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	2000	1920	2075	1920	2195	2195	2340	2432	2440	2432
B	mm	1450	1450	1450	1540	1600	1610	1610	1610	1630	1630	1500	1645	1500	1645	1575	1575	1585	1775	1775	1820
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4320	4290	4345	4290	4650	4650	4600	5015	5150	5150
Empty weight	kg	1770	1790	1790	2280	2290	2510	3120	3170	3450	3510	4120	4030	4410	4080	6050	6120	6670	7040	7420	7490

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402
Set-up: °																					
Dimensions and weights																					
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	2000	1920	2075	1920	2195	2195	2340	2432	2440	2432
B	mm	1450	1450	1450	1510	1550	1610	1610	1610	1610	1610	1500	1630	1500	1630	1575	1575	1585	1775	1775	1820
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4320	4290	4345	4290	4380	4380	4395	4535	4605	4605
Empty weight	kg	1610	1630	1630	2120	2130	2350	2940	2980	3260	3320	3810	3820	4100	3870	5690	5750	6300	6670	6970	7070

Size			6703	7203	8403	9603
Set-up: L						
Dimensions and weights						
A	°,A	mm	2250	2250	2250	2250
B	°,A	mm	2200	2200	2200	2200
C	°	mm	5650	5650	5650	5650
	A	mm	6840	6840	6840	6840
Empty weight	°	kg	9890	10470	10760	10830
	A	kg	10880	12230	12950	12990

Size			6703	7203	8403	9603
Set-up: °						
Dimensions and weights						
A	°,A	mm	2250	2250	2250	2250
B	°,A	mm	2200	2200	2200	2200
C	°	mm	5650	5650	5650	5650
	A	mm	6840	6840	6840	6840
Empty weight	°	kg	9330	9910	10130	10200
	A	kg	10320	11670	12270	12360

■ *For the sizes of D-T-E versions please contact the factory.*

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

WFI

Water cooled heat pump reversible water side

Cooling capacity 291 ÷ 2406 kW
Heating capacity 326 ÷ 2664 kW

- **Condenser side hot water production up to 60°C.**
- **Production of negative chilled water down to -8°C.**
- **Available also with R513A refrigerant**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency

FEATURES

Operating field

Production of chilled water up to 16°C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 60°C depending on the model.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10°C.

Mono, bi-tri circuit unit

Unit with 1-2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.
All units are equipped with an inverter compressor combined with an on-off compressor (two-circuit sizes) or two on/off compressors (three-circuit sizes) with R134a refrigerant.
The R513A (XP10) refrigerant with this type of gas is also available on the configurator. On average, the units have a yield > 2% and an EER < 3% compared to the same size with R134a.
For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO_5

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Adjustment includes complete management of the alarms and their log.
The possibility to controll several units in Master - Slave parallel mode up to a maximum of 4 compressors.
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A								•		•		•	•	•	•	•	•				
AER485P1 x n° 3 (1)	°,A																		•	•	•	•
AERBACP	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Set-up	Heat recovery	1101	1251	1401
°	°, K, L	°, D, T	-	-	-
A	°	°	AVX680	AVX680	AVX681
A	K	°	AVX681	AVX681	AVX688
A	L	°	AVX681	AVX681	AVX681
A	°, K, L	D, T	-	-	-

Version	Set-up	Heat recovery	1601	1801	2101
°	°, K, L	°, D, T	-	-	-
A	°	°	AVX687	AVX687	AVX682
A	K	°	AVX682	AVX682	AVX685
A	L	°	AVX682	AVX682	AVX682
A	°, K, L	D, T	-	-	-

Version	Set-up	Heat recovery	2401	2502	2801
°	°, K, L	°, D, T	-	-	-
A	°	°	AVX685	AVX673	AVX683
A	K	°	AVX683	Contact us.	AVX683
A	L	°	AVX683	AVX674	AVX683
A	°, L	D, T	-	AVX674	-
A	K	D, T	-	Contact us.	-

Version	Set-up	Heat recovery	2802	3201	3202
°	°, K, L	°, D, T	-	-	-
A	°, L	°	AVX674	AVX683	AVX679
A	K	°	Contact us.	AVX683	Contact us.
A	°, L	D, T	AVX674	-	AVX679
A	K	D, T	Contact us.	-	Contact us.

Version	Set-up	Heat recovery	3602	4202	4802
°	°, K, L	°, D, T	-	-	-
A	°	°, D	AVX679	AVX679	AVX678
A	L	°	AVX679	AVX679	AVX678
A	K	°, D, T	Contact us.	Contact us.	Contact us.
A	°	T	AVX679	AVX678	AVX678
A	L	D, T	AVX679	AVX678	AVX678

Version	Set-up	Heat recovery	5602	6402	6703
°	°, K, L	°, D, T	-	-	Contact us.
A	°, L	°, D, T	AVX678	AVX678	Contact us.
A	K	°, D, T	Contact us.	Contact us.	Contact us.

Version	Set-up	Heat recovery	7203	8403	9603
°	°, K, L	°, D, T	Contact us.	Contact us.	Contact us.
A	°, K, L	°, D, T	Contact us.	Contact us.	Contact us.

- not available

Power factor correction

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	-	-	-	-	-	-	-	RIFWFI2502	-	RIFWFI2802	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603
A	RIFWFI3202	RIFWFI3602	RIFWFI4202	RIFWFI4802	RIFWFI5602	RIFWFI6402	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603

A grey background indicates the accessory must be assembled in the factory

For the size of the units with the RIF accessory we ask you to contact the headquarters.

Isolating kit

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15	ISG1	ISG15

A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	ISG5	ISG5	ISG6	ISG6
A	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**WFI**
4,5,6,7	**Size** 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
8	**Model**
H	Optimised for high condensation
°	Standard condensation
9	**Version**
°	Standard (1)
A	High efficiency
10	**Operating field**
X	Electronic thermostatic expansion valve (2)
Z	Double electronic thermostatic for low temperature (3)
11	**Set-up**
K	Super silenced
L	Silenced with hood
°	Standard without hood
12	**Heat recovery**
D	With desuperheater (4)
T	With total recovery (4)
°	Without heat recovery
13	**Evaporator**
°	Standard
14	**Power supply**
8	400V ~ 3 50Hz with magnet circuit breakers (5)
°	400V ~ 3 50Hz with fuses
15	**Refrigerant gas**
G	R513A (XP10) (6)
°	R134a

(1) Only for sizes from 6703 to 9603
(2) Water produced from 0 °C ÷ 16 °C
(3) Water produced from -8 °C up to 10 °C
(4) Not available for the condenserless "E"
(5) Not available for 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2801, 3201 size
(6) For further details refer to the technical documentation or to the Magellano selection program.

MODEL PERFORMANCE DATA (°) - FOR TEMPERATURES WATER PRODUCED UP TO +55°C

WFI 1101 - 3201 - model (°) version A - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	291,4	339,7	388,2	433,5	496,2	552,0	635,3	714,7	783,3
Input power	kW	55,9	66,5	75,6	85,1	98,6	111,6	122,5	138,9	148,8
Cooling total input current	A	95,0	111,0	125,0	140,0	161,0	181,0	199,0	223,0	241,0
EER	W/W	5,21	5,11	5,13	5,09	5,03	4,95	5,19	5,15	5,26
Water flow rate source side	l/h	59350	69394	79271	88730	101760	113566	129637	145972	159590
Pressure drop source side	kPa	42	41	36	32	30	30	33	33	31
Water flow rate system side	l/h	50123	58428	66772	74535	85331	94907	109229	122894	134668
Pressure drop system side	kPa	38	43	45	27	32	24	35	45	26
Heating performances 40 °C / 45 °C - gas R134a (2)										
Heating capacity	kW	326,0	387,7	437,0	490,2	566,3	631,1	707,9	798,2	873,1
Input power	kW	74,3	88,1	97,5	106,3	126,9	143,0	156,9	178,5	189,7
Heating total input current	A	125,0	144,0	158,0	173,0	204,0	230,0	251,0	281,0	305,0
COP	W/W	4,39	4,40	4,48	4,61	4,46	4,41	4,51	4,47	4,60
Water flow rate system side	l/h	56587	67319	75890	85131	98344	109614	122953	138630	151661
Pressure drop system side	kPa	39	39	33	29	28	28	30	29	28
Water flow rate source side	l/h	74024	88235	99938	112439	128897	142918	161620	182106	199956
Pressure drop source side	kPa	83	98	101	61	74	54	76	98	57

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 2502 - 9603 - model (°) version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	670,0	757,4	889,1	1002,3	1143,6	1304,6	1441,8	1621,2	1771,2	1940,6	2167,0	2406,5
Input power	kW	127,4	144,9	168,9	192,8	218,4	244,5	275,3	309,9	327,6	362,0	410,0	458,2
Cooling total input current	A	214,0	244,0	277,0	315,0	351,0	399,0	446,0	497,0	527,0	597,0	667,0	751,0
EER	W/W	5,26	5,23	5,26	5,20	5,24	5,34	5,24	5,23	5,41	5,36	5,29	5,25
Water flow rate source side	l/h	136129	154084	180866	204404	232973	264813	293658	330152	359034	393872	440716	490182
Pressure drop source side	kPa	55	58	48	46	44	47	48	48	38	31	32	40
Water flow rate system side	l/h	115215	130225	152866	172295	196591	224275	247834	278670	304461	333577	372486	413608
Pressure drop system side	kPa	53	43	38	27	31	44	31	39	45	54	57	33
Heating performances 40 °C / 45 °C - gas R134a (2)													
Heating capacity	kW	746,2	839,5	979,7	1112,5	1270,4	1441,8	1597,0	1815,3	1951,6	2145,2	2391,0	2664,3
Input power	kW	165,1	183,8	210,4	242,5	276,5	310,2	346,1	394,1	414,4	459,6	518,3	573,6
Heating total input current	A	273,0	305,0	341,0	394,0	441,0	499,0	556,0	624,0	656,0	743,0	826,0	931,0
COP	W/W	4,52	4,57	4,66	4,59	4,59	4,65	4,61	4,61	4,71	4,67	4,61	4,64
Water flow rate system side	l/h	129578	145788	170162	193225	220670	250442	277422	315345	339051	372698	415418	462891
Pressure drop system side	kPa	50	51	42	41	40	42	43	44	34	28	28	36
Water flow rate source side	l/h	171302	192864	225753	254786	291203	332319	366559	417106	451025	495203	550498	612203
Pressure drop source side	kPa	118	95	82	60	67	97	69	88	98	118	125	73

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 6703 - 9603 - model (°) version ° - gas R134a

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1723,4	1905,7	2114,5	2327,9
Input power	kW	331,7	366,9	409,8	463,6
Cooling total input current	A	522,0	592,0	659,0	744,0
EER	W/W	5,20	5,19	5,16	5,02
Water flow rate source side	l/h	350768	387913	431371	476493
Pressure drop source side	kPa	73	69	58	71
Water flow rate system side	l/h	296246	327572	363441	400118
Pressure drop system side	kPa	47	51	39	46
Heating performances 40 °C / 45 °C - gas R134a (2)					
Heating capacity	kW	1909,4	2114,9	2342,8	2593,9
Input power	kW	418,2	463,2	513,0	581,3
Heating total input current	A	651,0	737,0	817,0	922,0
COP	W/W	4,57	4,57	4,57	4,46
Water flow rate system side	l/h	331680	367403	407019	450652
Pressure drop system side	kPa	65	62	52	63
Water flow rate source side	l/h	438855	486287	537130	592236
Pressure drop source side	kPa	103	112	85	102

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
SEER - 12/7 (EN14825: 2018) . refrigerant gas R134a (1)																							
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	319,80	319,20	318,20	313,60
	A	%	337,10	343,20	342,80	348,90	348,20	350,10	347,00	339,20	351,20	340,00	355,00	341,70	340,20	337,90	340,30	343,50	344,30	343,10	341,00	340,50	342,50
SEER	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,07	8,06	8,03	7,92
	A	W/W	8,50	8,66	8,65	8,80	8,78	8,83	8,75	8,56	8,86	8,58	8,95	8,62	8,58	8,52	8,58	8,66	8,68	8,65	8,60	8,59	8,64
SEPR - (EN 14825: 2018) High temperature - refrigerant gas R134a (2)																							
SEPR	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,60	8,60	8,40	8,40
	A	W/W	9,40	9,40	9,30	8,70	9,30	8,90	9,10	9,10	9,00	9,00	8,90	8,90	8,80	8,90	8,80	8,90	8,90	9,00	8,80	8,60	8,80

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
Gas R134a																							
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	862,9	965,5	1077,5	1211,4
	A	A	163,0	189,0	206,0	226,0	262,0	300,0	329,0	354,5	371,0	395,1	405,0	447,5	511,1	576,7	647,2	724,3	824,0	862,9	965,5	1077,5	1211,4
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1176,0	1301,0	1533,0	1744,0
	A	A	23,0	23,0	23,0	23,0	23,0	23,0	23,0	506,0	23,0	550,0	23,0	666,0	730,0	889,0	982,0	1179,0	1355,0	1176,0	1301,0	1533,0	1744,0

MODEL PERFORMANCE DATA (H) - FOR TEMPERATURES WATER PRODUCED UP TO +60°C

WFI 1101 - 3201 - model (H) version A - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	294,7	338,4	389,7	436,1	479,8	540,5	637,9	703,6	781,8
Input power	kW	57,3	67,1	79,0	87,4	98,3	110,3	127,2	142,1	162,7
Cooling total input current	A	98,0	112,0	129,0	143,0	159,0	177,0	206,0	228,0	262,0
EER	W/W	5,15	5,05	4,94	4,99	4,88	4,90	5,02	4,95	4,80
Water flow rate source side	l/h	60130	69281	80074	89564	98879	111372	130851	144597	161585
Pressure drop source side	kPa	44	41	37	32	30	30	33	32	33
Water flow rate system side	l/h	50692	58217	67029	74994	82505	92934	109677	120988	134409
Pressure drop system side	kPa	39	44	46	26	32	24	35	43	27
Heating performances 40 °C / 45 °C - gas R134a (2)										
Heating capacity	kW	325,5	376,9	434,9	486,7	538,4	604,0	709,5	783,3	871,3
Input power	kW	70,4	82,2	96,5	105,2	119,3	133,5	151,5	168,8	185,2
Heating total input current	A	118,0	135,0	155,0	170,0	190,0	212,0	241,0	265,0	295,0
COP	W/W	4,63	4,58	4,51	4,63	4,51	4,52	4,68	4,64	4,71
Water flow rate system side	l/h	56513	65431	75521	84523	93497	104898	123224	136049	151346
Pressure drop system side	kPa	39	37	33	29	27	27	29	29	29
Water flow rate source side	l/h	74998	86674	99584	111688	122874	137657	163575	180444	200734
Pressure drop source side	kPa	86	97	100	58	71	52	78	97	59

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 2502 - 9603 - model (H) version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	672,4	770,8	886,7	999,1	1145,7	1305,1	1454,0	1620,1	1770,6	1939,2	2161,5	2375,7
Input power	kW	132,4	153,1	173,5	195,9	224,6	254,6	288,9	327,3	340,1	376,7	435,1	482,5
Cooling total input current	A	226,0	257,0	285,0	316,0	364,0	415,0	475,0	543,0	567,0	621,0	715,0	806,0
EER	W/W	5,08	5,04	5,11	5,10	5,10	5,13	5,03	4,95	5,21	5,15	4,97	4,92
Water flow rate source side	l/h	137384	157768	181226	204349	234273	266548	297970	332858	360998	396033	443977	488997
Pressure drop source side	kPa	53	55	48	48	49	48	50	46	36	32	32	38
Water flow rate system side	l/h	115641	132532	152452	171756	196959	224366	249941	278496	304349	333335	371531	408313
Pressure drop system side	kPa	54	44	36	27	32	44	32	40	46	54	51	30
Heating performances 40 °C / 45 °C - gas R134a (2)													
Heating capacity	kW	741,6	852,1	975,8	1106,1	1267,8	1441,2	1611,1	1842,1	1948,7	2138,6	2398,1	2642,8
Input power	kW	160,3	184,4	206,0	235,2	268,6	305,3	343,0	388,6	408,5	453,9	520,2	571,4
Heating total input current	A	268,0	305,0	334,0	376,0	431,0	490,0	558,0	633,0	669,0	732,0	838,0	945,0
COP	W/W	4,63	4,62	4,74	4,70	4,72	4,72	4,70	4,74	4,77	4,71	4,61	4,62
Water flow rate system side	l/h	128783	147970	169486	192116	220216	250335	279872	320004	338539	371554	416652	459154
Pressure drop system side	kPa	47	48	42	42	44	43	44	42	32	28	29	33
Water flow rate source side	l/h	171266	196282	225782	254976	292792	333536	371554	426498	451814	494844	551546	606152
Pressure drop source side	kPa	118	96	80	60	71	97	71	93	101	118	113	66

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 6703 - 9603 - model (H) version ° - gas R134a

Size		6703	7203	8403	9603
Model: H					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1706,6	1904,2	2109,2	2298,6
Input power	kW	343,5	381,7	434,3	486,5
Cooling total input current	A	561,0	616,0	705,0	796,0
EER	W/W	4,97	4,99	4,86	4,72
Water flow rate source side	l/h	349811	390073	434460	475234
Pressure drop source side	kPa	73	70	59	70
Water flow rate system side	l/h	293360	327313	362530	395080
Pressure drop system side	kPa	47	51	38	46
Heating performances 40 °C / 45 °C - gas R134a (2)					
Heating capacity	kW	1891,1	2108,3	2348,6	2571,3
Input power	kW	411,1	457,6	515,2	578,0
Heating total input current	A	662,0	727,0	826,0	933,0
COP	W/W	4,60	4,61	4,56	4,45
Water flow rate system side	l/h	328503	366257	408016	446727
Pressure drop system side	kPa	64	62	52	62
Water flow rate source side	l/h	435501	485905	538185	586506
Pressure drop source side	kPa	104	112	85	101

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
SEER - 12/7 (EN14825: 2018) . refrigerant gas R134a (1)																							
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	279,70	281,00	284,80	278,60
	A	%	306,80	310,90	296,50	309,10	297,30	306,60	308,50	298,00	314,60	297,10	315,60	301,30	295,40	301,80	303,60	307,30	298,00	297,80	295,60	296,90	297,50
SEER	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,07	7,10	7,20	7,04
	A	W/W	7,75	7,85	7,49	7,80	7,51	7,74	7,79	7,53	7,94	7,50	7,97	7,61	7,46	7,62	7,67	7,76	7,53	7,52	7,47	7,50	7,51
SEPR - (EN 14825: 2018) High temperature - refrigerant gas R134a (2)																							
SEPR	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,40	8,30	8,20	8,10
	A	W/W	9,20	9,10	9,10	8,50	9,00	8,60	8,80	8,80	8,80	8,80	8,70	8,60	8,40	8,60	8,50	8,60	8,60	8,70	8,60	8,40	8,50

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
Gas R134a																							
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	954,0	1052,0	1180,0	1290,0
	A	A	165,0	190,0	216,0	237,0	274,0	308,0	356,0	378,0	387,0	428,0	418,0	473,0	535,0	616,0	704,0	787,0	864,0	954,0	1357,0	1180,0	1290,0
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1234,0	1357,0	1595,0	1784,0
	A	A	23,0	23,0	23,0	23,0	23,0	23,0	23,0	507,0	23,0	560,0	23,0	676,0	742,0	897,0	1009,0	1203,0	1359,0	1234,0	1052,0	1595,0	1784,0

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

Model performance data (°) - for condensing temperatures up to 55°C

Model output data - model WFI° - AE - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	261,4	307,5	351,6	393,3	441,4	493,3	571,6	642,9	693,1
Input power	kW	68,4	80,8	90,0	100,3	117,7	133,8	145,8	164,9	178,0
Cooling total input current	A	119,0	139,0	152,0	168,0	197,0	222,0	240,0	269,0	292,0
EER	W/W	3,82	3,81	3,91	3,92	3,75	3,69	3,92	3,90	3,89
Evaporator water flow rate	l/h	44906	52830	60402	67574	75833	84756	98206	110455	119091
Pressure drop evaporator side	kPa	31	36	37	21	27	20	28	36	21
Length of refrigerant lines from/to 0 - 10 m										
Gas line (C1)	Ø	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	603,1	688,5	797,4	899,3	1008,4	1169,8	1287,8	1439,2	1558,1	1742,4	1896,4	2110,0
Input power	kW	152,9	171,4	198,1	229,9	259,8	287,4	323,9	364,6	386,3	431,2	481,0	540,3
Cooling total input current	A	261,4	292,5	330,2	380,6	424,7	476,4	532,4	600,3	631,3	709,7	792,6	891,2
EER	W/W	3,94	4,02	4,03	3,91	3,88	4,07	3,98	3,95	4,03	4,04	3,94	3,91
Evaporator water flow rate	l/h	103615	118287	137003	154508	173247	200980	221262	247268	267705	299365	325826	362526
Pressure drop evaporator side	kPa	43	35	29	22	25	35	25	31	35	43	39	24
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model output data - model WFI° - °E - gas R134a

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1515,4	1689,7	1833,1	2021,9
Input power	kW	387,7	429,0	481,0	541,3
Cooling total input current	A	633,0	713,0	793,0	893,0
EER	W/W	3,91	3,94	3,81	3,74
Evaporator water flow rate	l/h	260358	290307	314947	347392
Pressure drop evaporator side	kPa	37	40	29	35
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model performance data (H) - for condensing temperatures up to 60°C

Model output data - model WFIH - AE - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	260,1	304,6	351,5	393,7	432,7	485,1	579,1	638,3	697,1
Input power	kW	65,4	76,0	88,4	97,7	111,1	123,1	143,8	158,6	176,5
Cooling total input current	A	113,0	129,0	148,0	162,0	180,0	200,0	235,0	257,0	290,0
EER	W/W	3,98	4,01	3,98	4,03	3,89	3,94	4,03	4,02	3,95
Evaporator water flow rate	l/h	44694	52328	60399	67637	74335	83339	99495	109670	119762
Pressure drop evaporator side	kPa	31	35	37	21	26	19	29	36	21
Length of refrigerant lines from/to 0 - 10 m										
Gas line (C1)	Ø	54,0	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	602,3	690,5	794,5	897,8	1009,4	1177,8	1297,5	1436,1	1566,5	1750,8	1908,3	2101,3
Input power	kW	147,9	170,4	193,3	218,4	248,4	284,6	324,0	361,7	383,8	424,1	485,5	536,4
Cooling total input current	A	256,5	291,2	322,9	358,5	412,8	473,1	536,1	602,7	646,0	707,3	806,6	899,1
EER	W/W	4,07	4,05	4,11	4,11	4,06	4,14	4,01	3,97	4,08	4,13	3,93	3,92
Evaporator water flow rate	l/h	103477	118635	136501	154254	173418	202354	222930	246737	269151	300804	327864	361031
Pressure drop evaporator side	kPa	43	35	29	22	25	36	26	31	36	44	40	24
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model output data - model WFIH - °E - gas R134a

Size			6703	7203	8403	9603
Model: H						
Cooling performance 12 °C / 7 °C - gas R134a (1)						
Cooling capacity		kW	1524,4	1698,4	1844,7	2016,4
Input power		kW	383,7	425,2	483,3	533,7
Cooling total input current		A	645,8	709,0	803,3	895,1
EER		W/W	3,97	3,99	3,82	3,78
Evaporator water flow rate		l/h	261912	291802	316947	346444
Pressure drop evaporator side		kPa	38	40	29	35
Length of refrigerant lines from/to 0 - 10 m						
Gas line (C1)		Ø	76,0	88,9	88,9	88,9
Gas line (C2)		Ø	76,0	88,9	88,9	88,9
Gas line (C3)		Ø	76,0	88,9	88,9	88,9
Liquid line (C1)		Ø	54,0	54,0	54,0	54,0
Liquid line (C2)		Ø	54,0	54,0	54,0	54,0
Liquid line (C3)		Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

GENERAL TECHNICAL DATA

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor																							
Type	°,A	type	Screw																				
Compressor regulation	°,A	Type	I	I	I	I	I	I	I	I+1	I	I+1	I	1+I	1+I	1+I	1+I	1+I	1+I	2+I	2+I	2+I	2+I
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type	R134a																				
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
	A	kg	59,0	57,0	72,0	66,0	61,0	85,0	81,0	50,0	110,0	53,0	104,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
	A	kg	-	-	-	-	-	-	-	50,0	-	53,0	-	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 3 (1)	°,A	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger																							
Type	°,A	type	Shell and tube																				
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Type	Grooved joints																				
Source side heat exchanger																							
Type	°,A	type	Shell and tube																				
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Type	Grooved joints																				

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Sound data calculated with functioning in cooling mode - R134a gas

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
Standard equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99,5	100,6	101,0	102,0
	A	dB(A)	94,0	95,8	96,1	97,0	97,1	97,2	97,3	97,3	97,3	97,7	98,0	98,8	98,8	98,9	98,9	99,3	100,0	99,5	100,6	101,0	102,0
Silenced equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	94,4	94,6	94,6	94,9
	A	dB(A)	86,1	88,0	88,2	89,1	89,2	89,3	89,3	89,5	89,3	90,0	89,8	91,6	91,9	92,7	92,4	92,5	92,6	94,4	94,6	94,6	94,9
Super silenced equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91,5	91,6	91,6	91,9
	A	dB(A)	83,1	85,0	85,3	86,2	86,3	86,4	86,3	86,5	86,4	87,0	86,8	88,6	89,0	89,7	89,5	89,6	90,0	91,5	91,6	91,6	91,9

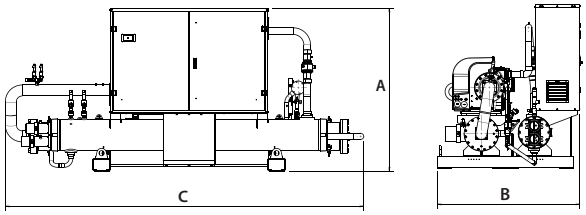
(1) Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
Standard equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99,2	98,9	100,0	100,5
	A	dB(A)	94,0	95,8	96,1	97,0	97,1	97,2	97,3	96,9	97,3	97,4	98,0	97,9	98,0	98,8	98,8	98,6	98,9	99,2	98,9	100,0	100,5
Silenced equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92,3	91,3	92,8	93,0
	A	dB(A)	86,1	88,0	88,2	89,1	89,2	89,3	89,3	89,3	89,3	89,6	89,8	90,3	90,5	91,5	91,1	91,2	91,3	92,3	91,3	92,8	93,0
Super silenced equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89,4	88,4	89,8	90,0
	A	dB(A)	83,1	85,0	85,3	86,2	86,3	86,4	86,3	86,3	86,4	86,7	86,8	87,4	87,5	88,5	88,1	88,2	88,8	89,4	88,4	89,8	90,0

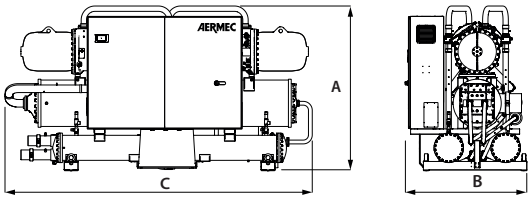
(1) Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

DIMENSIONS

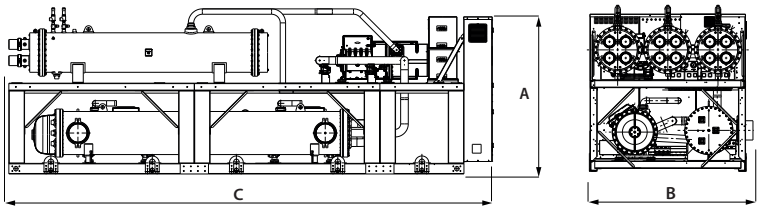
1101 - 3201



2502 - 6402



6703 - 9603



Unit dimensions and weights °/H in standard configuration

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H, °																							
Dimensions and weights - standard configuration																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1510	1560	1610	1610	1610	1610	1610	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4380	4380	4395	4500	4580	4580	5650	5650	5650	5650
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8740	9680	9900	10000
	A	kg	2020	2030	2230	2410	2450	2670	3090	3710	3530	3980	3570	5160	5220	5710	6440	6680	6770	9730	11440	11980	12060

Unit dimensions and weights °/H in silenced configuration

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H, °																							
Dimensions and weights - quiet configuration																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	6840	6840	6840
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9270	10240	10510	10610
	A	kg	2180	2190	2390	2570	2610	2830	3280	4020	3720	4290	3760	5500	5560	6050	6810	7080	7170	10260	12000	12590	12670
Super silenced equipment dimensions and weights																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	5650	5650	5650
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9890	10890	11230	11330
	A	kg	2370	2380	2580	2760	2800	3020	3500	4400	3940	4670	3980	5910	5970	6460	7240	7550	7640	10880	12650	13310	13390

■ *For the sizes of D-T-E versions please contact the factory.*

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Tel. 0442633111 - Telefax 044293577
www.aermec.com

WFN

Water cooled heat pump reversible water side

Cooling capacity 182 ÷ 2349 kW
Heating capacity 205 ÷ 2610 kW

- **Production of hot water up to 55°C.**
- **Production of negative chilled water down to -8°C.**

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency

FEATURES

Operating field

Production of chilled water up to 16 °C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 55 °C.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10°C.

Mono, bi-tri circuit unit

Unit with 2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.
They are equipped with screw compressors and system and source side shell and tube heat exchangers with R134a refrigerant.
The R513A (XP10) refrigerant with this type of gas is also available on the configurator. On average, the units have a yield > 2% and an EER < 3% compared to the same size with R134a.
For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO_5

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Adjustment includes complete management of the alarms and their log.
The possibility to controll several units in Master - Slave parallel mode up to a maximum of 4 compressors.
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•	•	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A											•		•		•	•	•	•	•	•				
AER485P1 x n° 3 (1)	°,A																					•	•	•	•
AERBACP	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Set-up	Heat recovery	0701	0801	0901	1101	1251
°	°, K, L	°, D, T	-	-	-	-	-
A	°, K, L	°	AVX680	AVX680	AVX680	AVX681	AVX681
A	°, K, L	D, T	-	-	-	-	-

Version	Set-up	Heat recovery	1401	1601	1801	2101	2401
°	°, K, L	°, D, T	-	-	-	-	-
A	°	°	AVX681	AVX682	AVX682	AVX683	AVX683
A	K	°	AVX688	AVX683	AVX683	AVX683	AVX683
A	L	°	AVX681	AVX682	AVX685	AVX683	AVX683
A	°, K, L	D, T	-	-	-	-	-

Version	Set-up	Heat recovery	2502	2801	2802	3201	3202
°	°, K, L	°, D, T	-	-	-	-	-
A	°	°	AVX673	AVX683	AVX674	AVX683	AVX679
A	K	°	Contact us.	AVX686	Contact us.	AVX686	Contact us.
A	L	°	AVX674	AVX683	AVX674	AVX683	AVX678
A	°	D	AVX674	-	AVX674	-	AVX679
A	°	T	AVX674	-	AVX674	-	AVX678
A	L	D, T	AVX674	-	AVX674	-	AVX678
A	K	D, T	Contact us.	-	Contact us.	-	Contact us.

Version	Set-up	Heat recovery	3602	4202	4802	5602	6402
°	°, K, L	°, D, T	-	-	-	-	-
A	°	°, D	AVX679	AVX678	AVX678	AVX678	AVX678
A	K	°, D, T	Contact us.	Contact us.	Contact us.	Contact us.	Contact us.
A	°	T	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	°, D	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	T	AVX678	AVX678	AVX676	AVX676	AVX676

Version	Set-up	Heat recovery	6703	7203	8403	9603
°	°, K, L	°, D, T	Contact us.	Contact us.	Contact us.	Contact us.
A	°, K, L	°, D, T	Contact us.	Contact us.	Contact us.	Contact us.

- not available

Power factor correction

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801
A	RIFWFN0701	RIFWFN0801	RIFWFN0901	RIFWFN1101	RIFWFN1251	RIFWFN1401	RIFWFN1601	RIFWFN1801	RIFWFN2101	RIFWFN2401	RIFWFN2502	RIFWFN2801

A grey background indicates the accessory must be assembled in the factory

Ver	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	-	-	RIFWFN6703	RIFWFN7203	RIFWFN8403	RIFWFN9603
A	RIFWFN2802	RIFWFN3201	RIFWFN3202	RIFWFN3602	RIFWFN4202	RIFWFN4802	RIFWFN5602	RIFWFN6402	RIFWFN6703	RIFWFN7203	RIFWFN8403	RIFWFN9603

A grey background indicates the accessory must be assembled in the factory

Isolating kit

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ISG5	ISG5	ISG6	ISG6
A	ISG10	ISG10	ISG10	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15	ISG1	ISG15	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**WFN**
4,5,6,7		**Size** 0701, 0801, 0901, 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
8		**Model**
	°	Heat pump reversible on the water side
9		**Version**
	°	Standard (1)
	A	High efficiency
10		**Operating field**
	X	Electronic thermostatic expansion valve (2)
	Z	Double electronic thermostatic for low temperature (3)
11		**Set-up**
	K	Super silenced
	L	Silenced with hood
	°	Standard
12		**Heat recovery**
	D	With desuperheater (4)
	T	With total recovery (4)
	°	Without heat recovery

Field		Description
13		**Evaporator**
	E	Evaporating unit
	°	Standard
14		**Power supply**
	2	230V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (5)
	4	230V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (5)
	5	500V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit
	8	400V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit
	9	500V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (5)
	°	400V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (5)
15		**Refrigerant gas**
	G	R513A (XP10)
	°	R134a

(1) Only for sizes from 6703 to 9603
(2) Water produced from 0 °C ÷ 16 °C
(3) Water produced from -8 °C up to 10 °C
(4) Not available for the condenserless "E"
(5) The 230V and 500V power supplies are only available for sizes 0701 - 0801 - 0901 - 1101 - 1251 - 1401 - 2502 - 2802

PERFORMANCE SPECIFICATIONS

WFN 0701 - 3201 - version A - gas R134a

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	182,1	207,2	232,9	295,9	322,1	370,3	448,8	504,1	579,3	655,9	719,6	788,4
Input power	kW	35,2	40,2	45,6	55,9	60,5	68,8	83,9	95,0	106,4	120,6	136,6	149,7
Cooling total input current	A	63,0	71,0	79,0	91,0	104,0	120,0	138,0	156,0	170,0	200,0	223,0	248,0
EER	W/W	5,18	5,16	5,11	5,30	5,32	5,38	5,35	5,31	5,45	5,44	5,27	5,27
Water flow rate system side	l/h	31347	35658	40063	50900	55401	63688	77171	86683	99596	112777	123733	135542
Pressure drop system side	kPa	40	46	46	40	40	41	28	35	27	37	45	27
Water flow rate source side	l/h	37125	42261	47577	60109	65418	75101	91161	102491	117368	132862	146434	160587
Pressure drop source side	kPa	37	37	34	44	37	33	33	33	33	34	33	32
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	204,8	230,6	262,5	327,5	358,1	410,4	494,2	556,2	639,5	733,2	796,8	879,7
Input power	kW	44,4	50,8	57,8	70,4	76,6	87,1	104,0	118,2	131,8	150,4	169,5	188,1
Heating total input current	A	78,0	88,0	98,0	113,0	130,0	149,0	170,0	191,0	209,0	246,0	272,0	308,0
COP	W/W	4,61	4,54	4,54	4,65	4,68	4,71	4,75	4,70	4,85	4,87	4,70	4,68
Water flow rate system side	l/h	35533	40021	45575	56858	62177	71260	85815	96600	111065	127339	138391	152791
Pressure drop system side	kPa	34	33	31	40	33	29	30	29	30	31	29	29
Water flow rate source side	l/h	47178	52944	60295	75577	82711	94940	114197	128417	148521	170834	184231	202358
Pressure drop source side	kPa	90	101	103	88	89	91	61	78	61	85	101	60

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFN 2502 - 9603 - version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	652,3	746,8	905,7	1024,5	1164,3	1325,5	1446,9	1589,7	1721,1	1960,7	2149,5	2349,3
Input power	kW	121,4	137,8	167,7	189,5	213,7	242,9	270,4	296,6	317,6	359,9	406,3	445,4
Cooling total input current	A	208,0	239,0	275,0	310,0	341,0	401,0	447,0	493,0	509,0	598,0	667,0	739,0
EER	W/W	5,37	5,42	5,40	5,41	5,45	5,46	5,35	5,36	5,42	5,45	5,29	5,28
Water flow rate system side	l/h	112179	128411	155723	176117	200144	227870	248717	273259	295856	337027	369472	403784
Pressure drop system side	kPa	51	41	38	29	33	45	32	38	83	55	51	30
Water flow rate source side	l/h	132175	151199	183520	207646	235653	268115	293728	322600	348857	396964	437212	478412
Pressure drop source side	kPa	49	50	49	49	50	49	48	46	34	32	32	36
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	726,4	828,1	1001,4	1138,6	1283,2	1459,8	1589,2	1809,3	1911,8	2159,8	2376,5	2610,0
Input power	kW	154,8	174,8	209,3	234,9	264,8	302,9	332,5	371,1	396,0	450,7	504,3	547,7
Heating total input current	A	260,0	298,0	339,0	381,0	418,0	492,0	545,0	606,0	624,0	733,0	812,0	900,0
COP	W/W	4,69	4,74	4,78	4,85	4,85	4,82	4,78	4,88	4,83	4,79	4,71	4,77
Water flow rate system side	l/h	126142	143812	173923	197757	222889	253571	276062	314312	332129	375231	412895	453465
Pressure drop system side	kPa	45	45	44	45	45	44	43	44	31	28	28	32
Water flow rate source side	l/h	168271	191878	232387	264585	298364	339696	368017	421779	444410	502013	549582	603144
Pressure drop source side	kPa	114	92	85	65	73	101	70	91	97	122	112	66

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFN 6703 - 9603 - version ° - gas R134a

Size		6703	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1691,1	1925,6	2120,1	2310,0
Input power	kW	322,4	364,9	407,2	452,6
Cooling total input current	A	505,0	594,0	660,0	733,0
EER	W/W	5,00	5,00	5,00	5,00
Water flow rate system side	l/h	290696	330989	364406	397041
Pressure drop system side	kPa	46	52	39	46
Water flow rate source side	l/h	343740	390980	431894	471655
Pressure drop source side	kPa	70	70	58	69
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1885,5	2129,2	2348,8	2575,2
Input power	kW	401,0	454,4	501,6	558,6
Heating total input current	A	619,0	728,0	803,0	893,0
COP	W/W	5,00	5,00	5,00	5,00
Water flow rate system side	l/h	327527	369895	408061	447398
Pressure drop system side	kPa	64	63	52	62
Water flow rate source side	l/h	436659	493020	542047	593071
Pressure drop source side	kPa	105	115	86	103

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Refrigerant gas: °														
SEER - 12/7 (EN14825: 2018) . refrigerant gas R134a (1)														
SEER	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-
	A	W/W	6,64	6,87	6,80	6,55	6,76	6,83	6,79	6,85	6,94	6,94	6,62	6,75
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	-	-	-	-
	A	%	262,60	271,70	269,00	259,00	267,50	270,00	268,40	270,90	274,50	274,50	261,70	267,10

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Refrigerant gas: °														
SEER - 12/7 (EN14825: 2018) . refrigerant gas R134a (1)														
SEER	°	W/W	-	-	-	-	-	-	-	-	6,85	7,02	6,98	6,88
	A	W/W	7,06	7,19	7,07	7,23	7,24	7,18	7,01	7,14	7,37	7,44	7,31	7,34
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	270.8%	277.7%	276.2%	272.3%
	A	%	279.5%	284.6%	279.8%	296.3%	286.5%	284.3%	277.3%	282.4%	291.9%	294.5%	289.5%	290.4%

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.

Size			0701	0801	0901	1101
Refrigerant gas: °						
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)						
Pdesignh	°	kW	-	-	-	-
	A	kW	264,00	294,00	339,00	417,00
SCOP	°	W/W	-	-	-	-
	A	W/W	4,58	4,63	4,55	4,73
ηsh	°	%	-	-	-	-
	A	%	175,00	177,00	174,00	181,00

(1) Efficiencies for average temperature applications (55 °C)

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

WFN - AE- gas R134a

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Evaporator: E													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	162,7	185,3	208,6	264,5	289,4	331,9	398,9	449,2	519,2	588,2	640,8	701,8
Input power	kW	41,4	47,2	53,8	65,8	71,8	81,7	98,8	111,7	125,2	141,5	158,8	175,4
Cooling total input current	A	74,0	83,0	94,0	109,0	124,0	141,0	164,0	185,0	203,0	236,0	263,0	290,0
EER	W/W	3,93	3,92	3,88	4,02	4,03	4,06	4,04	4,02	4,15	4,16	4,03	4,00
Evaporator water flow rate	l/h	27948	31843	35845	45444	49721	57032	68528	77175	89209	101057	110092	120581
Pressure drop evaporator side	kPa	32	36	37	32	32	33	22	28	22	30	36	21
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	42,0	54,0	54,0	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	28,0	35,0	35,0	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Evaporator: E													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	584,6	668,6	803,3	911,8	1043,5	1186,8	1284,6	1414,9	1544,3	1758,8	1912,5	2076,9
Input power	kW	143,3	163,2	196,5	222,8	249,8	283,2	317,9	349,1	373,7	422,6	474,7	523,3
Cooling total input current	A	246,7	282,2	326,3	368,7	405,5	472,6	525,9	578,3	606,7	705,8	785,6	867,1
EER	W/W	4,08	4,10	4,09	4,09	4,18	4,19	4,04	4,05	4,13	4,16	4,03	3,97
Evaporator water flow rate	l/h	100443	114870	138020	156649	179280	203906	220716	243093	265322	302189	328596	356829
Pressure drop evaporator side	kPa	41	33	30	23	27	36	25	30	35	44	40	23
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

WFN - °E - gas R134a

Size		6703	7203	8403	9603
Evaporator: E					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1500,1	1704,7	1830,1	1998,5
Input power	kW	375,4	424,4	474,7	524,9
Cooling total input current	A	609,0	708,0	786,0	869,0
EER	W/W	4,00	4,02	3,86	3,81
Evaporator water flow rate	l/h	257735	292888	314432	343357
Pressure drop evaporator side	kPa	36	41	29	35
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ELECTRIC DATA

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Electric data													
Maximum current (FLA)	A	106,0	119,0	136,0	162,0	183,0	208,0	243,0	275,0	305,0	350,0	389,0	427,0
Peak current (LRA)	A	166,0	195,0	232,0	303,0	317,0	344,0	439,0	468,0	589,0	653,0	808,0	920,0

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Electric data														
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	913,0	1050,0	1166,0	1281,0
	A	A	365,0	416,0	486,0	549,0	609,0	700,0	777,0	854,0	913,0	1050,0	1166,0	1281,0
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	1198,0	1353,0	1585,0	1774,0
	A	A	500,0	552,0	682,0	743,0	894,0	1003,0	1197,0	1347,0	1198,0	1353,0	1585,0	1774,0

GENERAL TECHNICAL DATA

WFN - A

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Compressor													
Type	type	Screw											
Compressor regulation	Type	On-Off											
Number	no.	1	1	1	1	1	1	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type	R134a											
Refrigerant load circuit 1 (1)	kg	41,0	41,0	38,0	59,0	57,0	72,0	66,0	61,0	85,0	81,0	110,0	104,0
System side heat exchanger													
Type	type	Shell and tube											
Number	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	Type	Grooved joints											
Sizes (in/out)	Ø	4"	4"	4"	4"	5"	6"	6"	6"	6"	6"	8"	8"
Source side heat exchanger													
Type	type	Shell and tube											
Number	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	Type	Grooved joints											
Sizes (in/out)	Ø	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"	6"	6"

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor														
Type	°,A	type						Screw						
Compressor regulation	°,A	Type						On-Off						
Number	°,A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type						R134a						
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	50,0	53,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	50,0	53,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 3 (1)	°	kg	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger														
Type	°,A	type						Shell and tube						
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Type						Grooved joints						
Sizes (in/out)	°,A	Ø	8″	8″	8″	8″	10″	10″	10″	10″	10″	10″	10″	10″
Source side heat exchanger														
Type	°,A	type						Shell and tube						
Number	°,A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Type						Grooved joints						
Sizes (in/out)	°	Ø	-	-	-	-	-	-	-	-	5″	5″	6″	6″
	A	Ø	4″	4″	4″	4″	5″	6″	6″	6″	-	-	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Sound data calculated with functioning in cooling mode - R134a gas

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Set-up: K														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
	A	dB(A)	78,0	78,2	77,9	79,8	80,4	80,9	81,1	81,5	84,3	82,6	85,1	84,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Set-up: L														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
	A	dB(A)	81,0	81,2	80,9	82,8	83,4	83,9	84,1	84,5	87,3	85,5	88,1	87,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Set-up: °														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
	A	dB(A)	87,7	88,0	87,7	89,1	90,3	91,3	90,5	90,7	93,2	92,5	87,4	84,9

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Set-up: K														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	88,1	87,3	89,8	90,3
	A	dB(A)	83,6	83,6	84,5	85,2	86,1	85,6	87,8	88,3	88,1	87,3	89,8	90,3

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Set-up: L														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	91,1	90,2	92,8	93,3
	A	dB(A)	86,6	86,6	87,5	88,2	89,1	88,5	90,8	91,3	91,1	90,2	92,8	93,3

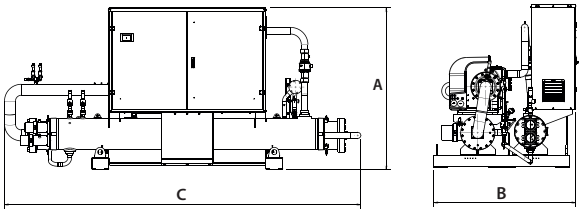
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Set-up: °														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	97,0	97,2	99,5	100,0
	A	dB(A)	93,5	94,0	94,0	94,5	95,0	95,5	97,5	98,0	97,0	97,2	99,5	100,0

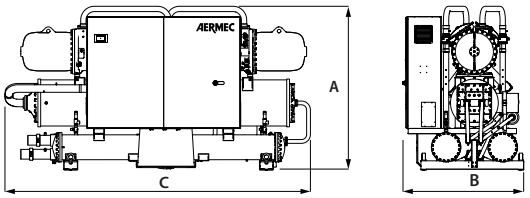
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

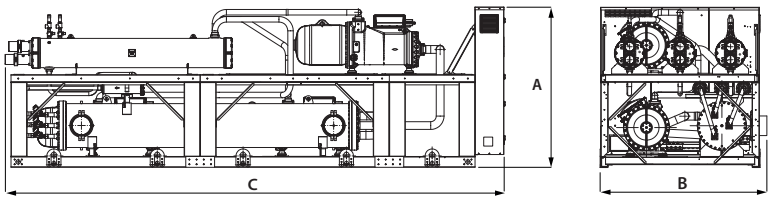
0701 - 3201



2502 - 6402



6703 - 9603



WFN 0701-9603 ver. A

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Dimensions and weights - standard configuration													
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	1920	1920
B	mm	1450	1450	1450	1510	1550	1610	1610	1610	1610	1610	1630	1630
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4290	4290
Empty weight	kg	1610	1630	1630	2120	2130	2350	2940	2980	3260	3320	3820	3870
Dimensions and weights - quiet configuration													
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	1920	1920
B	mm	1450	1450	1450	1540	1600	1610	1610	1610	1630	1630	1645	1645
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4290	4290
Empty weight	kg	1770	1790	1790	2280	2290	2510	3120	3170	3450	3510	4030	4080
Super silenced equipment dimensions and weights													
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	1920	1920
B	mm	1450	1450	1450	1540	1600	1610	1610	1610	1630	1630	1645	1645
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4290	4290
Empty weight	kg	1960	1980	1980	2470	2480	2700	3340	3390	3670	3730	4280	4330

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Dimensions and weights - standard configuration													
A	mm	2000	2075	2195	2195	2340	2432	2440	2432	2250	2250	2250	2250
B	mm	1500	1500	1575	1575	1585	1845	1800	1800	2200	2200	2200	2200
C	mm	4320	4345	4380	4380	4395	4535	4605	4605	6840	6840	6840	6840
Empty weight	kg	3810	4100	5690	5750	6300	6670	6970	7070	10320	11670	12270	12360
Dimensions and weights - quiet configuration													
A	mm	2000	2075	2195	2195	2340	2432	2440	2432	2250	2250	2250	2250
B	mm	1500	1500	1575	1575	1585	1845	1800	1800	2200	2200	2200	2200
C	mm	4320	4345	4650	4650	4600	5015	5150	5150	6840	6840	6840	6840
Empty weight	kg	4120	4410	6050	6120	6670	7040	7420	7490	10880	12230	12950	12990
Super silenced equipment dimensions and weights													
A	mm	2000	2075	2195	2195	2340	2432	2440	2432	2250	2250	2250	2250
B	mm	1500	1500	1575	1575	1585	1845	1800	1800	2200	2200	2200	2200
C	mm	4320	4345	4650	4650	4600	5015	5150	5150	6840	6840	6840	6840
Empty weight	kg	4500	4790	6480	6550	7100	7470	7890	7990	11530	12880	13650	13740

WFN 6703-9603 ver. °

Size		6703	7203	8403	9603
Dimensions and weights - standard configuration					
A	mm	2250	2250	2250	2250
B	mm	2200	2200	2200	2200
C	mm	5650	5650	5650	5650
Empty weight	kg	9330	9910	10130	10200
Dimensions and weights - quiet configuration					
A	mm	2250	2250	2250	2250
B	mm	2200	2200	2200	2200
C	mm	5650	5650	5650	5650
Empty weight	kg	9890	10470	10760	10830
Super silenced equipment dimensions and weights					
A	mm	2250	2250	2250	2250
B	mm	2200	2200	2200	2200
C	mm	5650	5650	5650	5650
Empty weight	kg	10540	11120	11510	11580

For the sizes of D-T-E versions please contact the factory.

For the size of the units with the RIF accessory we ask you to contact the headquarters.

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WMX

Water-water chiller

Cooling capacity 280,1 ÷ 324,2 kW

- **High efficiency also at partial loads ESEER 8,4**
- **Compact design**
- **Extremely flexible and reliable**

DESCRIPTION

Indoor unit for the production of chilled water, equipped with magnetic levitation centrifugal compressors and system side, flooded source heat exchangers that guarantee a 50% reduction of the refrigerant load in comparison to conventional flooded heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
The technological choices made, always oriented to the highest quality and efficiency can reach 5.71 EER values (class A for the working conditions Eurovent).

EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

— 5 times lighter than an equivalent screw compressor.
— Extremely compact wide to allow access through a standard doorway.
— High efficiency with generously sizes heat exchanger.

Two-stage, oil-free centrifugal compressor with latest-generation magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.
Provided with inverter technology that permits capacity modulation down to 30% A version.
Built-in device to reduce starting current (only 6 Amps!)

Operating field

Water produced from 20 °C up to 45 °C on Condenser side and from 5 °C up to 20 °C on Evaporator side.

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

CONFIGURATOR

Field	Description
1,2,3	**WMX**
4,5,6	**Size** 300
7	**Efficiency**
A	High efficiency
U	Very high efficiency
8	**Version**
°	Standard
L	Silenced

PERFORMANCE SPECIFICATIONS

Size			300
Efficiency: A			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	324,2
Input power	°,L	kW	60,3
Cooling total input current	°,L	A	94,0
EER	°,L	W/W	5,37
Water flow rate system side	°,L	l/h	55761
Pressure drop system side	°,L	kPa	34
Water flow rate source side	°,L	l/h	65750
Pressure drop source side	°,L	kPa	41

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			300
Efficiency: U			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	280,1
Input power	°,L	kW	48,9
Cooling total input current	°,L	A	78,0
EER	°,L	W/W	5,72
Water flow rate system side	°,L	l/h	48180
Pressure drop system side	°,L	kPa	25
Water flow rate source side	°,L	l/h	56338
Pressure drop source side	°,L	kPa	30

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			300
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	8,99
	U	W/W	9,04
Seasonal efficiency	A	%	356,6%
	U	%	358,5%
SEPR - (EN 14825: 2018) High temperature (2)			
SEPR	A	W/W	9,70
	U	W/W	10,35

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			300
Efficiency: A, U			
Electric data			
Maximum current (FLA)	°,L	A	135,0
Peak current (LRA)	°,L	A	6,0

GENERAL TECHNICAL DATA

Size			300
Efficiency: A, U			
Compressor			
Type	°,L	type	Centrifugal
Compressor regulation	°,L	Type	Inverter
Number	°,L	no.	1
Circuits	°,L	no.	1
Refrigerant	°,L	type	R134a
Source side heat exchanger			
Type	°,L	type	Shell and tube - flooded compact
Number	°,L	no.	1
Connections (in/out)	°,L	Type	Grooved joints
Sizes (in/out)	°,L	Ø	4"
System side heat exchanger			
Type	°,L	type	Shell and tube - flooded compact with Spray system
Number	°,L	no.	1
Connections (in/out)	°,L	Type	Grooved joints
Sizes (in/out)	°,L	Ø	4"

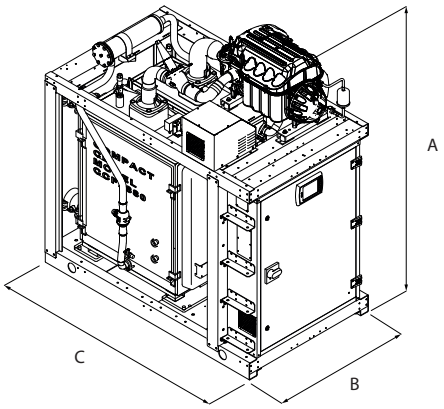
Size			300
Efficiency: A			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	90,0
	L	dB(A)	84,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			300
Efficiency: U			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	85,0
	L	dB(A)	78,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			300
Efficiency: A, U			
Dimensions and weights			
A	°	mm	1905
	L	mm	1942
B	°,L	mm	1041
C	°,L	mm	1770
Empty weight	°	kg	2025
	L	kg	2210

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WMG

Water-water chiller

Cooling capacity 282,3 ÷ 312,4 kW

- **High efficiency also at partial loads ESEER 8,4**
- **Compact design**
- **Extremely flexible and reliable**

DESCRIPTION

Indoor unit for the production of chilled water, equipped with magnetic levitation centrifugal compressors and system side, flooded source heat exchangers that guarantee a 50% reduction of the refrigerant load in comparison to conventional flooded heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
The technological choices made, always oriented to the highest quality and efficiency can reach 5.71 EER values (class A for the working conditions Eurovent).

EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

— 5 times lighter than an equivalent screw compressor.
— Extremely compact wide to allow access through a standard doorway.
— High efficiency with generously sizes heat exchanger.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:
da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430; with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

Two-stage, oil-free centrifugal compressor with latest-generation magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.
Provided with inverter technology that permits capacity modulation down to 30% A version.
Built-in device to reduce starting current (only 6 Amps!)

Operating field

Water produced from 20 °C up to 55 °C on Condenser side and from 5 °C up to 20 °C on Evaporator side.

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

CONFIGURATOR

Field		Description
1,2,3		WMG
4,5,6		Size 300
7		Efficiency
	A	High efficiency
	U	Very high efficiency
8		Version
	°	Standard
	L	Silenced

PERFORMANCE SPECIFICATIONS

Size			300
Efficiency: A			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	312,4
Input power	°,L	kW	57,6
Cooling total input current	°,L	A	85,0
EER	°,L	W/W	5,42
Water flow rate system side	°,L	l/h	53731
Pressure drop system side	°,L	kPa	31
Water flow rate source side	°,L	l/h	63303
Pressure drop source side	°,L	kPa	36

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			300
Efficiency: U			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	282,3
Input power	°,L	kW	49,1
Cooling total input current	°,L	A	74,0
EER	°,L	W/W	5,75
Water flow rate system side	°,L	l/h	48548
Pressure drop system side	°,L	kPa	25
Water flow rate source side	°,L	l/h	56739
Pressure drop source side	°,L	kPa	29

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			300
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	8,88
	U	W/W	8,91
Seasonal efficiency	A	%	352,0%
	U	%	353,4%
SEPR - (EN 14825: 2018) High temperature (2)			
SEPR	A	W/W	9,96
	U	W/W	10,37

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			300
Efficiency: A, U			
Electric data			
Maximum current (FLA)	°,L	A	150,0
Peak current (LRA)	°,L	A	6,0

GENERAL TECHNICAL DATA

Size			300
Efficiency: A, U			
Compressor			
Type	°,L	type	Centrifugal
Compressor regulation	°,L	Type	Inverter
Number	°,L	no.	1
Circuits	°,L	no.	1
Refrigerant	°,L	type	R1234ze
Source side heat exchanger			
Type	°,L	type	Shell and tube - flooded compact
Number	°,L	no.	1
Connections (in/out)	°,L	Type	Grooved joints
Sizes (in/out)	°,L	Ø	4"
System side heat exchanger			
Type	°,L	type	Shell and tube - flooded compact with Spray system
Number	°,L	no.	1
Connections (in/out)	°,L	Type	Grooved joints
Sizes (in/out)	°,L	Ø	4"

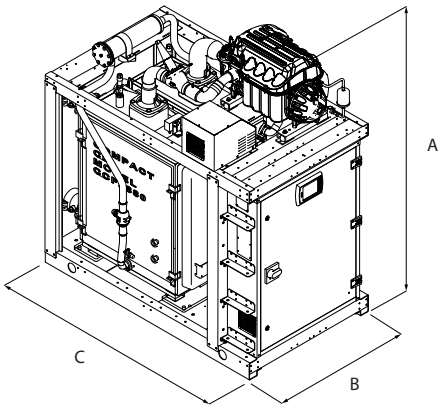
Size			300
Efficiency: A			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	90,0
	L	dB(A)	85,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			300
Efficiency: U			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	84,0
	L	dB(A)	78,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			300
Efficiency: A, U			
Dimensions and weights			
A	°	mm	1905
	L	mm	1942
B	°,L	mm	1041
C	°,L	mm	1770
Empty weight	°	kg	2065
	L	kg	2250

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WTX

Water-water chiller

Cooling capacity 222,9 ÷ 1958,4 kW

- **High efficiency ESEER up to 9**
- **Extended operating range**
- **Possibility of selecting between heat exchangers with 1 or 2 passes on water side**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Indoor unit producing chilled water equiped with magnetic levitation centrifugal compressors and shell & tube heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
The technological choices made always focus on maximum quality and efficiency, thereby achieving EER > 6 values (class A for Eurovent operating conditions).

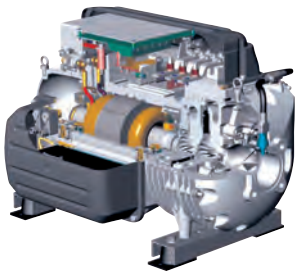
EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

Two-stage, oil-free centrifugal compressor with latest-generation magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.
The compressor is equipped with an inverter for continuous load modulation by varying rpm (from 30% to 100%).
Built-in device to reduce starting current (only 6 Amps!)



Operating field

Water produced from 15 °C up to 50 °C on Condenser side and from 5 °C up to 25 °C on Evaporator side.

Flooded Evaporator with subcooler

Subcooler effect
— Superheats compressor gas intake;
— Subcools thermostatic valve fluid intake;
— Increases chiller yield and ensures gas suction from compressor.
Condenser
— With refrigerant on shell side and water on pipe side

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

ACCESSORIES COMPATIBILITY

Model	Ver	1300	1350	2300	2350	3300	3325	3350	4325	4350
AER485P1	A,U	•	•	•	•	•	•	•	•	•
AERBACP	A,U	•	•	•	•	•	•	•	•	•
FL	A,U	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,U	•	•	•	•	•	•	•	•	•

With the MULTICHILLER_EVO accessory, it is necessary to add AER485P1 for each connected unit.

Antivibration

Ver	1300	1350	2300	2350	3300	3325	3350	4325	4350
A, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

CONFIGURATOR

Field	Description
1,2,3	**WTX**
4,5,6,7	**Size** 1300, 1350, 2300, 2350, 3300, 3325, 3350, 4325, 4350
8	**Efficiency**
A	High efficiency
U	Very high efficiency
9	**Exchanger**
1	One pass on water side (1)
2	Two passes on water side
10	**Version**
°	Standard
L	Silenced
11	**Power supply**
°	400V ~ 3 50Hz with circuit breakers on compressors and auxiliary circuit

(1) Option available only for size from 3300 to 4350.

EXCHANGERS

Over-sized tube core exchangers ensure excellent performances at full and partial loads.

Flooded evaporator: with level adjustment through an electronic valve controlled by a level sensor.

Backflow condenser: with refrigerant on shell side and water on tube side.

From size 1300 to 2350, heat exchangers have 2 passes on the water side

Starting from size WTX 3300, heat exchangers are available as versions with one or two passes on the water side, to meet any plant installation requirement. **The dimensions of the two configurations ensure similar performances** (same approach to heat exchangers). **The difference is that the version with two passes on the water side due offers the convenience of water connections all on the same side**, against a generally higher but nonetheless limited drop in pressure compared to the version with one pass on the water side.

PERFORMANCE SPECIFICATIONS

WTX - A

Size		1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	-	-	-	-	1054,4	1214,3	1466,1	1716,2 (2)	1955,0 (2)
Input power	kW	-	-	-	-	211,4	219,9	281,6	315,3	375,1
Cooling total input current	A	-	-	-	-	317,0	356,0	435,0	503,0	580,0
EER	W/W	-	-	-	-	4,99	5,52	5,21	5,44	5,21
Water flow rate system side	l/h	-	-	-	-	181266	208751	252017	294970	336022
Pressure drop system side	kPa	-	-	-	-	32	39	31	24	31
Water flow rate source side	l/h	-	-	-	-	218376	247239	301544	350417	402059
Pressure drop source side	kPa	-	-	-	-	31	38	31	42	31

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Sizes 4325 and 4350 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

Size		1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	351,3	488,5	702,8	899,4	1054,3	1215,9	1466,0	1715,9 (2)	1958,4 (2)
Input power	kW	70,8	94,3	141,8	164,1	212,6	220,6	283,8	318,8	380,0
Cooling total input current	A	106,0	145,0	212,0	255,0	317,0	356,0	435,0	503,0	580,0
EER	W/W	4,96	5,18	4,96	5,48	4,96	5,51	5,17	5,38	5,15
Water flow rate system side	l/h	60422	84006	120844	154630	181266	209053	252017	294970	336647
Pressure drop system side	kPa	32	30	40	33	54	77	54	60	82
Water flow rate source side	l/h	72792	100515	145584	183481	218376	247235	301544	350417	402062
Pressure drop source side	kPa	31	33	35	28	28	35	33	41	53

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Sizes 4325 and 4350 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

WTX - U

Size		1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	-	-	-	-	669,0	869,6	1002,7	1179,6	1336,9
Input power	kW	-	-	-	-	112,2	144,9	166,9	195,3	222,3
Cooling total input current	A	-	-	-	-	180,0	237,0	273,0	316,0	364,0
EER	W/W	-	-	-	-	5,96	6,00	6,01	6,04	6,01
Water flow rate system side	l/h	-	-	-	-	115004	149476	172333	202737	229777
Pressure drop system side	kPa	-	-	-	-	12	18	14	10	14
Water flow rate source side	l/h	-	-	-	-	135049	175273	202156	237660	269542
Pressure drop source side	kPa	-	-	-	-	12	17	13	17	13

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size		1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	222,9	334,1	445,9	559,7	669,0	840,1	1006,1	1191,4	1342,6
Input power	kW	37,5	55,9	75,1	94,3	112,5	140,7	167,2	198,4	223,4
Cooling total input current	A	60,0	91,0	120,0	158,0	180,0	237,0	273,0	316,0	364,0
EER	W/W	5,95	5,98	5,94	5,93	5,95	5,97	6,02	6,01	6,01
Water flow rate system side	l/h	38335	57444	76669	96214	115004	144425	172942	204799	230804
Pressure drop system side	kPa	12	13	16	12	21	32	24	26	37
Water flow rate source side	l/h	45016	67385	90033	113067	135049	169344	202690	240041	270255
Pressure drop source side	kPa	12	14	13	10	10	15	14	18	23

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1											
SEER - 12/7 (EN14825: 2018) (1)											
SEER	A	W/W	-	-	-	-	8,25	8,64	8,78	8,76	8,95
	U	W/W	-	-	-	-	9,70	9,54	9,85	9,59	9,92
Seasonal efficiency	A	%	-	-	-	-	326,8%	342,6%	348,2%	347,2%	354,8%
	U	%	-	-	-	-	384,8%	378,4%	390,8%	380,6%	393,7%
SEPR - (EN 14825: 2018) High temperature (2)											
SEPR	A	W/W	-	-	-	-	8,75	9,92	9,33	9,71	9,35
	U	W/W	-	-	-	-	11,80	11,36	11,44	11,49	11,47

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2											
SEER - 12/7 (EN14825: 2018) (1)											
SEER	A	W/W	8,40	8,59	8,19	8,76	8,03	8,34	8,45	8,32	8,39
	U	W/W	9,69	9,07	9,47	9,73	9,54	9,31	9,66	9,28	9,60
Seasonal efficiency	A	%	332,9%	340,6%	324,5%	347,3%	318,1%	330,4%	334,9%	329,8%	332,6%
	U	%	384,4%	359,9%	375,6%	386,3%	378,6%	369,5%	383,5%	368,1%	380,8%
SEPR - (EN 14825: 2018) High temperature (2)											
SEPR	A	W/W	8,26	9,17	8,25	9,70	8,64	9,75	9,17	9,48	9,08
	U	W/W	11,65	11,34	11,62	11,17	11,70	11,20	11,37	11,30	11,31

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Electric data											
Maximum current (FLA)	A,U	A	135,0	210,0	270,0	420,0	405,0	405,0	630,0	630,0	630,0
Peak current (LRA)	A,U	A	6,0	6,0	141,0	216,0	276,0	276,0	426,0	426,0	426,0

GENERAL TECHNICAL DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Compressor											
Type	A,U	type					Centrifugal - Oil Free				
Compressor regulation	A,U	Type					Inverter				
Number	A,U	no.	1	1	2	2	3	3	3	4	4
Circuits	A,U	no.	1	1	1	1	1	1	1	1	1
Refrigerant	A,U	type					R134a				

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1											
System side heat exchanger											
Type	A,U	type	-	-	-	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1
Connections (in/out)	A,U	Type	-	-	-	-	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Sizes (in/out)	A,U	Ø	-	-	-	-	6″	10″	10″	6″	8″
Source side heat exchanger											
Type	A,U	type	-	-	-	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1
Connections (in/out)	A,U	Type	-	-	-	-	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Sizes (in/out)	A,U	Ø	-	-	-	-	6″	6″	10″	8″	8″

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2											
System side heat exchanger											
Type	A,U	type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,U	Type	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Sizes (in/out)	A,U	Ø	5″	5″	5″	6″	6″	10″	6″	8″	8″
Source side heat exchanger											
Type	A,U	type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,U	Type	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Sizes (in/out)	A,U	Ø	5″	5″	6″	6″	6″	6″	8″	8″	8″

SOUND DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: A											
Sound data calculated in cooling mode (1)											
Sound power level	°	dB(A)	90,0	91,0	93,0	93,5	96,0	95,5	97,0	98,5	100,0
	L	dB(A)	84,0	85,0	87,0	87,5	90,0	89,5	91,0	92,5	94,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: U											
Sound data calculated in cooling mode (1)											
Sound power level	°	dB(A)	87,0	88,0	90,0	88,0	90,0	91,0	94,0	94,0	97,0
	L	dB(A)	81,0	82,0	84,0	82,0	84,0	85,0	88,0	88,0	91,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: A											
Sound data calculated in cooling mode (1)											
Sound power level	°	dB(A)	90,0	91,0	93,0	93,5	96,0	95,5	97,0	98,5	100,0
	L	dB(A)	84,0	85,0	87,0	87,5	90,0	89,5	91,0	92,5	94,0

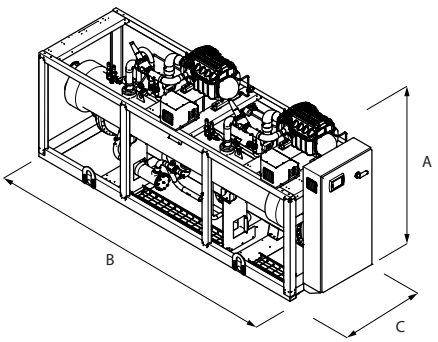
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: U											
Sound data calculated in cooling mode (1)											
Sound power level	°	dB(A)	87,0	88,0	90,0	88,0	90,0	91,0	94,0	94,0	97,0
	L	dB(A)	81,0	82,0	84,0	82,0	84,0	85,0	88,0	88,0	91,0

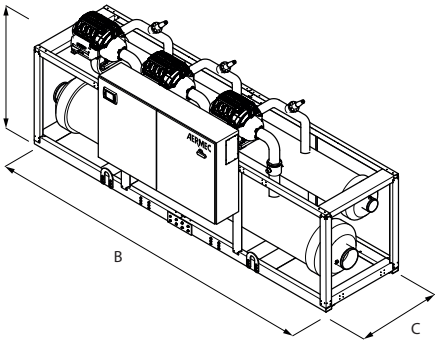
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

WTX 1300 - 2350



WTX 3300 - 4350



Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1											
Dimensions and weights											
A	A,U	mm	-	-	-	-	1970	2010	2010	2010	2280
B	A,U	mm	-	-	-	-	4966	4966	4966	4966	4966
C	A,U	mm	-	-	-	-	1640	1640	1640	1640	1732
Empty weight	A,U	kg	-	-	-	-	4090	4430	5120	5690	6640
Weight functioning	A,U	kg	-	-	-	-	4430	4810	5620	6250	7450

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2											
Dimensions and weights											
A	A,U	mm	1850	1950	1970	2010	2240	2280	2280	2280	2280
B	A,U	mm	3040	3040	3340	3440	3990	3990	3990	4966	4966
C	A,U	mm	1000	1000	1240	1240	1732	1732	1836	1836	1836
Empty weight	A,U	kg	2190	2370	2770	3390	5440	5730	6630	7200	7380
Weight functioning	A,U	kg	2350	2560	3010	3740	6170	6480	7540	8160	8400

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WTG

Water-water chiller

Cooling capacity 246,6 ÷ 1959,4 kW

- **Extended operating range**
- **Possibility of selecting between heat exchangers with 1 or 2 passes on water side**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Indoor unit producing chilled water equiped with magnetic levitation centrifugal compressors and shell & tube heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
The technological choices made always focus on maximum quality and efficiency, thereby achieving EER > 6 values (class A for Eurovent operating conditions).

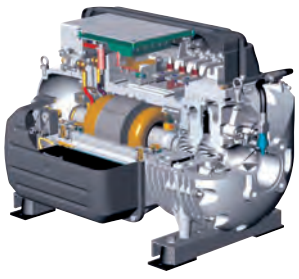
EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

Two-stage, oil-free centrifugal compressor with latest-generation magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.
The compressor is equipped with an inverter for continuous load modulation by varying rpm (from 30% to 100%).
Built-in device to reduce starting current (only 6 Amps!)



Operating field

Water produced from 15 °C up to 50 °C on Condenser side and from 5 °C up to 25 °C on Evaporator side.

Flooded Evaporator

Evaporator
— Low charge content
Condenser
— With refrigerant on shell side and water on pipe side

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

ACCESSORIES COMPATIBILITY

Model	Ver	1310	1490	2310	2490	3310	3400	3490	4400	4490
AER485P1	A,U	•	•	•	•	•	•	•	•	•
AERBACP	A,U	•	•	•	•	•	•	•	•	•
FL	A,U	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,U	•	•	•	•	•	•	•	•	•

■ *With the MULTICHILLER_EVO accessory, it is necessary to add AER485P1 for each connected unit.*

Antivibration

Ver	1310	1490	2310	2490	3310	3400	3490	4400	4490
A, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

CONFIGURATOR

Field		Description
1,2,3		**WTG**
4,5,6,7		**Size** 1310, 1490, 2310, 2490, 3310, 3400, 3490, 4400, 4490
8		**Version**
	A	High efficiency
	U	Very high efficiency
9		**Exchanger**
	1	One pass on water side
	2	Two passes on water side
10		**Set-up**
	L	Silenced
	°	Standard
11		**Power supply**
	°	400V ~ 3 50Hz with circuit breakers on compressors and auxiliary circuit
12		**Refrigerant gas**
	°	R1234ze

EXCHANGERS

Over-sized tube core exchangers ensure excellent performances at full and partial loads.

Flooded evaporator: with level adjustment through an electronic valve controlled by a level sensor.

Backflow condenser: with refrigerant on shell side and water on tube side.

■ *From size 1310 to 2490, heat exchangers have 2 passes on the water side*

Starting from size WTG 3310, heat exchangers are available as versions with one or two passes on the water side, to meet any plant installation requirement. **The dimensions of the two configurations ensure similar performances** (same approach to heat exchangers). **The difference is that the version with two passes on the water side due offers the convenience of water connections all on the same side**, against a generally higher but nonetheless limited drop in pressure compared to the version with one pass on the water side.

PERFORMANCE SPECIFICATIONS

WTG - A

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	-	-	-	-	1049,5	1199,4	1409,4	1679,3 (2)	1955,0 (2)
Input power		kW	-	-	-	-	194,3	202,4	245,0	286,4	334,3
Cooling total input current		A	-	-	-	-	310,0	324,0	389,0	457,0	532,0
EER		W/W	-	-	-	-	5,40	5,93	5,75	5,86	5,85
Water flow rate system side		l/h	-	-	-	-	180402	206174	242254	288643	336022
Pressure drop system side		kPa	-	-	-	-	24	32	27	29	28
Water flow rate source side		l/h	-	-	-	-	213103	240238	283553	336857	392518
Pressure drop source side		kPa	-	-	-	-	23	23	24	27	19

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Sizes 4400 and 4490 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	349,7	469,7	699,6	899,3	1049,3	1199,2	1409,2	1679,2 (2)	1958,5 (2)
Input power		kW	66,4	81,4	132,2	158,8	196,5	204,4	248,0	290,2	339,1
Cooling total input current		A	106,0	130,0	211,0	250,0	310,0	324,0	389,0	457,0	532,0
EER		W/W	5,27	5,77	5,29	5,66	5,34	5,87	5,68	5,79	5,78
Water flow rate system side		l/h	60134	80751	120268	154630	180402	206174	242254	288643	336647
Pressure drop system side		kPa	24	14	22	50	45	49	40	44	46
Water flow rate source side		l/h	71250	94518	142500	181033	213103	240238	283553	336857	393148
Pressure drop source side		kPa	23	18	23	32	33	32	42	47	39

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Sizes 4400 and 4490 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

WTG - U

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	-	-	-	-	736,7	869,6	999,1	1159,6	1336,9
Input power		kW	-	-	-	-	120,2	140,2	153,5	186,2	211,9
Cooling total input current		A	-	-	-	-	205,0	233,0	254,0	311,0	349,0
EER		W/W	-	-	-	-	6,13	6,20	6,51	6,23	6,31
Water flow rate system side		l/h	-	-	-	-	126626	149476	171729	199301	229777
Pressure drop system side		kPa	-	-	-	-	12	17	14	14	13
Water flow rate source side		l/h	-	-	-	-	147066	173222	197868	230962	265867
Pressure drop source side		kPa	-	-	-	-	16	22	18	19	18

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	246,4	334,3	492,9	669,8	736,6	869,5	999,1	1159,5	1342,8
Input power		kW	40,1	50,9	80,1	105,5	120,7	140,3	154,1	187,0	212,7
Cooling total input current		A	69,0	85,0	137,0	173,0	205,0	233,0	254,0	311,0	349,0
EER		W/W	6,15	6,57	6,16	6,35	6,10	6,20	6,48	6,20	6,31
Water flow rate system side		l/h	42371	57462	84741	115160	126626	149476	171729	199301	230804
Pressure drop system side		kPa	12	7	11	28	22	26	20	21	22
Water flow rate source side		l/h	49186	66178	98371	132989	147066	173222	197868	230962	266902
Pressure drop source side		kPa	11	9	11	17	16	16	20	22	18

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ELECTRIC DATA

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Electric data											
Maximum current (FLA)	A,U	A	150,0	217,0	300,0	434,0	450,0	651,0	651,0	868,0	868,0
Peak current (LRA)	A,U	A	6,0	6,0	156,0	223,0	306,0	440,0	440,0	657,0	657,0

GENERAL TECHNICAL DATA

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Compressor											
Type	A,U	type					Centrifugal - Oil Free				
Compressor regulation	A,U	Type					Inverter				
Number	A,U	no.	1	1	2	2	3	3	3	4	4
Circuits	A,U	no.	1	1	1	1	1	1	1	1	1
Refrigerant	A,U	type					R1234ze				

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1											
System side heat exchanger											
Type	A,U	type	-	-	-	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1
Source side heat exchanger											
Type	A,U	type	-	-	-	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2											
System side heat exchanger											
Type	A,U	type					Shell and tube				
Number	A,U	no.	1	1	1	1	1	1	1	1	1
Source side heat exchanger											
Type	A,U	type					Shell and tube				
Number	A,U	no.	1	1	1	1	1	1	1	1	1

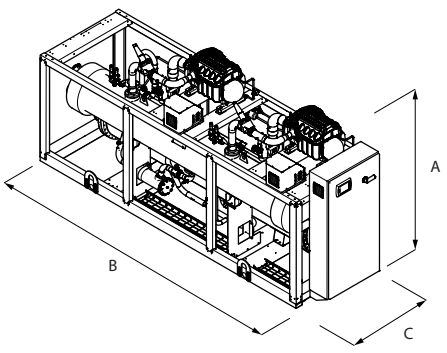
SOUND DATA

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Set-up: °											
Sound data calculated in cooling mode (1)											
Sound power level	A	dB(A)	89,0	91,0	92,0	94,0	94,0	93,0	96,0	94,0	97,0
	U	dB(A)	86,0	88,0	89,0	91,0	91,0	93,0	93,0	94,0	94,0

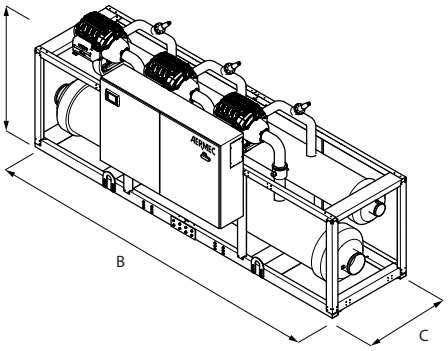
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

WTG 1310 - 2490



WTG 3310 - 4490



Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1											
Dimensions and weights											
A	A,U	mm	-	-	-	-	2010	2010	2010	2280	2280
B	A,U	mm	-	-	-	-	4966	4966	4966	4966	4966
C	A,U	mm	-	-	-	-	1640	1640	1640	1732	1732

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2											
Dimensions and weights											
A	A,U	mm	1850	1970	2010	2280	2280	2280	2280	2280	2280
B	A,U	mm	3040	3040	3340	4390	3990	3990	4966	4966	4966
C	A,U	mm	1000	1240	1240	1332	1732	1836	1836	1836	1836

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

MULTI-PURPOSE

Thanks to the special architecture of the refrigerant circuit and advanced control logic, the multi-purpose heat pump is able to simultaneously satisfy different installation requirements and to independently modulate the power delivered on each of them.

The ability to simultaneously meet the demand of the hot and cold circuit, whatever the proportion of the load on the two circuits may be, derives from the capacity of its control to switch the operation between the various possible modes.

MULTI-PURPOSE

		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
NRP 0200-0750	Air-water multipurpose (plate heat exchanger)	-	43-185	46-205	858
NRP 0804-2406	Air-water multipurpose (plate heat exchanger)	-	207-639	208-662	865
NPG 0800-3600	Air-water multipurpose (plate heat exchanger)	-	206,5-657,8	212,0-670,8	872
CPS	Multifunction unit with multiple temperature level capability	-	164-491	176-505	882
NXP 0500-1650	Water-water multipurpose (plate heat exchanger)	-	108-502	122-549	887

NRP 0200-0750

Air-water multipurpose

Cooling capacity 43 ÷ 185 kW
Heating capacity 46 ÷ 205 kW

- **High efficiency also at partial loads**
- **Units designed for 2 or 4-pipe systems**
- **Simultaneous and independent production of hot and chilled water**
- **Compact dimensions**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Multipurpose external units designed for 2 or 4-pipe systems. With just one unit simultaneous and independent requests for hot and chilled water can be accommodated all year round.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 46 °C in summer. Hot water production up to 55 °C (for more details refer to the selection software and technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Option integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
GP: Anti-intrusion grid.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
AER485P1	A							•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A							•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A							•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A							•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	A							•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•	•

Anti-intrusion grid

Ver	0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
A	-	-	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP10 x 3 (1)
E	GP3	GP3	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP10 x 3 (1)

(1) x _ indicates the quantity to buy

Antivibration

Version	System side - pumps	Recovery side - pumps	0200	0240	0280
A	00	00, R1, R2, R3, R4	-	-	-
A	01, 02, 03, 04, 05, 06, 07, 08	00	-	-	-
A	P1, P2, P3, P4	00, R1, R2, R3, R4	-	-	-
E	00, P1, P2, P3, P4	00, R1, R2, R3, R4	VT17	VT17	VT17
E	01, 02, 03, 04, 05, 06, 07, 08	00	VT13	VT13	VT13

Version	System side - pumps	Recovery side - pumps	0300	0330	0350
A	00	00, R1, R2, R3, R4	-	-	-
A	01, 02, 03, 04, 05, 06, 07, 08	00	-	-	-
A	P1, P2, P3, P4	00, R1, R2, R3, R4	-	-	-
E	00, P1, P2, P3, P4	00, R1, R2, R3, R4	VT17	VT17	VT17
E	01, 02, 03, 04, 05, 06, 07, 08	00	VT13	VT13	VT13

Version	System side - pumps	Recovery side - pumps	0500	0550	0600
A	00	00, R1, R2, R3, R4	VT11	VT11	VT11
A	01, 02, 03, 04, 05, 06, 07, 08	00	VT11	VT11	VT11
A	P1, P2, P3, P4	00, R1, R2, R3, R4	VT11	VT11	VT11
E	00	00, R1, R2, R3, R4	VT11	VT11	VT11
E	01, 02, 03, 04, 05, 06, 07, 08	00	VT11	VT11	VT11
E	P1, P2, P3, P4	00, R1, R2, R3, R4	VT11	VT11	VT11

Version	System side - pumps	Recovery side - pumps	0650	0700	0750
A	00	00, R1, R2, R3, R4	VT11	VT22	VT23
A	01, 02, 03, 04, 05, 06, 07, 08	00	VT11	VT22	VT23
A	P1, P2, P3, P4	00, R1, R2, R3, R4	VT11	VT22	VT23
E	00	00, R1, R2, R3, R4	VT11	VT22	VT23
E	01, 02, 03, 04, 05, 06, 07, 08	00	VT11	VT22	VT23
E	P1, P2, P3, P4	00, R1, R2, R3, R4	VT11	VT22	VT23

- not available

Device for peak current reduction

Ver	0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Power supply: °												
A	-	-	-	-	-	-	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)
E	DRE281 (1)	DRE281 (1)	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
A	-	-	-	-	-	-	RIF52	RIF52	RIF53	RIF53	RIF53	RIF53
E	RIF54	RIF54	RIF50	RIF50	RIF50	RIF51	RIF52	RIF52	RIF53	RIF53	RIF53	RIF53

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**NRP**
4,5,6,7	**Size** 0200, 0240, 0280, 0300, 0330, 0350, 0500, 0550, 0600, 0650, 0700, 0750
8	**Version**
A	High efficiency
E	Silenced high efficiency (1)
9	**System type**
2	2-pipe system
4	4-pipe system
10	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
11	**Fans**
J	Inverter (2)
M	Oversized (3)
°	Standard (4)
12	**Power supply**
1	220V ~ 3 50Hz with magnet circuit breakers (5)
°	400V ~ 3N 50Hz with magnet circuit breakers
13,14	**System side - pumps**
00	Without hydronic kit
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
05	Storage tank with holes for heaters and single low head pump (6)
06	Storage tank with holes for heaters and pump low head + stand-by pump (6)
07	Storage tank with holes for heaters and single high head pump (6)
08	Storage tank with holes for heaters and pump high head + stand-by pump (6)
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
15,16	**Recovery side - pumps**
00	Without hydronic kit
R1	Single pump low head
R2	Pump low head + stand-by pump
R3	Single pump high head
R4	Pump high head + stand-by pump

(1) The size up 0200 to 0350 are only available in the silenced versions (E)
(2) Standard for size from 0200 to 0350 without useful static pressure, option for other sizes
(3) Available only for size from 0200 to 0350
(4) As standard in sizes fom 0500 to 0750
(5) Not available for size 0750
(6) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRP - 2-pipe system version A

Size		0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling system side 2-pipe system (1)													
Cooling capacity	kW	-	-	-	-	-	-	99,8	103,7	123,7	140,7	159,7	184,6
Input power	kW	-	-	-	-	-	-	32,4	36,0	44,1	50,5	55,2	64,6
Cooling total input current	A	-	-	-	-	-	-	55,0	59,0	72,0	82,0	88,0	113,0
EER	W/W	-	-	-	-	-	-	3,08	2,89	2,80	2,79	2,89	2,86
Water flow rate system side	l/h	-	-	-	-	-	-	17181	17868	21305	24225	27490	31785
Pressure drop system side	kPa	-	-	-	-	-	-	37	39	37	48	56	67
Heating system side 2-pipe system (2)													
Heating capacity	kW	-	-	-	-	-	-	106,3	112,3	137,3	152,3	173,3	205,4
Input power	kW	-	-	-	-	-	-	32,6	35,1	41,3	45,8	53,8	62,8
Heating total input current	A	-	-	-	-	-	-	55,0	59,0	72,0	82,0	88,0	113,0
COP	W/W	-	-	-	-	-	-	3,26	3,20	3,33	3,33	3,22	3,27
Water flow rate system side	l/h	-	-	-	-	-	-	18423	19466	23810	26417	30067	35629
Pressure drop system side	kPa	-	-	-	-	-	-	43	46	46	57	67	84
Heating domestic hot water side 2-pipe system (3)													
Heating capacity	kW	-	-	-	-	-	-	106,2	112,2	137,3	152,3	173,4	205,3
Input power	kW	-	-	-	-	-	-	32,5	34,9	41,3	45,7	53,5	62,3
Heating total input current	A	-	-	-	-	-	-	55,0	59,0	72,0	82,0	88,0	113,0
COP	W/W	-	-	-	-	-	-	3,27	3,21	3,32	3,34	3,24	3,29
Water flow rate domestic hot water side	l/h	-	-	-	-	-	-	18423	19466	23810	26417	30067	35629
Pressure drop domestic hot water side	kPa	-	-	-	-	-	-	30	34	51	48	35	49
Simultaneous operation (heating + cooling), 2 pipes (4)													
Cooling capacity	kW	-	-	-	-	-	-	103,3	111,3	133,8	148,5	169,2	202,7
Recovered heating power	kW	-	-	-	-	-	-	132,2	142,2	174,3	193,3	218,4	261,3
Input power	kW	-	-	-	-	-	-	30,8	32,9	43,2	48,0	52,5	63,0
Water flow rate system side	l/h	-	-	-	-	-	-	17181	17868	21305	24225	27490	31785
Pressure drop system side	kPa	-	-	-	-	-	-	37	39	37	48	56	67
Water flow rate domestic hot water side	l/h	-	-	-	-	-	-	18423	19466	23810	26417	30067	35629
Pressure drop domestic hot water side	kPa	-	-	-	-	-	-	30	34	51	48	35	49

(1) Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side 40 °C / 45 °C;
(4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 2-pipe system version E

Size		0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling system side 2-pipe system (1)													
Cooling capacity	kW	42,9	49,9	55,9	63,9	67,9	79,8	94,8	98,8	115,8	130,7	152,7	178,7
Input power	kW	13,9	16,5	18,9	20,8	23,2	27,0	35,2	38,9	48,3	55,5	61,9	70,6
Cooling total input current	A	28,0	33,0	38,0	41,0	45,0	52,0	60,0	64,0	79,0	91,0	99,0	120,0
EER	W/W	3,08	3,02	2,97	3,07	2,93	2,96	2,70	2,54	2,40	2,35	2,47	2,53
Water flow rate system side	l/h	7388	8591	9621	10996	11683	13745	16322	17009	19930	22507	26287	30754
Pressure drop system side	kPa	26	37	22	29	22	31	34	35	32	41	51	63
Heating system side 2-pipe system (2)													
Heating capacity	kW	46,1	53,2	60,1	75,2	80,2	84,2	106,3	112,3	137,3	152,3	173,3	205,4
Input power	kW	13,3	15,6	17,7	22,4	23,9	25,6	32,6	35,1	41,3	45,7	53,8	62,8
Heating total input current	A	28,0	33,0	38,0	41,0	45,0	52,0	60,0	64,0	79,0	91,0	99,0	120,0
COP	W/W	3,47	3,42	3,40	3,36	3,36	3,28	3,26	3,20	3,33	3,33	3,22	3,27
Water flow rate system side	l/h	7995	9211	10428	13035	13904	14599	18423	19466	23812	26417	30067	35629
Pressure drop system side	kPa	30	43	26	41	31	35	43	46	46	56	67	85
Heating domestic hot water side 2-pipe system (3)													
Heating capacity	kW	46,1	53,1	60,1	75,2	80,2	84,1	106,2	112,2	137,3	152,3	173,4	205,3
Input power	kW	13,2	15,4	17,7	22,3	24,0	25,5	32,5	34,9	41,3	45,7	53,5	62,3
Heating total input current	A	28,0	33,0	38,0	41,0	45,0	52,0	60,0	64,0	79,0	91,0	99,0	120,0
COP	W/W	3,49	3,44	3,40	3,37	3,35	3,30	3,27	3,21	3,32	3,34	3,24	3,29
Water flow rate domestic hot water side	l/h	7995	9211	10428	13035	13904	14599	18423	19466	23810	26417	30067	35629
Pressure drop domestic hot water side	kPa	13	17	21	33	38	19	30	34	51	48	35	49
Simultaneous operation (heating + cooling), 2 pipes (4)													
Cooling capacity	kW	45,6	52,4	58,3	68,9	74,0	87,1	103,3	111,4	133,9	148,5	169,2	202,7
Recovered heating power	kW	58,1	67,1	75,1	88,2	95,2	111,1	132,2	142,2	174,3	193,3	218,4	261,3
Input power	kW	13,2	15,5	17,8	20,5	22,5	25,5	30,7	32,8	43,1	47,9	52,5	62,9
Water flow rate system side	l/h	7388	8591	9621	10996	11683	13745	16322	17009	19930	22507	26287	30754
Pressure drop system side	kPa	26	37	22	29	22	31	34	35	32	41	51	63
Water flow rate domestic hot water side	l/h	7995	9211	10428	13035	13904	14599	18423	19446	23810	26417	30067	35629
Pressure drop domestic hot water side	kPa	13	17	21	33	38	19	30	34	51	48	35	49

(1) Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side 40 °C / 45 °C;
(4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 4-pipe system version A

Size		0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling system side 4-pipe system (1)													
Cooling capacity	kW	-	-	-	-	-	-	99,8	103,7	123,7	140,7	159,7	184,6
Input power	kW	-	-	-	-	-	-	32,4	36,0	44,1	50,5	55,2	64,6
Cooling total input current	A	-	-	-	-	-	-	55,0	59,0	72,0	82,0	88,0	113,0
EER	W/W	-	-	-	-	-	-	3,08	2,89	2,80	2,79	2,89	2,86
Water flow rate system side	l/h	-	-	-	-	-	-	17181	17868	21305	24225	27490	31785
Pressure drop system side	kPa	-	-	-	-	-	-	37	39	37	48	56	67
Heating system side 4-pipe system (2)													
Heating capacity	kW	-	-	-	-	-	-	106,2	112,2	137,3	152,3	173,4	205,3
Input power	kW	-	-	-	-	-	-	32,5	39,9	41,3	45,7	53,5	62,3
Heating total input current	A	-	-	-	-	-	-	55,0	59,0	72,0	82,0	88,0	113,0
COP	W/W	-	-	-	-	-	-	3,27	3,21	3,32	3,34	3,24	3,29
Water flow rate system side	l/h	-	-	-	-	-	-	18423	19466	23810	26417	30067	35629
Pressure drop system side	kPa	-	-	-	-	-	-	30	34	51	48	35	49
Simultaneous operation (heating + cooling), 4 pipes (3)													
Cooling capacity	kW	-	-	-	-	-	-	103,3	111,3	133,8	148,5	169,2	202,7
Recovered heating power	kW	-	-	-	-	-	-	132,2	142,2	174,3	193,3	218,4	261,3
Input power	kW	-	-	-	-	-	-	30,8	32,9	43,2	48,0	52,5	63,0
Water flow rate cold side	l/h	-	-	-	-	-	-	17181	17868	21305	24225	27490	31785
Pressure drop cold side	kPa	-	-	-	-	-	-	37	39	37	48	56	67
Water flow rate hot side	l/h	-	-	-	-	-	-	18423	19466	23810	26417	30067	35629
Pressure drop hot side	kPa	-	-	-	-	-	-	30	34	51	48	35	49

(1) Data 14511:2022; System side water heat exchanger 12 °C / 7 °C; External air 35 °C
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 4-pipe system version E

Size		0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling system side 4-pipe system (1)													
Cooling capacity	kW	42,9	49,9	55,9	63,9	67,9	79,8	94,8	98,8	115,8	130,7	152,7	178,7
Input power	kW	13,9	16,5	18,9	20,8	23,2	27,0	35,2	38,9	48,3	55,5	61,9	70,6
Cooling total input current	A	28,0	33,0	38,0	41,0	45,0	52,0	60,0	64,0	79,0	91,0	99,0	120,0
EER	W/W	3,08	3,02	2,97	3,07	2,93	2,96	2,70	2,54	2,40	2,35	2,47	2,53
Water flow rate system side	l/h	7388	8591	9621	10996	11683	13745	16322	17009	19930	22507	26287	30754
Pressure drop system side	kPa	26	37	22	29	22	31	34	35	32	41	51	63
Heating system side 4-pipe system (2)													
Heating capacity	kW	46,1	53,1	60,1	75,2	80,2	84,1	106,2	112,2	137,3	152,3	173,4	205,3
Input power	kW	13,2	15,4	17,7	22,3	24,0	25,5	32,5	34,9	41,3	45,7	53,5	62,3
Heating total input current	A	28,0	33,0	38,0	41,0	45,0	52,0	60,0	64,0	79,0	91,0	99,0	120,0
COP	W/W	3,49	3,44	3,40	3,37	3,35	3,30	3,27	3,21	3,32	3,34	3,24	3,29
Water flow rate system side	l/h	7995	9211	10428	13035	13904	14599	18423	19466	23810	26417	30067	35629
Pressure drop system side	kPa	13	17	21	33	38	19	30	34	51	48	35	49
Simultaneous operation (heating + cooling), 4 pipes (3)													
Cooling capacity	kW	45,6	52,4	58,3	68,9	74,0	87,1	103,3	111,4	133,9	148,5	169,2	202,7
Recovered heating power	kW	58,1	67,1	75,1	88,2	95,2	111,1	132,2	142,2	174,3	193,3	218,4	261,3
Input power	kW	13,2	15,5	17,8	20,5	22,5	25,5	30,7	32,8	43,1	47,9	52,5	62,9
Water flow rate cold side	l/h	7388	8591	9621	10996	11683	13745	16322	17009	19930	22507	26287	30754
Pressure drop cold side	kPa	26	37	22	29	22	31	34	35	32	41	51	63
Water flow rate hot side	l/h	7995	9211	10428	13035	13904	14599	18423	19466	23810	26417	30067	35629
Pressure drop hot side	kPa	13	17	21	33	38	19	30	34	51	48	35	49

(1) Data 14511:2022; System side water heat exchanger 12 °C / 7 °C; External air 35 °C
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

ENERGY DATA

Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling capacity with low leaving water temp (UE n° 2016/2281)														
SEER	A	W/W	-	-	-	-	-	-	3,62	3,34	3,78	3,83	3,86	3,92
	E	W/W	3,78	3,74	3,77	3,70	3,74	4,00	3,53	3,29	3,67	3,72	3,75	3,76
ηsc	A	%	-	-	-	-	-	-	141,60	130,60	148,00	150,10	151,30	153,70
	E	%	148,20	146,50	147,70	145,00	146,50	157,10	138,10	128,50	143,60	145,70	146,90	147,50
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)														
Pdesignh	A	kW	-	-	-	-	-	-	90,00	95,00	116,00	129,00	147,00	174,00
	E	kW	39,00	45,00	51,00	64,00	68,00	71,00	90,00	95,00	116,00	129,00	147,00	174,00
SCOP	A	W/W	-	-	-	-	-	-	3,53	3,50	3,60	3,68	3,55	3,60
	E	W/W	3,60	3,53	3,55	3,50	3,50	3,43	3,53	3,50	3,70	3,68	3,55	3,60
ηsh	A	%	-	-	-	-	-	-	138,00	137,00	145,00	144,00	139,00	141,00
	E	%	141,00	138,00	139,00	137,00	137,00	134,00	138,00	137,00	145,00	144,00	139,00	141,00

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Electric data														
Maximum current (FLA)	A	A	-	-	-	-	-	-	76,0	81,0	100,0	112,0	122,0	144,0
	E	A	36,0	41,0	46,0	53,0	58,0	63,0	76,0	81,0	100,0	112,0	122,0	144,0
Peak current (LRA)	A	A	-	-	-	-	-	-	214,0	220,0	232,0	243,0	261,0	320,0
	E	A	119,0	150,0	155,0	184,0	190,0	200,0	214,0	220,0	232,0	243,0	261,0	320,0

GENERAL TECHNICAL DATA

Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Compressor														
Type	A	type	-	-	-	-	-	-	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
	E	type	Scroll											
Number	A	no.	-	-	-	-	-	-	3	3	4	4	4	4
	E	no.	2	2	2	2	2	2	3	3	4	4	4	4
Circuits	A	no.	-	-	-	-	-	-	2	2	2	2	2	2
	E	no.	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type	R410A											
Refrigerant charge (1)	A	kg	-	-	-	-	-	-	33,0	33,0	40,0	40,0	48,0	72,0
	E	kg	16,0	16,0	16,0	20,0	20,0	20,0	33,0	33,0	40,0	40,0	48,0	72,0
2-pipe system - System side heat exchanger (hot/cold)														
Type	A	type	-	-	-	-	-	-	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate
	E	type	Brazed plate											
Number	A	no.	-	-	-	-	-	-	1	1	1	1	1	1
	E	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A	Type	-	-	-	-	-	-	G.s.	G.s.	G.s.	G.s.	G.s.	G.s.
	E	Type	G.s.											
Size (in)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
Size (out)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
2-pipe system - Recovery side heat exchanger (domestic hot water)														
Type	A	type	-	-	-	-	-	-	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate
	E	type	Brazed plate											
Number	A	no.	-	-	-	-	-	-	2	2	2	2	2	2
	E	no.	2	2	2	2	2	2	2	2	2	2	2	2
Manifold connection (in/out)	A	Type	-	-	-	-	-	-	-	G.s.	G.s.	G.s.	G.s.	G.s.
	E	Type	G.s.											
Manifold diameter (in)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
Manifold diameter (out)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
4-pipe system - System side heat exchanger (cold side)														
Type	A	type	-	-	-	-	-	-	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate
	E	type	Brazed plate											
Number	A	no.	-	-	-	-	-	-	1	1	1	1	1	1
	E	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A	Type	-	-	-	-	-	-	G.s.	G.s.	G.s.	G.s.	G.s.	G.s.
	E	Type	G.s.											
Size (in)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
Size (out)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
4-pipe system - Recovery side heat exchanger (hot side)														
Type	A	type	-	-	-	-	-	-	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate
	E	type	Brazed plate											
Number	A	no.	-	-	-	-	-	-	2	2	2	2	2	2
	E	no.	2	2	2	2	2	2	2	2	2	2	2	2
Manifold connection (in/out)	A	Type	-	-	-	-	-	-	-	G.s.	G.s.	G.s.	G.s.	G.s.
	E	Type	G.s.											
Manifold diameter (in)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
Manifold diameter (out)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

G.s. = Grooved joints

FANS DATA

Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Fan														
Type	A	type	-	-	-	-	-	-	Axial	Axial	Axial	Axial	Axial	Axial
	E	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	A	no.	-	-	-	-	-	-	2	2	2	2	3	3
	E	no.	6	6	6	8	8	8	2	2	2	2	3	3
Air flow rate cooling mode	A,E	m^3/h	-	-	-	-	-	-	-	-	-	-	-	-
Air flow rate heating mode	A,E	m^3/h	-	-	-	-	-	-	-	-	-	-	-	-

Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Fans: J														
Fan														
Type	A	type	-	-	-	-	-	-	Axial	Axial	Axial	Axial	Axial	Axial
	E	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	A	no.	-	-	-	-	-	-	2	2	2	2	3	3
	E	no.	6	6	6	8	8	8	2	2	2	2	3	3
Air flow rate cooling mode	A	m^3/h	-	-	-	-	-	-	37000	37000	36500	36500	58000	48000
	E	m^3/h	20000	20000	20000	26000	26000	26000	20200	21100	21400	22400	31900	34600
Air flow rate heating mode	A	m^3/h	-	-	-	-	-	-	37000	37000	36500	36500	58000	48000
	E	m^3/h	20000	20000	20000	26000	26000	26000	37000	37000	36500	36500	58000	48000

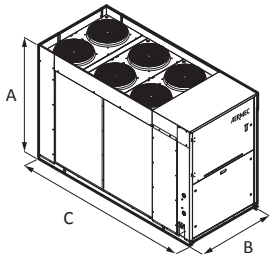
SOUND DATA

Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Sound data calculated in cooling mode (1)														
Sound power level	A	dB(A)	-	-	-	-	-	-	82,0	82,0	82,0	83,0	85,0	85,0
	E	dB(A)	74,0	74,0	74,0	75,0	75,0	76,0	74,0	74,0	74,0	75,0	77,0	77,0
Sound pressure level (10 m)	A	dB(A)	-	-	-	-	-	-	50,0	50,0	50,0	51,0	53,0	53,0
	E	dB(A)	42,0	42,0	42,0	43,0	43,0	44,0	42,0	42,0	42,0	43,0	45,0	45,0

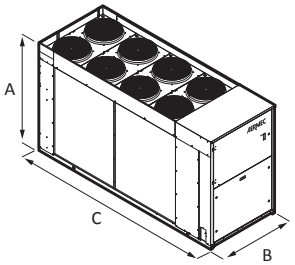
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

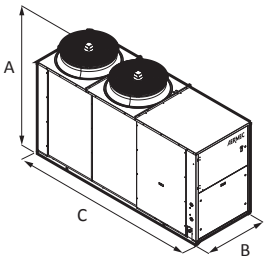
NRP 0200 - 0280



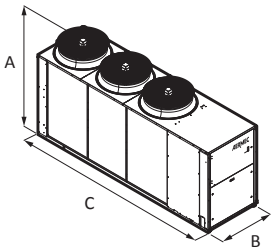
NRP 0300 - 0350



NRP 0500 - 0600



NRP 0700 - 0750



Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Dimensions and weights														
A	A	mm	-	-	-	-	-	-	1875	1875	1875	1875	1875	1975
	E	mm	1606	1606	1606	1606	1606	1606	1875	1875	1875	1875	1875	1975
B	A	mm	-	-	-	-	-	-	1100	1100	1100	1100	1100	1500
	E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1500
C	A	mm	-	-	-	-	-	-	3342	3342	3342	3342	4342	4350
	E	mm	2700	2700	2700	3200	3200	3200	3342	3342	3342	3342	4342	4350
Empty weight	A	kg	-	-	-	-	-	-	1233	1237	1359	1378	1591	1939
	E	kg	788	790	792	862	872	894	1233	1237	1359	1378	1591	1939

■ *The weights are for standard units with plate heat exchangers and no hydronic kit.*

Aermec S.p.A.
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www.aermec.com

NRP 0804-2406

Air-water multipurpose

Cooling capacity 207 ÷ 639 kW
Heating capacity 208 ÷ 662 kW

- **Units designed for 2 or 4-pipe systems**
- **High efficiency also at partial loads**
- **Simultaneous and independent production of hot and chilled water**
- **Also available with Shell and tube heat exchanger**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Multipurpose external units designed for 2 or 4-pipe systems. With just one unit simultaneous and independent requests for hot and chilled water can be accommodated all year round.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 50 °C in summer. Hot water production up to 55 °C (for more details refer to the selection software and technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Exchangers

All the units have plate heat exchangers on service and recovery as standard but, upon request, they can be supplied with a shell & tube heat exchanger as well.
If the customer chooses a unit with tube core exchangers, it is not possible to add a hydronic kit.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Option integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

The flow switch is available as an accessory for both the system side and the recovery side, and is compulsory; if it is not installed, the warranty will be considered invalid.

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

BRC1: Condensate drip tray. Consider 1 for each V-block.

ACCESSORIES COMPATIBILITY

Model	Ver	0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•	•
FL	A,E	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•	•	•	•	•	•

			0804	0904	1004	1104	1204	1414
	IDR IMP	IDR REC						
A	00	00	AVX882	AVX887	AVX887	AVX887	AVX887	AVX871
	PA-DJ	00	AVX886	AVX887	AVX887	AVX887	AVX887	AVX872
	00	RA-SJ	AVX886	AVX887	AVX887	AVX887	AVX883	AVX873
	PA-DJ	RA-SJ	AVX870	AVX883	AVX883	AVX883	AVX883	AVX874
E	00	00	AVX886	AVX871	AVX871	AVX871	AVX871	AVX875
	PA-DJ	00	AVX886	AVX872	AVX872	AVX872	AVX872	AVX875
	00	RA-SJ	AVX870	AVX873	AVX873	AVX873	AVX873	AVX876
	PA-DJ	RA-SJ	AVX870	AVX874	AVX874	AVX874	AVX874	AVX876

			1604	1805	2006	2206	2406
	IDR IMP	IDR REC					
A	00	00	AVX871	AVX875	AVX875	AVX877	AVX877
	PA-DJ	00	AVX872	AVX875	AVX884	AVX877	AVX885
	00	RA-SJ	AVX873	AVX876	AVX876	AVX885	AVX885
	PA-DJ	RA-SJ	AVX874	AVX876	AVX884	AVX885	AVX885
E	00	00	AVX877	AVX878	AVX878	AVX866	AVX866
	PA-DJ	00	AVX877	AVX878	AVX865	AVX866	AVX866
	00	RA-SJ	AVX877	AVX865	AVX865	AVX867	AVX867
	PA-DJ	RA-SJ	AVX877	AVX879	AVX865	AVX867	AVX867

Device for peak current reduction

Ver	0804	0904	1004	1104	1204	1414
A, E	DRENRP0804	DRENRP0904	DRENRP1004	DRENRP1104	DRENRP1204 (1)	DRENRP1404 (2)

(1) Only for power supply 400V 3N ~ 50Hz e 400V 3 ~ 50Hz.
(2) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1604	1805	2006	2206	2406
A, E	DRENRP1604 (1)	DRENRP1805	DRENRP2006	DRENRP2206	DRENRP2406

(1) Only for power supply 400V 3N ~ 50Hz e 400V 3 ~ 50Hz.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0804	0904	1004	1104	1204	1414
A	RIFNRP0804A	RIFNRP0904A	RIFNRP1004A	RIFNRP1104A	RIFNRP1204A	RIFNRP1404
E	RIFNRP0804E	RIFNRP0904E	RIFNRP1004E	RIFNRP1104E	RIFNRP1204E	RIFNRP1404

A grey background indicates the accessory must be assembled in the factory

Ver	1604	1805	2006	2206	2406
A, E	RIFNRP1604	RIFNRP1805	RIFNRP2006	RIFNRP2206	RIFNRP2406

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0804	0904	1004	1104	1204	1414
A	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP5VN

A grey background indicates the accessory must be assembled in the factory

Ver	1604	1805	2006	2206	2406
A	GP4VN	GP5VN	GP5G	GP6V	GP6V
E	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

Ver	0804	0904	1004	1104	1204	1414
A, E	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

Ver	1604	1805	2006	2206	2406
A, E	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRP**
4,5,6,7		**Size** 0804, 0904, 1004, 1104, 1204, 1414, 1604, 1805, 2006, 2206, 2406
8		**Version**
	A	High efficiency (1)
	E	Silenced high efficiency
9		**System type**
	2	2-pipe system
	4	4-pipe system
10		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
11		**Fans**
	J	EC Inverter motors
	°	AC standard
12		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
13,14		**System side - pumps**
	00	Without hydronic kit
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
15,16		**Recovery side - pumps**
	00	Without hydronic kit
	RA	Pump A
	RB	Pump B
	RC	Pump C
	RD	Pump D
	RE	Pump E
	RF	Pump F
	RG	Pump G
	RH	Pump H
	RI	Pump I
	SA	Pump A + stand-by pump
	SB	Pump B + stand-by pump
	SC	Pump C + stand-by pump
	SD	Pump D + stand-by pump
	SE	Pump E + stand-by pump
	SF	Pump F + stand-by pump
	SG	Pump G + stand-by pump
	SH	Pump H + stand-by pump
	SI	Pump I + stand-by pump

(1) Unit 804 version A cannot be configured with a twin pump on both the system side and the recovery side.

PERFORMANCE SPECIFICATIONS

NRP - 2-pipe system version A

Size		0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Cooling system side 2-pipe system (1)												
Cooling capacity	kW	206,7	230,6	259,2	299,6	332,2	386,3	426,2	490,5	544,3	598,2	638,8
Input power	kW	69,4	76,3	86,1	99,5	116,2	128,1	146,7	165,5	189,8	202,0	220,3
Cooling total input current	A	124,0	138,0	155,0	172,0	195,0	218,0	247,0	280,0	319,0	341,0	371,0
EER	W/W	2,98	3,02	3,01	3,01	2,86	3,02	2,91	2,96	2,87	2,96	2,90
Water flow rate system side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611	102896	109845
Pressure drop system side	kPa	24	33	34	42	43	36	36	49	54	64	47
Heating system side 2-pipe system (2)												
Heating capacity	kW	209,9	246,0	272,7	306,2	340,5	396,2	437,6	504,8	562,7	618,6	660,8
Input power	kW	66,8	79,6	85,5	95,7	107,8	125,7	136,8	159,6	180,8	199,7	209,7
Heating total input current	A	120,0	143,0	154,0	166,0	183,0	214,0	233,0	272,0	306,0	337,0	356,0
COP	W/W	3,14	3,09	3,19	3,20	3,16	3,15	3,20	3,16	3,11	3,10	3,15
Water flow rate system side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701	107407	114743
Pressure drop system side	kPa	25	34	39	50	41	52	35	47	51	62	47
Heating domestic hot water side 2-pipe system (3)												
Heating capacity	kW	209,9	246,0	272,7	306,2	340,6	396,2	437,6	504,9	562,7	618,7	660,8
Input power	kW	66,9	79,8	85,6	95,7	108,3	125,4	137,0	159,8	180,9	199,9	209,9
Heating total input current	A	120,0	143,0	154,0	166,0	183,0	214,0	233,0	272,0	306,0	337,0	356,0
COP	W/W	3,14	3,08	3,19	3,20	3,15	3,16	3,19	3,16	3,11	3,10	3,15
Water flow rate domestic hot water side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701	107407	114743
Pressure drop domestic hot water side	kPa	34	47	39	49	61	42	44	53	55	66	50
Simultaneous operation (heating + cooling), 2 pipes (4)												
Cooling capacity	kW	211,2	236,7	258,2	306,9	350,5	398,0	446,2	510,6	584,4	630,2	680,0
Recovered heating power	kW	270,3	304,4	331,0	392,1	448,5	510,5	570,1	653,9	749,6	810,9	871,0
Input power	kW	62,8	72,4	77,7	91,3	105,2	120,2	132,4	153,7	177,2	194,7	204,6
TER	W/W	7,67	7,48	7,58	7,66	7,60	7,56	7,68	7,58	7,53	7,40	7,58
Water flow rate system side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611	102896	109845
Pressure drop system side	kPa	24	33	34	42	43	36	36	49	54	64	47
Water flow rate domestic hot water side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701	107407	114743
Pressure drop domestic hot water side	kPa	34	47	39	49	61	42	44	53	55	66	50

(1) Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side 40 °C / 45 °C;
(4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 2-pipe system version E

Size		0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Cooling system side 2-pipe system (1)												
Cooling capacity	kW	200,7	225,7	255,3	296,9	332,7	382,2	427,0	487,6	549,9	598,5	639,4
Input power	kW	66,0	73,4	83,2	96,4	113,0	125,6	139,1	159,0	182,6	195,9	214,0
Cooling total input current	A	113,0	125,0	142,0	159,0	182,0	203,0	225,0	256,0	294,0	315,0	344,0
EER	W/W	3,04	3,07	3,07	3,08	2,94	3,04	3,07	3,07	3,01	3,05	2,99
Water flow rate system side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585	102947	109954
Pressure drop system side	kPa	25	33	34	43	44	37	38	49	54	64	48
Heating system side 2-pipe system (2)												
Heating capacity	kW	207,4	240,7	262,4	300,7	338,4	389,4	436,7	503,3	567,2	618,5	661,8
Input power	kW	63,8	74,6	80,5	92,8	104,9	121,1	134,3	155,5	181,7	199,3	209,7
Heating total input current	A	109,0	126,0	136,0	153,0	170,0	195,0	217,0	250,0	293,0	320,0	338,0
COP	W/W	3,25	3,22	3,26	3,24	3,23	3,22	3,25	3,24	3,12	3,10	3,16
Water flow rate system side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488	107379	114913
Pressure drop system side	kPa	25	33	37	48	40	50	35	46	52	62	47
Heating domestic hot water side 2-pipe system (3)												
Heating capacity	kW	207,3	240,7	262,4	300,7	338,5	389,4	436,8	503,3	567,3	618,5	661,8
Input power	kW	64,0	74,8	80,5	92,8	105,4	120,8	134,6	155,7	181,9	199,5	209,9
Heating total input current	A	109,0	126,0	136,0	153,0	170,0	195,0	217,0	250,0	293,0	320,0	338,0
COP	W/W	3,24	3,22	3,26	3,24	3,21	3,22	3,24	3,23	3,12	3,10	3,15
Water flow rate domestic hot water side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488	107379	114913
Pressure drop domestic hot water side	kPa	34	45	38	48	60	41	44	53	55	66	50
Simultaneous operation (heating + cooling), 2 pipes (4)												
Cooling capacity	kW	211,0	236,8	258,3	306,6	350,0	397,8	445,0	509,9	583,9	630,2	679,9
Recovered heating power	kW	270,0	304,5	331,0	391,9	448,2	510,5	569,2	653,4	749,1	810,9	871,0
Input power	kW	62,8	72,3	77,6	91,4	105,3	120,3	132,7	153,9	177,3	194,7	204,7
TER	W/W	7,66	7,49	7,59	7,64	7,58	7,55	7,64	7,56	7,52	7,40	7,58
Water flow rate system side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585	102947	109954
Pressure drop system side	kPa	25	33	34	43	44	37	38	49	54	64	48
Water flow rate domestic hot water side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488	107379	114913
Pressure drop domestic hot water side	kPa	34	45	38	48	60	41	44	53	55	66	50

(1) Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side 40 °C / 45 °C;
(4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 4-pipe system version A

Size		0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Cooling system side 4-pipe system (1)												
Cooling capacity	kW	206,7	230,6	259,2	299,6	332,2	386,3	426,2	490,5	544,3	598,2	638,8
Input power	kW	69,4	76,3	86,1	99,5	116,2	128,1	146,7	165,5	189,8	202,0	220,3
Cooling total input current	A	124,0	138,0	155,0	172,0	195,0	218,0	247,0	280,0	319,0	341,0	371,0
EER	W/W	2,98	3,02	3,01	3,01	2,86	3,02	2,91	2,96	2,87	2,96	2,90
Water flow rate system side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611	102896	109845
Pressure drop system side	kPa	24	33	34	42	43	36	36	49	54	64	47
Heating system side 4-pipe system (2)												
Heating capacity	kW	209,9	246,0	272,7	306,2	340,6	396,2	437,6	504,9	562,7	618,7	660,8
Input power	kW	66,9	79,8	85,6	95,7	108,3	125,4	137,0	159,8	180,9	199,9	209,9
Heating total input current	A	120,0	143,0	154,0	166,0	183,0	214,0	233,0	272,0	306,0	337,0	356,0
COP	W/W	3,14	3,08	3,19	3,20	3,15	3,16	3,19	3,16	3,11	3,10	3,15
Water flow rate system side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701	107407	114743
Pressure drop system side	kPa	34	47	39	49	61	42	44	53	55	66	50
Simultaneous operation (heating + cooling), 4 pipes (3)												
Cooling capacity	kW	211,2	236,7	258,2	306,9	350,5	398,0	446,2	510,6	584,4	630,2	680,0
Recovered heating power	kW	270,3	304,4	331,0	392,1	448,5	510,5	570,1	653,9	749,6	810,9	871,0
Input power	kW	62,8	72,4	77,7	91,3	105,2	120,2	132,4	153,7	177,2	194,7	204,6
TER	W/W	7,67	7,48	7,58	7,66	7,60	7,56	7,68	7,58	7,53	7,40	7,58
Water flow rate cold side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611	102896	109845
Pressure drop cold side	kPa	24	33	34	42	43	36	36	49	54	64	47
Water flow rate hot side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701	107407	114743
Pressure drop hot side	kPa	34	47	39	49	61	42	44	53	55	66	50

(1) Data 14511:2022; System side water heat exchanger 12 °C / 7 °C; External air 35 °C
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 4-pipe system version E

Size		0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Cooling system side 4-pipe system (1)												
Cooling capacity	kW	200,7	225,7	255,3	296,9	332,7	382,2	427,0	487,6	549,9	598,5	639,4
Input power	kW	66,0	73,4	83,2	96,4	113,0	125,6	139,1	159,0	182,6	195,9	214,0
Cooling total input current	A	113,0	125,0	142,0	159,0	182,0	203,0	225,0	256,0	294,0	315,0	344,0
EER	W/W	3,04	3,07	3,07	3,08	2,94	3,04	3,07	3,07	3,01	3,05	2,99
Water flow rate system side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585	102947	109954
Pressure drop system side	kPa	25	33	34	43	44	37	38	49	54	64	48
Heating system side 4-pipe system (2)												
Heating capacity	kW	207,3	240,7	262,4	300,7	338,5	389,4	436,8	503,3	567,3	618,5	661,8
Input power	kW	64,0	74,8	80,5	92,8	105,4	120,8	134,6	155,7	181,9	199,5	209,9
Heating total input current	A	109,0	126,0	136,0	153,0	170,0	195,0	217,0	250,0	293,0	320,0	338,0
COP	W/W	3,24	3,22	3,26	3,24	3,21	3,22	3,24	3,23	3,12	3,10	3,15
Water flow rate system side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488	107379	114913
Pressure drop system side	kPa	34	45	38	48	60	41	44	53	55	66	50
Simultaneous operation (heating + cooling), 4 pipes (3)												
Cooling capacity	kW	211,0	236,8	258,3	306,6	350,0	397,8	445,0	509,9	583,9	630,2	679,9
Recovered heating power	kW	270,0	304,5	331,0	391,9	448,2	510,5	569,2	653,4	749,1	810,9	871,0
Input power	kW	62,8	72,3	77,6	91,4	105,3	120,3	132,7	153,9	177,3	194,7	204,7
TER	W/W	7,66	7,49	7,59	7,64	7,58	7,55	7,64	7,56	7,52	7,40	7,58
Water flow rate cold side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585	102947	109954
Pressure drop cold side	kPa	25	33	34	43	44	37	38	49	54	64	48
Water flow rate hot side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488	107379	114913
Pressure drop hot side	kPa	34	45	38	48	60	41	44	53	55	66	50

(1) Data 14511:2022; System side water heat exchanger 12 °C / 7 °C; External air 35 °C
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

ENERGY DATA

Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Fans: J													
Cooling capacity with low leaving water temp (UE n° 2016/2281)													
SEER	A	W/W	4,25	4,36	4,32	4,21	4,35	4,47	4,55	4,56	4,58	4,58	4,59
	E	W/W	4,56	4,64	4,55	4,40	4,45	4,59	4,58	4,62	4,61	4,62	4,62
ηsc	A	%	167,20	171,40	169,70	165,20	171,10	175,80	179,00	179,50	180,10	180,20	180,40
	E	%	179,50	182,80	178,80	173,10	174,90	180,60	180,30	181,80	181,50	181,90	181,70
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)													
SCOP	A	W/W	3,53	3,27	3,44	3,49	3,60	3,53	3,66	-	-	-	-
	E	W/W	3,71	3,59	3,69	3,70	3,82	3,70	3,75	-	-	-	-
ηsh	A	%	138,30	127,70	134,50	136,70	140,90	138,40	143,60	-	-	-	-
	E	%	145,50	140,60	144,70	144,90	149,70	145,20	147,20	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)

Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Fans: °													
Cooling capacity with low leaving water temp (UE n° 2016/2281)													
SEER	A	W/W	3,94	4,04	4,00	3,89	4,03	4,14	4,21	4,23	4,24	4,24	4,25
	E	W/W	4,22	4,30	4,21	4,08	4,12	4,25	4,24	4,28	4,27	4,28	4,28
ηsc	A	%	154,60	158,50	156,90	152,80	158,20	162,50	165,50	166,00	166,60	166,60	166,80
	E	%	166,00	169,00	165,40	160,10	161,70	167,00	166,80	168,20	167,80	168,20	168,00
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)													
SCOP	A	W/W	3,53	3,27	3,44	3,49	3,60	3,53	3,66	-	-	-	-
	E	W/W	3,71	3,59	3,69	3,70	3,82	3,70	3,75	-	-	-	-
ηsh	A	%	138,30	127,70	134,50	136,70	140,90	138,40	143,60	-	-	-	-
	E	%	145,50	140,60	144,70	144,90	149,70	145,20	147,20	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

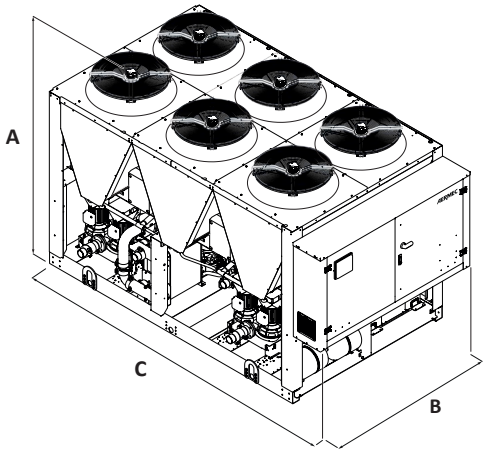
Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	A	A	163,0	188,0	205,0	233,0	261,0	303,0	337,0	386,0	427,0	468,0	502,0
	E	A	170,0	196,0	213,0	241,0	269,0	311,0	352,0	401,0	442,0	484,0	518,0
Peak current (LRA)	A	A	368,0	431,0	449,0	485,0	513,0	636,0	670,0	638,0	679,0	801,0	835,0
	E	A	376,0	439,0	456,0	493,0	521,0	644,0	685,0	653,0	694,0	817,0	851,0

GENERAL TECHNICAL DATA

Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Compressor													
Type	A,E	type						Scroll					
Number	A,E	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type						R410A					
Potential global heating	A,E	GWP						2088kgCO_2eq					
Refrigerant charge (1)	A	kg	41,1	61,0	61,4	62,7	62,8	83,6	83,6	106,1	107,6	129,2	129,2
	E	kg	61,0	80,8	81,2	82,9	83,0	103,9	124,1	147,2	149,3	170,9	170,9
2-pipe system - System side heat exchanger (hot/cold)													
Type	A,E	type						Brazed plate					
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E	Type						Grooved joints					
Size (in)	A,E	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″
Size (out)	A,E	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″
2-pipe system - Recovery side heat exchanger (domestic hot water)													
Type	A,E	type						Brazed plate					
Number	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Manifold connection (in/out)	A,E	Type						G.s.					
Manifold diameter (in)	A,E	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″
Manifold diameter (out)	A,E	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″
4-pipe system - System side heat exchanger (cold side)													
Type	A,E	type						Brazed plate					
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E	Type						Grooved joints					
Size (in)	A,E	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″
Size (out)	A,E	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″
4-pipe system - Recovery side heat exchanger (hot side)													
Type	A,E	type						Brazed plate					
Number	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Manifold connection (in/out)	A,E	Type						Grooved joints					
Manifold diameter (in)	A,E	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″
Manifold diameter (out)	A,E	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″
Fan													
Type	A,E	type						Axial					
Fan motor	A,E	type						On-Off					
Number	A	no.	4	6	6	6	6	8	8	10	10	12	12
	E	no.	6	8	8	8	8	10	12	14	14	16	16
Air flow rate	A	m^3/h	80000	120000	120000	120000	120000	160000	160000	200000	200000	240000	240000
	E	m^3/h	80000	110000	110000	110000	110000	130000	160000	180000	180000	210000	210000
Sound data calculated in cooling mode (2)													
Sound power level	A	dB(A)	89,5	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2	95,1	95,1
	E	dB(A)	84,6	86,1	86,1	86,1	86,1	87,2	88,2	89,4	89,9	91,1	91,6

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Dimensions and weights													
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	3970	3970	3970	3970	4760	4760	5950	6350	7140	7140
	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520
Size			**0804**	**0904**	**1004**	**1104**	**1204**	**1414**	**1604**	**1805**	**2006**	**2206**	**2406**
System type: 2													
Weights													
Empty weight	A	kg	2642	3152	3262	3452	3722	4409	4569	5419	5829	6479	6756
	E	kg	3072	3712	3822	4012	4282	4879	5449	6359	6789	7469	7736
Size			**0804**	**0904**	**1004**	**1104**	**1204**	**1414**	**1604**	**1805**	**2006**	**2206**	**2406**
System type: 4													
Weights													
Empty weight	A	kg	2632	3132	3252	3442	3692	4379	4539	5389	5799	6449	6716
	E	kg	3052	3692	3812	4002	4252	4849	5419	6319	6759	7429	7706

The weights are for standard units with plate heat exchangers and no hydronic kit.

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

NPG 0800-3600

Air-water multipurpose

Cooling capacity 206,8 ÷ 937,3 kW
Heating capacity 211,7 ÷ 977,6 kW

- **Units designed for 2 or 4-pipe systems**
- **High efficiency also at partial loads**
- **Simultaneous and independent production of hot and chilled water**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Multipurpose external units designed for 2 or 4-pipe systems. With just one unit simultaneous and independent requests for hot and chilled water can be accommodated all year round.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 49,0 °C in summer. Hot water production up to 60,0 °C (for more information refer to the the selection program Magellano or dedicated documentations).

Refrigerant HFC R32

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).
The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *Refrigerant gas detector is supplied as per standard.*

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

■ *Sizes 2600 to 3600 are available with a standard J fan.*

Option integrated hydronic kit

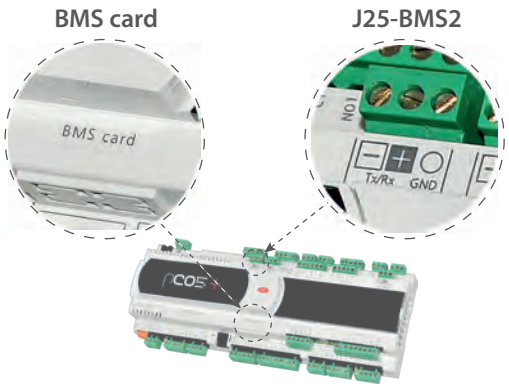
To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

■ *The flow switch is available as an accessory for both the system side and the recovery side, and is compulsory; if it is not installed, the warranty will be considered invalid.*

CONTROL PCO_5

The units from size 0800 to 2400 have 1 control card, while the units from size 2600 to 3600 have 2 control cards.
Microprocessor adjustment, with 7", touch screen keyboard which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and the ad adjustment includes complete management of the alarms and their log.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **"EASYLOG" data logger as per standard:** allows all operating data read by the pCO5 to be stored on an SD card.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.
— Possibility to control two units in a Master-Slave configuration (from size 0800 to 2400)



In the 'BMS card' port, the compatible accessories are:

— AER485P1
— AERBACP
— MULTICHILLER-EVO + AER485P1

In the 'J25-BMS2' port, the compatible accessories are:

— AERNET

Note:

— "BMS card" and "J25-BMS2" are two ports on the unit's control board. Only one accessory can be connected to each port.
— An 'EASYLOG' diagnostic device may be present in port 'J25-BMS2', possibly disconnect it to connect the accessory AERNET.
— **For other requirements, please contact the company.**

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
BRC1: Condensate drip tray. Consider 1 for each V-block.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•	•						
AER485P1 x no. 2	A												•	•	•	•	•	•
	E												•	•	•	•		
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•	•						
AERBACP x no. 2	A												•	•	•	•	•	•
	E												•	•	•	•		
AERNET	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
FL	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
MULTICHILLER-EVO	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		

Antivibration

Version	System side - pumps	Recovery side - pumps	0800	0900	1000	1100	1200	1400
A	00	00	AVX1210	AVX1212	AVX1212	AVX1212	AVX1214	AVX1214
A	00	MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1211	AVX1213	AVX1213	AVX1213	AVX1215	AVX1215
A	DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ	00, MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1211	AVX1213	AVX1213	AVX1213	AVX1215	AVX1215
E	00	00	AVX1212	AVX1214	AVX1214	AVX1214	AVX1217	AVX1217
E	00	MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1213	AVX1215	AVX1215	AVX1215	AVX1219	AVX1219
E	DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ	00, MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1213	AVX1215	AVX1215	AVX1215	AVX1219	AVX1219

Version	System side - pumps	Recovery side - pumps	1600	1800	2000	2200	2400	2600
A	00	00	AVX1216	AVX1217	AVX1217	AVX1219	AVX1219	AVX1270
A	00	MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1215	AVX1219	AVX1219	AVX1219	AVX1219	AVX1271
A	DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ	00, MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1215	AVX1219	AVX1219	AVX1219	AVX1219	AVX1271
E	00	00	AVX1219	AVX1220	AVX1220	AVX1222	AVX1222	AVX1274
E	00	MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1219	AVX1221	AVX1221	AVX1222	AVX1222	AVX1275
E	DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ	00, MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1219	AVX1221	AVX1221	AVX1222	AVX1222	AVX1275

Version	System side - pumps	Recovery side - pumps	2800	3000	3200	3400	3600
A	00	00	AVX1272	AVX1272	AVX1272	AVX1274	AVX1274
A	00	MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1273	AVX1273	AVX1273	AVX1275	AVX1275
A	DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ	00, MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1273	AVX1273	AVX1273	AVX1275	AVX1275
E	00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ	00, MA, MB, MC, MD, ME, MF, MG, MH, MI, NA, NB, NC, ND, NE, NF, NG, NH, NI, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ	AVX1276	AVX1276	AVX1276	-	-

- not available

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
A, E	DRENPG0800	DRENPG0900	DRENPG1000	DRENPG1100	DRENPG1200	DRENPG1400	DRENPG1600	DRENPG1800	DRENPG2000

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
A	DRENPG2200	DRENPG2400	DRENPG2600	DRENPG2800	DRENPG3000	DRENPG3200	DRENPG3400	DRENPG3600
E	DRENPG2200	DRENPG2400	DRENPG2600	DRENPG2800	DRENPG3000	DRENPG3200	-	-

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
A, E	RIFNPG0800	RIFNPG0900	RIFNPG1000	RIFNPG1100	RIFNPG1200	RIFNPG1400	RIFNPG1600	RIFNPG1800	RIFNPG2000

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
A	RIFNPG2200	RIFNPG2400	RIFNPG2600	RIFNPG2800	RIFNPG3000	RIFNPG3200	RIFNPG3400	RIFNPG3600
E	RIFNPG2200	RIFNPG2400	RIFNPG2600	RIFNPG2800	RIFNPG3000	RIFNPG3200	-	-

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
A	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP4GM	GP5G	GP5G
E	GP3G	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
A	GP6G	GP6G	GP16G	GP17G	GP17G	GP17G	GP18G	GP18G
E	GP8G	GP8G	GP18G	GP19G	GP19G	GP19G	-	-

A grey background indicates the accessory must be assembled in the factory

GP2VN becomes GP2VNA if configured with a hydronic kit for size 0800 A

Condensate drip.

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
A	BRC1 x 2 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 5 (1)	BRC1 x 5 (1)
E	BRC1 x 3 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 5 (1)	BRC1 x 5 (1)	BRC1 x 6 (1)	BRC1 x 7 (1)	BRC1 x 7 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
A	BRC1 x 6 (1)	BRC1 x 6 (1)	BRC1 x 7 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 9 (1)	BRC1 x 9 (1)
E	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 9 (1)	BRC1 x 10 (1)	BRC1 x 10 (1)	BRC1 x 10 (1)	-	-

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NPG**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800, 3000, 3200, 3400, 3600
8		**Version**
	A	High efficiency
	E	Silenced high efficiency (1)
9		**System type**
	2	2-pipe system
	4	4-pipe system
10		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
11		**Fans**
	J	Inverter
	°	Standard with DCPX (2)
12		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
13,14		**System side - pumps**
	00	Without hydronic kit
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump (2)
	DB	Pump B + stand-by pump (2)
	DC	Pump C + stand-by pump (2)
	DD	Pump D + stand-by pump (2)
	DE	Pump E + stand-by pump (2)
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (3)
		Kit with n° 1 inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed (2)
	IB	Pump B equipped with inverter device to work at fixed speed (2)
	IC	Pump C equipped with inverter device to work at fixed speedr (2)
	ID	Pump D equipped with inverter device to work at fixed speed (2)
	IE	Pump E equipped with inverter device to work at fixed speed (2)
	IF	Pump F equipped with inverter device to work at fixed speed (4)
	IG	Pump G equipped with inverter device to work at fixed speed (4)
	IH	Pump H equipped with inverter device to work at fixed speed (4)
	II	Pump I equipped with inverter device to work at fixed speed (4)
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (2)
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed (2)
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed (2)
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed (2)
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed (2)
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed (5)
		Kit with n° 1 pump
	PA	Pump A (2)
	PB	Pump B (2)
	PC	Pump C (2)
	PD	Pump D (2)
	PE	Pump E (2)
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (3)
15,16		**Recovery side - pumps**
	00	Without hydronic kit
		Kit with n° 1 inverter pump to fixed speed
	MA	Pump A equipped with inverter device to work at fixed speed (2)
	MB	Pump B equipped with inverter device to work at fixed speed (2)
	MC	Pump C equipped with inverter device to work at fixed speedr (2)
	MD	Pump D equipped with inverter device to work at fixed speed (2)
	ME	Pump E equipped with inverter device to work at fixed speed (2)
	MF	Pump F equipped with inverter device to work at fixed speed (4)
	MG	Pump G equipped with inverter device to work at fixed speed (4)
	MH	Pump H equipped with inverter device to work at fixed speed (4)
	MI	Pump I equipped with inverter device to work at fixed speed (4)
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	NA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (2)
	NB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed (2)
	NC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed (2)
	ND	Pump D+stand-by pump, both equipped with inverter to work at fixed speed (2)
	NE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed (2)
	NF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5)
	NG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5)
	NH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed (5)
	NI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed (5)
		Kit with n° 1 pump
	RA	Pump A (2)
	RB	Pump B (2)
	RC	Pump C (2)
	RD	Pump D (2)
	RE	Pump E (2)
	RF	Pump F
	RG	Pump G
	RH	Pump H
	RI	Pump I
	RJ	Pump J (3)
		Pump n° 1 pump + stand-by pump
	SA	Pump A + stand-by pump (2)
	SB	Pump B + stand-by pump (2)
	SC	Pump C + stand-by pump (2)
	SD	Pump D + stand-by pump (2)
	SE	Pump E + stand-by pump (2)

Field	Description
SF	Pump F + stand-by pump
SG	Pump G + stand-by pump
SH	Pump H + stand-by pump
SI	Pump I + stand-by pump
SJ	Pump J + stand-by pump (3)

(1) Not available for sizes 3400-3600.
(2) Not available for the sizes 2600-3600.
(3) Contact the factory
(4) Hydronic kit not available with sizes 0800-1600 version A, 0800-1100 version E.
(5) Hydronic kit not compatible with machines 0800-2000 version A, 0800-1400 version E. Not compatible with sizes 2600-3600.

PERFORMANCE SPECIFICATIONS

NPG - 2 TUBI - version A

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																		
Cooling system side 2-pipe system (1)																		
Cooling capacity	kW	206,5	238,8	262,1	298,1	349,6	385,1	424,0	492,6	549,2	601,9	634,7	692,2	759,1	828,4	864,7	900,0	936,4
Input power	kW	72,5	78,2	87,8	105,5	116,8	134,0	151,5	172,2	199,9	209,9	227,0	248,1	269,1	297,2	315,4	326,0	342,9
Cooling total input current	A	128,2	142,2	158,3	183,6	202,9	228,0	254,2	291,8	337,3	355,1	381,1	409,6	446,6	492,8	513,9	527,0	553,0
EER	W/W	2,85	3,06	2,98	2,83	2,99	2,87	2,80	2,86	2,75	2,87	2,80	2,79	2,82	2,79	2,74	2,76	2,73
Water flow rate system side	l/h	35537	41084	45096	51279	60134	66248	72915	84728	94449	103520	109133	119060	130559	142477	148710	154781	161041
Pressure drop system side	kPa	30	41	37	43	47	48	38	47	51	50	36	81	92	97	105	116	102
Heating system side 2-pipe system (2)																		
Heating capacity	kW	212,0	246,3	270,7	308,5	363,1	401,6	436,7	507,2	565,1	617,3	654,9	714,1	787,0	840,5	877,7	928,9	965,9
Input power	kW	67,3	79,4	86,7	99,8	116,0	129,1	138,3	161,0	179,3	195,0	208,9	230,5	253,2	270,9	284,3	301,4	315,6
Heating total input current	A	121,0	142,8	155,8	175,1	201,1	221,1	235,4	275,9	307,8	334,6	355,0	379,9	419,2	450,0	468,6	494,3	515,3
COP	W/W	3,15	3,10	3,12	3,09	3,13	3,11	3,16	3,15	3,15	3,17	3,13	3,10	3,11	3,10	3,09	3,08	3,06
Water flow rate system side	l/h	36787	42745	46996	53553	63027	69719	75833	88058	98099	107197	113726	124010	136667	145942	152400	161305	167715
Pressure drop system side	kPa	26	35	35	45	56	39	35	47	61	37	42	46	55	63	68	77	83
Heating domestic hot water side 2-pipe system (3)																		
Heating capacity	kW	212,6	247,4	272,1	309,6	361,5	399,4	433,8	508,6	565,9	607,8	644,6	719,4	796,4	850,0	888,2	941,1	978,5
Input power	kW	64,9	76,7	83,1	95,4	110,8	123,0	132,9	156,0	175,8	186,5	198,8	223,5	246,9	265,2	278,3	295,8	309,0
Heating total input current	A	118,5	140,0	152,0	169,7	194,2	213,0	227,9	269,1	303,2	323,1	340,9	370,5	411,8	443,0	461,1	487,7	506,7
COP	W/W	3,28	3,22	3,28	3,25	3,26	3,25	3,26	3,26	3,22	3,26	3,24	3,22	3,23	3,21	3,19	3,18	3,17
Water flow rate domestic hot water side	l/h	36883	42934	47229	53737	62755	69347	75327	88302	98238	105551	111934	124931	138301	147604	154236	163411	169910
Pressure drop domestic hot water side	kPa	26	35	35	45	55	38	35	47	62	36	40	47	56	64	70	79	85
Simultaneous operation (heating + cooling), 2 pipes (4)																		
Cooling capacity	kW	203,7	225,7	253,7	292,1	337,7	374,2	424,7	483,4	547,9	592,0	631,0	693,6	751,5	821,0	858,1	897,7	935,3
Recovered heating power	kW	261,4	290,8	325,1	376,1	432,7	481,8	541,8	619,8	703,9	754,4	805,3	889,8	967,1	1054,8	1104,6	1157,1	1207,4
Input power	kW	61,2	69,7	76,2	90,0	102,1	115,2	125,0	146,2	167,7	173,9	186,2	211,5	233,3	253,6	268,0	282,9	296,2
Water flow rate system side	l/h	35537	41084	45096	51279	60134	66248	72915	84728	94449	103520	109133	119060	130559	142477	148710	154781	161041
Pressure drop system side	kPa	30	41	37	43	47	48	38	47	51	50	36	81	92	97	105	116	102
Water flow rate domestic hot water side	l/h	36883	42934	47229	53737	62755	69347	75327	88302	98238	105551	111934	124931	138301	147604	154236	163411	169910
Pressure drop domestic hot water side	kPa	26	35	35	45	55	38	35	47	62	36	40	47	56	64	70	79	85
TER	W/W	7,60	7,41	7,59	7,42	7,55	7,43	7,73	7,55	7,46	7,74	7,71	7,49	7,37	7,40	7,32	7,26	7,23

(1) Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side 40 °C / 45 °C;
(4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

With the fan option ° the data are equivalent and available from size 0800 to 2400.

NPG - 4 TUBI - version A

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																		
Cooling system side 4-pipe system (1)																		
Cooling capacity	kW	206,5	238,8	262,1	298,1	349,6	385,1	424,0	492,6	549,2	601,9	634,7	692,2	759,1	828,4	864,7	900,0	936,4
Input power	kW	72,5	78,2	87,8	105,5	116,8	134,0	151,5	172,2	199,9	209,9	227,0	248,1	269,1	297,2	315,4	326,0	342,9
Cooling total input current	A	128,2	142,2	158,3	183,6	202,9	228,0	254,2	291,8	337,3	355,1	381,1	409,6	446,6	492,8	513,9	527,0	553,0
EER	W/W	2,85	3,06	2,98	2,83	2,99	2,87	2,80	2,86	2,75	2,87	2,80	2,79	2,82	2,79	2,74	2,76	2,73
Water flow rate system side	l/h	35537	41084	45096	51279	60134	66248	72915	84728	94449	103520	109133	119060	130559	142477	148710	154781	161041
Pressure drop system side	kPa	30	41	37	43	47	48	38	47	51	50	36	81	92	97	105	116	102
Heating system side 4-pipe system (2)																		
Heating capacity	kW	212,6	247,4	272,1	309,6	361,5	399,4	433,8	508,6	565,9	607,8	644,6	719,4	796,4	850,0	888,2	941,1	978,5
Input power	kW	64,9	76,7	83,1	95,4	110,8	123,0	132,9	156,0	175,8	186,5	198,8	223,5	246,9	265,2	278,3	295,8	309,0
Heating total input current	A	118,5	140,0	152,0	169,7	194,2	213,0	227,9	269,1	303,2	323,1	340,9	370,5	411,8	443,0	461,1	487,7	506,7
COP	W/W	3,28	3,22	3,28	3,25	3,26	3,25	3,26	3,26	3,22	3,26	3,24	3,22	3,23	3,21	3,19	3,18	3,17
Water flow rate system side	l/h	36883	42934	47229	53737	62755	69347	75327	88302	98238	105551	111934	124931	138301	147604	154236	163411	169910
Pressure drop system side	kPa	26	35	35	45	55	38	35	47	62	36	40	47	56	64	70	79	85
Simultaneous operation (heating + cooling), 4 pipes (3)																		
Cooling capacity	kW	203,7	225,7	253,7	292,1	337,7	374,2	424,7	483,4	547,9	592,0	631,0	693,6	751,5	821,0	858,1	897,7	935,3
Recovered heating power	kW	261,4	290,8	325,1	376,1	432,7	481,8	541,8	619,8	703,9	754,4	805,3	889,8	967,1	1054,8	1104,6	1157,1	1207,4
Input power	kW	61,2	69,7	76,2	90,0	102,1	115,2	125,0	146,2	167,7	173,9	186,2	211,5	233,3	253,6	268,0	282,9	296,2
TER	W/W	7,60	7,41	7,59	7,42	7,55	7,43	7,73	7,55	7,46	7,74	7,71	7,49	7,37	7,40	7,32	7,26	7,23
Water flow rate cold side	l/h	35537	41084	45096	51279	60134	66248	72915	84728	94449	103520	109133	119060	130559	142477	148710	154781	161041
Pressure drop cold side	kPa	30	41	37	43	47	48	38	47	51	50	36	81	92	97	105	116	102
Water flow rate hot side	l/h	36883	42934	47229	53737	62755	69347	75327	88302	98238	105551	111934	124931	138301	147604	154236	163411	169910
Pressure drop hot side	kPa	26	35	35	45	55	38	35	47	62	36	40	47	56	64	70	79	85

(1) Data 14511:2022; System side water heat exchanger 12 °C / 7 °C; External air 35 °C
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

With the fan option ° the data are equivalent and available from size 0800 to 2400.

NPG - 2 TUBI - version E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																		
Cooling system side 2-pipe system (1)																		
Cooling capacity	kW	213,9	243,4	269,6	308,8	360,8	398,4	444,6	512,8	573,9	620,0	657,8	715,9	784,5	846,1	890,0	-	-
Input power	kW	68,7	76,3	85,4	101,5	114,3	130,4	142,5	165,0	189,3	201,0	217,2	234,8	256,9	281,9	301,5	-	-
Cooling total input current	A	121,3	136,1	151,3	174,3	193,9	217,6	235,7	274,9	315,6	334,8	358,6	373,4	414,8	455,7	474,9	-	-
EER	W/W	3,11	3,19	3,16	3,04	3,16	3,06	3,12	3,11	3,03	3,08	3,03	3,05	3,05	3,00	2,95	-	-
Water flow rate system side	l/h	36805	41878	46384	53119	62049	68513	76468	88195	98704	106600	113102	123130	134927	145513	153075	-	-
Pressure drop system side	kPa	33	33	36	41	38	34	42	44	53	34	33	85	90	100	108	-	-
Heating system side 2-pipe system (2)																		
Heating capacity	kW	221,1	252,2	275,3	315,3	365,1	404,5	453,0	521,7	583,4	630,5	670,8	745,3	797,0	858,1	910,4	-	-
Input power	kW	68,9	79,7	87,0	99,8	112,1	124,1	140,1	160,5	179,3	196,0	207,7	234,3	247,8	266,5	289,1	-	-
Heating total input current	A	121,1	139,7	152,7	171,4	190,6	209,0	233,3	269,1	301,7	328,3	345,4	368,2	401,5	433,9	452,1	-	-
COP	W/W	3,21	3,16	3,16	3,16	3,26	3,26	3,23	3,25	3,25	3,22	3,23	3,18	3,22	3,22	3,15	-	-
Water flow rate system side	l/h	38375	43773	47791	54724	63379	70236	78653	90570	101283	109498	116479	129407	138396	148991	158070	-	-
Pressure drop system side	kPa	28	37	36	47	57	39	38	50	65	39	44	60	67	79	88	-	-
Heating domestic hot water side 2-pipe system (3)																		
Heating capacity	kW	220,1	250,9	276,7	316,4	365,5	404,7	450,0	522,2	583,4	621,2	660,2	710,9	783,6	843,4	882,8	-	-
Input power	kW	66,3	77,1	83,5	96,3	110,8	123,1	136,1	158,5	178,5	188,1	200,4	218,3	240,4	259,0	272,2	-	-
Heating total input current	A	117,9	136,5	148,4	166,9	188,7	207,4	227,5	266,1	300,3	317,3	335,1	362,1	401,1	432,5	450,6	-	-
COP	W/W	3,32	3,25	3,31	3,28	3,30	3,29	3,31	3,29	3,27	3,30	3,29	3,26	3,26	3,26	3,24	-	-
Water flow rate domestic hot water side	l/h	38186	43543	48035	54917	63434	70267	78140	90658	101283	107870	114640	123441	136056	146449	153287	-	-
Pressure drop domestic hot water side	kPa	28	36	36	47	57	39	38	50	65	37	42	54	65	76	83	-	-
Simultaneous operation (heating + cooling), 2 pipes (4)																		
Cooling capacity	kW	203,9	227,9	255,4	294,4	344,0	380,9	424,9	491,4	550,4	595,8	637,5	700,1	766,3	831,0	872,5	-	-
Recovered heating power	kW	261,2	292,9	326,5	378,1	438,7	488,2	541,4	627,4	705,8	757,3	811,0	895,4	981,2	1063,9	1118,1	-	-
Input power	kW	61,0	69,3	75,9	89,7	101,7	114,6	124,7	145,9	167,3	172,6	185,4	211,1	233,0	253,4	267,8	-	-
Water flow rate system side	l/h	36805	41878	46384	53119	62049	68513	76468	88195	98704	106600	113102	123130	134927	145513	153075	-	-
Pressure drop system side	kPa	33	33	36	41	38	34	42	44	53	34	33	85	90	100	108	-	-
Water flow rate domestic hot water side	l/h	38186	43543	48035	54917	63434	70267	78140	90658	101283	107870	114640	123441	136056	146449	153287	-	-
Pressure drop domestic hot water side	kPa	28	36	36	47	57	39	38	50	65	37	42	54	65	76	83	-	-
TER	W/W	7,63	7,51	7,66	7,49	7,70	7,59	7,75	7,67	7,51	7,84	7,81	7,56	7,50	7,48	7,43	-	-

(1) Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side 40 °C / 45 °C;
(4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

With the fan option ° the data are equivalent and available from size 0800 to 2400.

NPG - 4 TUBI - version E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																		
Cooling system side 4-pipe system (1)																		
Cooling capacity	kW	213,9	243,4	269,6	308,8	360,8	398,4	444,6	512,8	573,9	620,0	657,8	715,9	784,5	846,1	890,0	-	-
Input power	kW	68,7	76,3	85,4	101,5	114,3	130,4	142,5	165,0	189,3	201,0	217,2	234,8	256,9	281,9	301,5	-	-
Cooling total input current	A	121,3	136,1	151,3	174,3	193,9	217,6	235,7	274,9	315,6	334,8	358,6	373,4	414,8	455,7	474,9	-	-
EER	W/W	3,11	3,19	3,16	3,04	3,16	3,06	3,12	3,11	3,03	3,08	3,03	3,05	3,05	3,00	2,95	-	-
Water flow rate system side	l/h	36805	41878	46384	53119	62049	68513	76468	88195	98704	106600	113102	123130	134927	145513	153075	-	-
Pressure drop system side	kPa	33	33	36	41	38	34	42	44	53	34	33	85	90	100	108	-	-
Heating system side 4-pipe system (2)																		
Heating capacity	kW	220,1	250,9	276,7	316,4	365,5	404,7	450,0	522,2	583,4	621,2	660,2	710,9	783,6	843,4	882,8	-	-
Input power	kW	66,3	77,1	83,5	96,3	110,8	123,1	136,1	158,5	178,5	188,1	200,4	218,3	240,4	259,0	272,2	-	-
Heating total input current	A	117,9	136,5	148,4	166,9	188,7	207,4	227,5	266,1	300,3	317,3	335,1	362,1	401,1	432,5	450,6	-	-
COP	W/W	3,32	3,25	3,31	3,28	3,30	3,29	3,31	3,29	3,27	3,30	3,29	3,26	3,26	3,26	3,24	-	-
Water flow rate system side	l/h	38186	43543	48035	54917	63434	70267	78140	90658	101283	107870	114640	123441	136056	146449	153287	-	-
Pressure drop system side	kPa	28	36	36	47	57	39	38	50	65	37	42	54	65	76	83	-	-
Simultaneous operation (heating + cooling), 4 pipes (3)																		
Cooling capacity	kW	203,9	227,9	255,4	294,4	344,0	380,9	424,9	491,4	550,4	595,8	637,5	700,1	766,3	831,0	872,5	-	-
Recovered heating power	kW	261,2	292,9	326,5	378,1	438,7	488,2	541,4	627,4	705,8	757,3	811,0	895,4	981,2	1063,9	1118,1	-	-
Input power	kW	61,0	69,3	75,9	89,7	101,7	114,6	124,7	145,9	167,3	172,6	185,4	211,1	233,0	253,4	267,8	-	-
TER	W/W	7,63	7,51	7,66	7,49	7,70	7,59	7,75	7,67	7,51	7,84	7,81	7,56	7,50	7,48	7,43	-	-
Water flow rate cold side	l/h	36805	41878	46384	53119	62049	68513	76468	88195	98704	106600	113102	123130	134927	145513	153075	-	-
Pressure drop cold side	kPa	33	33	36	41	38	34	42	44	53	34	33	85	90	100	108	-	-
Water flow rate hot side	l/h	38186	43543	48035	54917	63434	70267	78140	90658	101283	107870	114640	123441	136056	146449	153287	-	-
Pressure drop hot side	kPa	28	36	36	47	57	39	38	50	65	37	42	54	65	76	83	-	-

(1) Data 14511:2022; System side water heat exchanger 12 °C / 7 °C; External air 35 °C
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

With the fan option ° the data are equivalent and available from size 0800 to 2400.

ENERGY DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																			
SEER - 12/7 (EN14825: 2018) (1)																			
SEER	A	W/W	4,20	4,40	4,29	4,19	4,41	4,29	4,43	4,49	4,47	4,56	4,56	4,56	4,59	4,56	4,57	4,57	4,56
	E	W/W	4,57	4,65	4,63	4,55	4,70	4,60	4,71	4,73	4,68	4,76	4,67	4,65	4,66	4,61	4,59	-	-
Seasonal efficiency	A	%	165,03	172,97	168,76	164,40	173,36	168,76	174,26	176,46	175,86	179,30	179,22	179,43	180,62	179,36	179,90	179,63	179,47
	E	%	179,65	183,16	182,27	179,15	185,06	181,08	185,47	186,03	184,37	187,25	183,96	183,11	183,49	181,33	180,56	-	-
SEER - 23/18 (EN14825: 2018) (2)																			
SEER	A	W/W	4,89	5,03	4,96	4,79	4,97	4,86	5,01	5,07	5,08	5,13	5,19	4,84	5,04	5,00	4,98	4,97	5,02
	E	W/W	5,28	5,36	5,28	5,20	5,32	5,26	5,30	5,33	5,23	5,42	5,34	5,06	5,13	5,02	4,96	-	-
Seasonal efficiency	A	%	192,45	198,11	195,26	188,53	195,85	191,60	197,44	199,91	200,14	202,39	204,66	190,78	198,71	196,88	196,19	195,61	197,80
	E	%	208,28	211,38	208,24	205,01	209,61	207,42	208,88	210,16	203,23	213,78	210,79	199,57	202,26	197,68	195,39	-	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)																			
Pdesignh	A	kW	186,20	213,96	236,22	271,27	315,32	351,43	382,83	446,83	497,81	534,41	569,02	608,69	665,85	715,17	748,86	791,03	824,59
	E	kW	190,10	215,96	238,70	275,27	316,62	353,47	392,97	454,77	508,34	542,88	578,33	613,29	668,22	719,87	752,39	-	-
SCOP	A	W/W	3,87	3,63	3,78	3,76	3,69	3,83	3,95	3,93	3,94	4,00	4,04	4,00	4,01	3,94	3,90	3,82	3,81
	E	W/W	3,77	3,62	3,70	3,79	3,66	3,77	3,88	3,85	3,86	3,97	3,99	3,99	3,95	3,88	3,85	-	-
ηsh	A	%	151,87	142,21	148,35	147,20	144,52	150,05	154,81	154,14	154,62	157,05	158,56	157,04	157,40	154,48	153,03	149,67	149,54
	E	%	147,93	141,65	145,12	148,62	143,52	147,88	152,37	150,92	151,58	155,88	156,50	156,42	154,93	152,14	150,89	-	-
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (4)																			
Pdesignh	A	kW	185,78	212,98	235,97	271,79	313,94	350,10	381,59	387,17	392,43	532,03	567,53	602,48	658,22	708,61	742,95	782,40	816,17
	E	kW	189,21	214,50	237,49	274,43	314,36	350,59	388,48	390,59	396,25	537,99	573,77	604,91	658,86	710,94	744,60	-	-
SCOP	A	W/W	3,16	3,03	3,14	3,10	3,05	3,08	3,13	3,22	3,13	3,23	3,25	3,23	3,37	3,37	3,34	3,32	3,34
	E	W/W	3,14	3,03	3,08	3,14	3,07	3,07	3,12	3,18	3,07	3,24	3,24	3,26	3,34	3,35	3,33	-	-
ηsh	A	%	123,43	118,15	122,48	120,99	119,19	120,37	122,24	125,88	122,33	126,23	126,91	126,16	131,68	131,69	130,60	129,69	130,56
	E	%	122,51	118,32	120,32	122,74	119,65	119,67	121,63	124,10	119,81	126,61	126,64	127,26	130,52	130,96	130,03	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: °																			
SEER - 12/7 (EN14825: 2018) (1)																			
SEER	A	W/W	3,91	4,19	4,10	4,02	4,24	4,11	4,20	4,23	4,17	- (2)	- (2)	-	-	-	-	-	-
	E	W/W	4,28	4,43	4,45	4,37	4,51	4,39	4,53	4,50	4,38	4,56	- (2)	-	-	-	-	-	-
Seasonal efficiency	A	%	153,42	164,55	160,94	157,62	166,50	161,53	165,09	166,23	163,91	- (2)	- (2)	-	-	-	-	-	-
	E	%	168,35	174,04	174,86	171,66	177,32	172,45	178,03	176,91	172,17	179,53	- (2)	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (3)																			
SEER	A	W/W	4,55	4,79	4,75	4,59	4,77	4,67	4,76	4,80	4,74	4,79	4,83	-	-	-	-	-	-
	E	W/W	4,97	5,10	5,07	4,98	5,08	5,02	5,10	5,09	4,93	5,22	5,12	-	-	-	-	-	-
Seasonal efficiency	A	%	179,15	188,60	186,82	180,78	187,65	183,75	187,30	188,88	186,64	188,56	190,36	-	-	-	-	-	-
	E	%	195,67	201,20	199,97	196,33	200,32	197,97	200,81	200,73	194,03	205,60	201,99	-	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (4)																			
Pdesignh	A	kW	186,20	213,96	236,22	271,27	315,32	351,43	382,83	387,17	392,43	534,41	569,02	-	-	-	-	-	-
	E	kW	190,10	215,96	238,70	275,27	316,62	353,47	392,97	390,59	396,25	542,88	578,33	-	-	-	-	-	-
SCOP	A	W/W	3,75	3,52	3,68	3,66	3,60	3,75	3,86	3,82	3,87	3,90	3,94	-	-	-	-	-	-
	E	W/W	3,65	3,51	3,61	3,70	3,57	3,64	3,79	3,71	3,77	3,85	3,88	-	-	-	-	-	-
ηsh	A	%	147,08	137,96	144,14	143,49	141,02	146,85	151,49	149,87	151,80	153,02	154,74	-	-	-	-	-	-
	E	%	143,08	137,31	141,51	144,82	139,84	142,66	148,63	145,46	147,80	151,00	152,20	-	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (5)																			
Pdesignh	A	kW	185,78	212,98	235,97	271,79	313,94	350,10	381,59	387,17	392,43	532,03	567,53	-	-	-	-	-	-
	E	kW	189,21	214,50	237,49	274,43	314,36	350,59	388,48	390,59	396,25	537,99	573,77	-	-	-	-	-	-
SCOP	A	W/W	3,06	2,94	3,05	3,02	2,98	3,02	3,06	3,12	3,13	3,15	3,17	-	-	-	-	-	-
	E	W/W	3,03	2,94	3,01	3,06	2,99	2,96	3,04	3,05	3,07	3,14	3,15	-	-	-	-	-	-
ηsh	A	%	119,46	114,54	118,93	117,87	116,20	117,74	119,57	121,93	122,33	122,86	123,75	-	-	-	-	-	-
	E	%	118,39	114,59	117,24	119,51	116,46	115,34	118,58	119,01	119,81	122,48	123,02	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.
(4) Efficiencies for low temperature applications (35 °C)
(5) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Electric data																			
Maximum current (FLA)	A	A	158,8	185,4	204,2	232,0	267,6	295,4	323,2	376,2	421,4	457,0	484,8	542,5	596,1	641,9	669,8	705,5	733,3
	E	A	166,6	193,2	212,0	239,8	275,4	303,2	338,8	391,8	437,0	472,6	500,4	558,1	611,7	657,5	685,4	-	-
Peak current (LRA)	A	A	363,0	427,2	446,0	695,0	730,6	758,4	786,2	839,2	884,4	920,0	947,8	1004,8	1058,4	1104,2	1132,1	1167,8	1195,6
	E	A	370,8	435,0	453,8	702,8	738,4	766,2	801,8	854,8	900,0	935,6	963,4	1020,4	1074,0	1119,8	1147,7	-	-

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Compressor																			
Type	A,E	type	Scroll																
Compressor regulation	A,E	Type	On-Off																
Number	A	no.	4	4	4	4	4	4	4	5	6	6	6	7	8	9	9	9	9
	E	no.	4	4	4	4	4	4	4	5	6	6	6	7	8	9	9	-	-
Circuits	A	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
	E	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	-	-
Refrigerant	A,E	type	R32																
Refrigerant load circuit 1 (1)	A	kg	14,5	19,7	24,6	22,5	29,0	28,0	32,0	38,6	40,9	42,6	43,7	32,0	48,3	51,1	51,1	53,2	54,6
	E	kg	16,0	28,5	29,3	29,7	31,9	30,8	35,2	40,8	42,9	45,0	41,4	35,2	60,2	67,6	67,6	-	-
Refrigerant load circuit 2 (1)	A	kg	15,0	19,7	24,6	23,0	30,0	28,0	32,0	38,6	40,9	42,6	43,7	32,0	48,3	51,1	51,1	53,2	54,6
	E	kg	16,5	28,5	29,3	29,3	33,0	30,8	35,2	40,8	42,9	45,0	41,4	35,2	60,2	67,6	67,6	-	-
Refrigerant load circuit 3 (1)	A	kg	-	-	-	-	-	-	-	-	-	-	-	44,0	44,0	44,0	44,0	44,0	44,0
	E	kg	-	-	-	-	-	-	-	-	-	-	-	44,0	44,0	44,0	44,0	-	-
2-pipe system - System side heat exchanger (hot/cold)																			
Type	A,E	type	Brazed plate																
Number	A	no.	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	E	no.	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	-	-
Connections (in/out)	A,E	Type	Grooved joints																
Sizes (in/out)	A	Ø	3''	3''	3''	3''	3''	4''	4''	4''	4''	5''	5''	5''	5''	5''	5''	5''	5''
	E	Ø	3''	3''	3''	3''	4''	4''	4''	4''	4''	5''	5''	5''	5''	5''	5''	-	-
2-pipe system - Recovery side heat exchanger (domestic hot water)																			
Type	A,E	type	Brazed plate																
Number	A	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
	E	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	-	-
Connections (in/out)	A,E	Type	Grooved joints																
Sizes (in/out)	A	Ø	3''	3''	3''	3''	3''	4''	4''	4''	4''	5''	5''	5''	5''	5''	5''	5''	5''
	E	Ø	3''	3''	3''	3''	3''	4''	4''	4''	4''	5''	5''	5''	5''	5''	5''	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
4-pipe system - System side heat exchanger (cold side)																			
Type	A,E	type	Brazed plate																
Number	A	no.	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	E	no.	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	-	-
Connections (in/out)	A,E	Type	Grooved joints																
Sizes (in/out)	A	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″	5″
	E	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	-	-
4-pipe system - Recovery side heat exchanger (hot side)																			
Type	A,E	type	Brazed plate																
Number	A	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
	E	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	-	-
Connections (in/out)	A,E	Type	Grooved joints																
Sizes (in/out)	A	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″	5″
	E	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	-	-
Sound data calculated in cooling mode (2)																			
Sound power level	A	dB(A)	90,5	92,2	92,2	92,3	93,6	93,6	93,7	94,6	94,7	95,4	95,5	95,6	96,1	96,1	96,2	96,7	96,8
	E	dB(A)	85,2	86,2	86,2	87,0	88,3	88,8	89,7	90,1	90,2	90,9	91,2	92,2	92,5	92,6	92,8	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

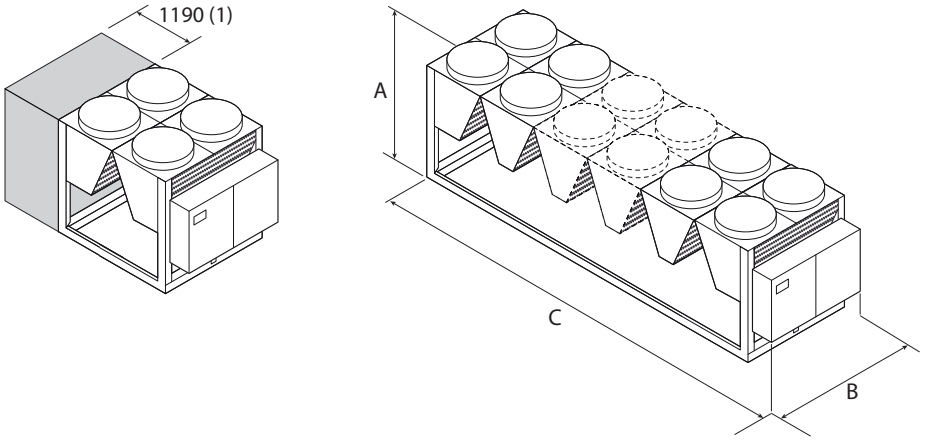
FANS DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																			
Fan																			
Type	A,E	type	Axial																
Fan motor	A,E	type	Inverter																
Number	A	no.	4	6	6	6	8	8	8	10	10	12	12	14	16	16	16	18	18
	E	no.	6	8	8	8	10	10	12	14	14	16	16	18	20	20	20	-	-
Air flow rate	A	m^3/h	82403	123609	123609	123605	164779	164779	164779	205996	205998	247152	247152	289826	331230	331230	331230	372633	372633
	E	m^3/h	102378	136491	136491	136491	170613	170613	204757	238871	238871	272982	272982	305065	338981	338961	338960	-	-

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: °																			
Fan																			
Type	A,E	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	-	-	-	-	-	-
Fan motor	A,E	type	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	-	-	-	-	-	-
Number	A	no.	4	6	6	6	8	8	8	10	10	12	12	-	-	-	-	-	-
	E	no.	6	8	8	8	10	10	12	14	14	16	16	-	-	-	-	-	-
Air flow rate	A	m^3/h	82403	123609	123609	123605	164779	164779	164779	205996	205998	247152	247152	-	-	-	-	-	-
	E	m^3/h	102378	136491	136491	136491	170613	170613	204757	238871	238871	272982	272982	-	-	-	-	-	-

(1) On-Off with DCPX

DIMENSIONS



(1) Additional module needed to contain the hydronic kit with "pump" option in sizes:
NPG 0800 A

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Dimensions and weights without hydronic kit																			
A	A	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
B	A	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
C	A	mm	2820	4010	4010	4010	5200	5200	5200	6390	6390	7580	7580	9960	11150	11150	11150	12340	12340
	E	mm	4010	5200	5200	5200	6390	6390	7580	8770	8770	9960	9960	12340	13530	13530	13530	-	-
Empty weight	A	kg	2575	3120	3130	3325	4115	4305	4605	5400	5805	6640	6740	8254	9076	9471	9571	10323	10413
	E	kg	3085	3745	3755	3955	4690	4865	5565	6400	6780	7690	7825	9268	10175	10540	10640	-	-
Dimensions and weights with pump/s																			
A	A	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
B	A	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
C	A	mm	4010	4010	4010	4010	5200	5200	5200	6390	6390	7580	7580	9960	11150	11150	11150	12340	12340
	E	mm	4010	5200	5200	5200	6390	6390	7580	8770	8770	9960	9960	12340	13530	13530	13530	-	-

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CPS

Multifunction unit with multiple temperature level capability

Cooling capacity 164 ÷ 491 kW
Heating capacity 176 ÷ 505 kW

- **Multipurpose 6 pipes plug and play system**
- **Simultaneous and independent production of chilled water, medium temperature hot water and high temperature hot water (also suitable for domestic use)**
- **Uses heat recovery for simultaneous cooling and heating**

DESCRIPTION

The multi-purpose 6-pipe units CPS are designed for residential buildings and accommodation facilities that require the simultaneous availability of heating and cooling for the rooms, along with high-temperature water (up to 73°C on the machine outlet) for heating needs and/or DHW production.
Each single service (cooling, medium-temperature heating, high-temperature hot water) can be supplied independently of the request for the others.
The versatile functions, extended operating limits and simplified installation of these units mean that they can also be used in a variety of different industrial processes.
CPS the ideal solution for both new installations and upgrading existing systems.

FEATURES

Operating field

Possibility to produce water up to 73°C, using mainly free-heating for cooling requests.

2 dual circuit units

Created by combining and optimising, in a single system, an NRP series 4-pipe multifunction air-water unit (with scroll compressors and R410A refrigerant) **for the production of chilled water and medium temperature hot water on the heating/cooling circuit side,** and a WWB series water-water heat pump (with scroll compressors and R134a refrigerant) **for the production of domestic hot water (DHW).**

Constructional characteristics of unit

CPS units can be installed and operated even in locations with limit space, offering significant time savings in terms of both system planning and installation, while tried-and-tested, optimised management logic makes it possible to create plug-and-play systems with superior reliability and efficiency.
These units consist of:
4 cooling circuits
— 2 circuits (C1/C2) with R410A gas
— 2 circuits (C2/C3) with R134a gas
3 plate heat exchanger
— 1 Plate heat exchanger for chilled water
— 1 Plate heat exchanger for medium temperature hot water
— 1 Inspectable **stainless steel** plate heat exchanger for high temperature hot water production (DHW)
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Option integrated hydronic kit

To create a solution which offers both cost savings and facilitated installation, these units may be configured with an integrated hydronic kit on the chilled water utility side. A hydronic kit must always be used, however, on the medium temperature water side.
These kits include all the main plumbing components necessary, and are available in a variety of configurations with either a single pump or with a backup pump to offer a choice of different total head values.

■ *Flow switches must be installed on both the cold and medium temperature water utility circuits to protect the heat exchangers. Failure to do so will render the warranty null and void.*

CONTROL PCO^5

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** Allows, with continuous fan modulation, to optimize the operation of the unit in any operating point, ensuring an increase in the energy efficiency at partial load. **ESEER up to +7% with inverter fans**

— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

CONFIGURATOR

Field		Description
1,2,3		**CPS**
4,5,6,7		**Size** 0704, 1004, 1805
8		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
9		**Fans**
	J	Inverter
	°	Asynchronous + DCPX
10		**Power supply**
	S	400V ~ 3 50Hz with soft-start
	°	400V ~ 3 50Hz with magnet circuit breakers
11,12		**Hydronic kit integrated on chilled water utility side**
	00	Without hydronic kit
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
13,14		**Hydronic kit integrated on medium temperature water utility side**
	RA	Pump A
	RB	Pump B
	RC	Pump C
	RD	Pump D
	RE	Pump E
	RF	Pump F
	RG	Pump G
	RH	Pump H
	RI	Pump I
	SA	Pump A + stand-by pump
	SB	Pump B + stand-by pump
	SC	Pump C + stand-by pump
	SD	Pump D + stand-by pump
	SE	Pump E + stand-by pump
	SF	Pump F + stand-by pump
	SG	Pump G + stand-by pump
	SH	Pump H + stand-by pump
	SI	Pump I + stand-by pump

COMPATIBILITY BETWEEN DIFFERENT HYDRONIC KITS

These kits include all the main plumbing components necessary, and are available in a variety of configurations with either a single pump or with a backup pump to offer a choice of different total head values.

The following table illustrates the compatibility between different unit sizes and the hydronic kits.
All units must be configured with the medium temperature water side hydronic kit.

Pumps - COLD WATER side	CPS0704	CPS1004	CPS1805
PA-DA	PA-DA		
PB-DB	PB-DB		
PC-DC	PC-DC	PC-DC	
PD-DD	PD-DD	PD-DD	
PE-DE	PE-DE	PE-DE	PE-DE
PF-DF		PF-DF	PF-DF
PG-DG			PG-DG
PH-DH			PH-DH
PI-DI			PI-DI

Pumps - HOT WATER (AVERAGE TEMPERATURE) side	CPS0704	CPS1004	CPS1805
RA-SA	RA-SA		
RB-SB	RB-SB		
RC-SC	RC-SC	RC-SC	
RD-SD	RD-SD	RD-SD	
RE-SE		RE-SE	RE-SE
RF-SF		RF-SF	RF-SF
RG-SG			RG-SG
RH-SH			RH-SH
RI-SI			RI-SI

PERFORMANCE SPECIFICATIONS

		CPS0704°°°00RA	CPS1004°°°00RC	CPS1805°°°00RE
Household system side cooling (1)				
Cooling capacity	kW	163,9	259,2	490,5
Input power	kW	53,2	86,3	165,7
Cooling total input current	A	97,0	128,0	239,0
EER	W/W	3,08	3,00	2,96
Water flow rate system side	l/h	28212	44593	84370
Pressure drop system side	kPa	32	34	49
Medium temperature system heating (2)				
Heating capacity	kW	175,2	271,8	503,5
Input power	kW	55,8	86,5	161,7
Heating total input current	A	104,0	136,0	250,0
COP	W/W	3,14	3,14	3,11
Water flow rate system side	l/h	30521	47339	87653
Useful head system side	kPa	99	120	113
High temperature system side heating (DHW) (3)				
Heating capacity (DHW)	kW	90,7	177,4	251,9
Input power	kW	48,4	85,3	144,3
Heating total input current	A	88,0	134,0	211,0
COP	W/W	1,87	2,08	1,75
Water flow rate domestic hot water side	l/h	7897	15442	21924
Pressure drop domestic hot water side	kPa	30	40	39
Simultaneous operation (cooling + medium temperature heating) (4)				
Cooling capacity	kW	163,3	258,3	466,2
Heating capacity	kW	207,8	330,2	600,6
Input power	kW	48,4	78,7	147,7
Total input current	A	92	136	253
TER	W/W	7,66	7,47	7,22
Water flow rate cold side	l/h	28212	45593	84370
Pressure drop cold side	kPa	32	34	49
Water flow rate hot side	l/h	30521	47339	87653
Useful head system side	kPa	99	120	113
Simultaneous operation (cooling + high temperature DHW production) (5)				
Cooling capacity	kW	160,0	250,0	463,5
Heating capacity (DHW)	kW	90,7	177,4	251,9
Input power	kW	70,7	124,1	217,0
Total input current	A	126	191	333
TER	W/W	3,54	3,45	3,30
Water flow rate cold side	l/h	27536	43003	79720
Pressure drop cold side	kPa	30	31	44
Water flow rate domestic hot water side	l/h	7899	15442	21924
Pressure drop domestic hot water side	kPa	30	40	39
Simultaneous operation (medium temperature heating + high temperature DHW production) (6)				
Heating capacity	kW	101,4	129,5	304,2
Heating capacity (DHW)	kW	90,5	177,0	251,3
Input power	kW	73,7	123,9	215,6
Total input current	A	137	196	341
TER	W/W	2,60	2,47	2,58
Water flow rate hot side	l/h	17696	22604	53038
Useful head system side	kPa	158	189	256
Water flow rate domestic hot water side	l/h	7897	15442	21924
Pressure drop domestic hot water side	kPa	30	40	39
Simultaneous operation (cooling + medium temperature heating + high temperature DHW production) (7)				
Cooling capacity	kW	163,3	258,3	466,2
Heating capacity	kW	134,0	187,9	401,4
Heating capacity (DHW)	kW	90,5	177,0	251,3
Total input power	kW	66,7	116,6	204,1
Total input current	A	125	199	347
TER	W/W	5,81	5,35	5,48
Water flow rate cold side	l/h	28212	44593	84370
Pressure drop cold side	kPa	32	34	49
Water flow rate hot side	l/h	30521	47339	87653
Useful head system side	kPa	99	120	113
Water flow rate domestic hot water side	l/h	7897	15442	21924
Pressure drop domestic hot water side	kPa	30	40	39

(1) Data 14511:2022; System side water heat exchanger 12 °C / 7 °C; External air 35 °C
(2) Data 14511:2022; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data 14511:2022; Heat exchanger - services side (DHW at high temperature) 55°C / 65°C; Outside air 7°C D.B./6°C W.B.
(4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;
(5) Data 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C; Heat exchanger water (DHW side) 55°C / 65°C
(6) Data 14511:2022; Heat exchanger water (services side) * °C / 45°C; Outside air 7°C D.B./6°C W.B.; Heat exchanger water (DHW side) 55°C / 65°C
(7) Heat exchanger - services side (cold water) * / 7°C; Heat exchanger - services side (hot water at average temperature) * / 45°C; Heat exchanger - services side (hot water at high temperature) 55°C / 65°C

ENERGY DATA

		CPS0704°°°00RA	CPS1004°°°00RC	CPS1805°°°00RE
Cooling capacity with low leaving water temp (UE n° 2016/2281)				
SEER	W/W	-	-	4,56
ηsc	%	-	-	180%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)				
Pdesignh	kW	150	241	-
SCOP	W/W	2,66	2,76	-
ηsh	%	103%	107%	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (2)				
Pdesignh	kW	158	246	-
SCOP	W/W	3,26	3,44	-
ηsh	%	128%	135%	-

(1) Efficiencies for average temperature applications (55 °C)
(2) Efficiencies for low temperature applications (35 °C)

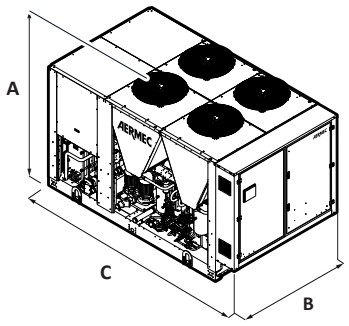
ELECTRIC DATA

		CPS0704°°°00RA	CPS1004°°°00RC	CPS1805°°°00RE
Cooling only mode				
Maximum current (FLA)	A	153,0	220,0	420,0
Peak current (LRA)	A	293,0	459,0	746,0
Medium temperature heating mode operation only				
Maximum current (FLA)	A	153,0	220,0	420,0
Peak current (LRA)	A	293,0	459,0	746,0
High temperature DHW production operating mode only)				
Maximum current (FLA)	A	121,0	203,0	320,0
Peak current (LRA)	A	261	442	645
Simultaneous operation (medium temperature heating + cooling)				
Maximum current (FLA)	A	138,0	197,0	381,0
Peak current (LRA)	A	278	436	707
Simultaneous operation (medium temperature heating + high temperature DHW production)				
Maximum current (FLA)	A	197,0	308,0	549,0
Peak current (LRA)	A	337	547	874
Simultaneous operation (cooling + DHW production operating)				
Maximum current (FLA)	A	189,0	300,0	533,0
Peak current (LRA)	A	329	539	858
Simultaneous operation (cooling + medium temperature heating + high temperature DHW production)				
Maximum current (FLA)	A	181,0	284,0	510,0
Peak current (LRA)	A	321	523	835

GENERAL TECHNICAL DATA

		CPS0704°°°00RA	CPS1004°°°00RC	CPS1805°°°00RE
Compressor - Circuit (C1/C2)				
Type	type		Scroll	
Number	no.	4	4	5
Circuits	no.	2	2	2
Refrigerant	type		R410A	
Refrigerant charge	kg	45,0	61,0	106,0
Thermostatic expansion valve	type		Meccanica	
Compressor - Circuit (C3/C4)				
Type	type		Scroll	
Number	no.	2	2	2
Circuits	no.	2	2	2
Refrigerant	type		R134a	
Refrigerant charge	kg	7,0	15,0	20,0
Thermostatic expansion valve	type		Elettronica	
Utility side heat exchanger (cooling)				
Type	type		Brazed plate	
Number	no.	1	1	1
Connections (in/out)	Type		Grooved joints	
Sizes (in/out)	Ø	2"1/2	3"	4"
Utility side heat exchanger (medium temperature heating)				
Type	type		Brazed plate	
Number	no.	2	2	2
Manifold connection (in/out)	Type		Grooved joints	
Manifold diameter (in/out)	Ø	2"1/2	3"	4"
Utility side heat exchanger (high temperature heating)				
Type	type		Brazed plate	
Number	no.	1	1	1
Connections (in/out)	Type		Gas	
Sizes (in/out)	Ø		2"M	
Fan				
Type	type		Axial	
Fan motor	type		Asynchronous with phase cut	
Number	no.	4	6	10
Air flow rate	m^3/h	88000	116500	194100

DIMENSIONS



		CPS0704°°°00RA	CPS1004°°°00RC	CPS1805°°°00RE
Dimensions and weights				
A	mm	2450	2450	2450
B	mm	2200	2200	2200
C	mm	3975	5760	8143

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NXP 0500 - 1650

Water-water multipurpose

Cooling capacity 108 ÷ 502 kW
Heating capacity 122 ÷ 549 kW

- **Units designed for 2 or 4-pipe systems**
- **High efficiency also at partial loads**
- **Simultaneous and independent production of hot and chilled water**

DESCRIPTION

Multi-purpose indoor model designed for applications with 2 or 4-pipe systems. Just one unit is capable of satisfying the yearly hot and cold water demand simultaneously and independently.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Work at full load with chilled water production from 4 to 18°C at the evaporator and hot water at the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Exchangers

All standard units have user-side heat exchangers and plate recovery, optimised to take advantage of the excellent heat exchange characteristics of the R410A.

Option integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

■ *The flow switch is available as an accessory for both the system side and the recovery side, and is compulsory; if it is not installed, the warranty will be considered invalid.*

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
AER485P1	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
FL	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

Antivibration

Version	System side - pumps	Recovery side - pumps	0500	0550	0600	0650	0700	0750	0800
°	°	°	AVX350	AVX350	AVX351	AVX351	AVX351	AVX351	AVX352
°	°	U, V	AVX357	AVX357	AVX358	AVX358	AVX358	AVX359	AVX360
°	M, N	°, U, V, W, Z	AVX357	AVX357	AVX358	AVX358	AVX358	AVX359	AVX360
°	O, P	U, V	AVX357	AVX357	AVX358	AVX358	AVX358	AVX359	AVX360
°	°	W, Z	AVX357	AVX357	AVX359	AVX359	AVX359	AVX359	AVX363
°	O, P	°, W, Z	AVX357	AVX357	AVX359	AVX359	AVX359	AVX359	AVX363
L	°	°	AVX351	AVX351	AVX355	AVX355	AVX355	AVX356	AVX353
L	°	U, V	AVX358	AVX358	AVX359	AVX359	AVX359	AVX360	AVX360
L	M, N	°, U, V	AVX358	AVX358	AVX359	AVX359	AVX359	AVX360	AVX360
L	°, M, N	W, Z	AVX359	AVX359	AVX359	AVX359	AVX359	AVX363	AVX363
L	O, P	°, U, V, W, Z	AVX359	AVX359	AVX359	AVX359	AVX359	AVX363	AVX363

Version	System side - pumps	Recovery side - pumps	0900	1000	1250	1400	1500	1650
°	°	°	AVX352	AVX353	AVX353	AVX353	AVX354	AVX354
°	°	U, V	AVX360	AVX361	AVX361	AVX361	AVX361	AVX361
°	M, N	°, U, V, W, Z	AVX360	AVX361	AVX361	AVX361	AVX361	AVX361
°	O, P	U, V	AVX360	AVX361	AVX361	AVX361	AVX361	AVX361
°	°	W, Z	AVX363	AVX364	AVX364	AVX364	AVX364	AVX364
°	O, P	°, W, Z	AVX363	AVX364	AVX364	AVX364	AVX364	AVX364
L	°	°	AVX353	AVX353	AVX354	AVX354	AVX354	AVX354
L	°	U, V	AVX360	AVX361	AVX361	AVX362	AVX362	AVX362
L	M, N	°, U, V	AVX360	AVX361	AVX361	AVX362	AVX362	AVX362
L	°, M, N	W, Z	AVX364	AVX364	AVX364	AVX364	AVX364	AVX364
L	O, P	°, U, V, W, Z	AVX364	AVX364	AVX364	AVX364	AVX364	AVX364

Device for peak current reduction

Ver	0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
°, L	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)	DRE801 (1)	DRE901 (1)	DRE1001 (1)	DRE1251 (1)	DRE1401 (1)	DRE1401 (1)	DRE1401 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
°, L	RIF98	RIF98	RIF95	RIF95	RIF95	RIF95	RIF95	RIF96	RIF97	RIF97	RIF97	RIF97	RIF97

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Configuration options

Field		Description
1,2,3		**NXP**
4,5,6,7		**Size** 0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1250, 1400, 1500, 1650
8		**Operating field**
	°	Standard mechanic thermostatic valve
9		**System type**
	2	2-pipe system
	4	4-pipe system
10		**Version**
	°	Standard
	L	Standard silenced
11		**Power supply**
	4	220V ~ 3 50Hz with magnet circuit breakers (1)
	5	500V ~ 3 50Hz with magnet circuit breakers (2)
	°	400V ~ 3 50Hz with magnet circuit breakers
12		**System side - pumps**
	M	Single pump low head
	N	Pump low head + stand-by pump
	O	Single pump high head
	P	Pump high head + stand-by pump
	°	Without hydronic kit
13		**Recovery side - pumps**
	U	Single pump low head
	V	Pump low head + stand-by pump
	W	Single pump high head
	Z	Pump high head + stand-by pump
	°	Without hydronic kit

(1) Only for sizes from 0500 to 0700
(2) Only for sizes from 0800 to 1000

PERFORMANCE SPECIFICATIONS

NXP - 2-pipe system versions °/L

Size		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Cooling system side 2-pipe system (1)														
Cooling capacity	kW	108,9	117,0	141,5	157,5	192,7	218,5	252,2	281,0	305,8	345,2	392,3	447,2	502,4
Input power	kW	24,0	26,1	30,9	35,1	42,6	48,9	56,0	62,5	66,3	75,7	85,2	98,4	110,3
Cooling input current	A	47,0	50,0	58,0	65,0	84,0	90,0	92,0	101,0	106,0	135,0	149,0	169,0	188,0
EER	W/W	4,54	4,48	4,58	4,49	4,52	4,47	4,51	4,50	4,61	4,56	4,60	4,55	4,55
Water flow rate source side	l/h	22711	24436	29455	32877	40143	45586	52705	58706	63673	71963	81633	93177	104621
Pressure drop source side	kPa	33	37	41	50	59	69	28	34	26	32	36	45	49
Water flow rate system side	l/h	18734	20124	24349	27108	33155	37599	43386	48338	52596	59364	67464	76904	86389
Pressure drop system side	kPa	19	21	21	25	27	29	20	25	19	23	26	32	34
Heating system side 2-pipe system (2)														
Heating capacity	kW	122,4	131,0	158,2	175,7	210,0	238,7	289,0	320,9	352,6	383,7	433,5	489,5	549,4
Input power	kW	29,6	32,0	38,5	43,3	51,7	59,6	70,9	79,3	84,0	91,7	103,4	118,6	132,1
Heating input current	A	54,0	58,0	68,0	76,0	95,0	103,0	112,0	123,0	130,0	154,0	173,0	196,0	217,0
COP	W/W	4,13	4,09	4,11	4,05	4,06	4,00	4,08	4,05	4,20	4,18	4,19	4,13	4,16
Water flow rate source side	l/h	27209	29066	35169	38937	46642	52841	63935	70917	78660	85555	96778	108934	122632
Pressure drop source side	kPa	47	52	58	69	79	92	41	50	39	45	51	62	67
Water flow rate system side	l/h	21232	22726	27452	30476	36453	41427	50177	55720	61233	66632	75270	84987	95403
Pressure drop system side	kPa	25	27	27	32	32	36	27	33	25	29	32	39	42
Heating domestic hot water side 2-pipe system (3)														
Heating capacity	kW	124,5	133,2	161,0	178,8	213,6	242,8	293,3	325,1	354,8	390,1	439,8	496,5	558,6
Input power	kW	29,2	31,6	37,8	42,6	50,9	58,4	70,0	78,4	83,2	91,1	102,6	117,8	131,6
Heating total input current	A	54,0	57,0	67,0	75,0	95,0	103,0	110,0	122,0	129,0	153,0	171,0	194,0	216,0
COP	W/W	4,26	4,21	4,26	4,20	4,19	4,16	4,19	4,15	4,26	4,28	4,29	4,21	4,24
Water flow rate source side	l/h	27905	29767	36085	39952	47734	54174	65416	72379	79441	87568	98845	111238	125462
Pressure drop source side	kPa	37	42	41	50	53	58	42	50	38	46	52	66	70
Water flow rate domestic hot water side	l/h	21604	23109	27936	31015	37062	42149	50928	56446	61601	67743	76363	86215	96994
Pressure drop domestic hot water side	kPa	23	26	25	30	33	36	26	32	23	28	33	40	43
Simultaneous operation (heating + cooling), 2 pipes (4)														
Cooling capacity	kW	96,2	102,5	124,8	138,9	165,4	190,6	225,7	250,3	282,6	308,1	340,2	392,0	444,9
Recovered heating power	kW	123,3	131,9	160,0	178,4	212,6	244,6	290,8	322,7	360,1	392,6	435,1	500,6	566,0
Input power	kW	28,2	30,5	36,5	40,9	49,0	56,2	67,8	75,5	80,9	88,2	99,2	113,9	126,6
Water flow rate system side	l/h	18734	20124	24349	27108	33155	37599	43386	48338	52596	59364	67464	76904	86389
Pressure drop system side	kPa	19	21	21	25	27	29	20	25	19	23	26	32	34
Water flow rate domestic hot water side	l/h	21604	23109	27936	31015	37062	42149	50928	56446	61601	67743	76363	86215	96994
Pressure drop domestic hot water side	kPa	23	26	25	30	33	36	26	32	23	28	33	40	43

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C; All the units are Eurovent certified
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C
(3) Water exchanger to the total recovery side 40 °C / 45 °C; Water source side 10 °C / 7 °C
(4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NXP - 4-pipe system versions °/L

Size		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Cooling system side 4-pipe system (1)														
Cooling capacity	kW	108,9	117,0	141,5	154,5	192,7	218,5	252,2	281,0	305,8	345,2	392,3	447,2	502,4
Input power	kW	24,0	26,1	30,9	35,1	42,6	48,9	56,0	62,5	66,3	75,7	85,2	98,4	110,3
Cooling input current	A	47,0	50,0	58,0	65,0	84,0	90,0	92,0	101,0	106,0	135,0	149,0	169,0	188,0
EER	W/W	4,54	4,48	4,58	4,49	4,52	4,47	4,51	4,50	4,61	4,56	4,60	4,55	4,55
Water flow rate source side	l/h	22711	24436	29455	32877	40143	45586	52705	58706	63673	71963	81633	93177	104621
Pressure drop source side	kPa	33	37	41	50	59	69	28	34	26	32	36	45	49
Water flow rate system side	l/h	18734	20124	24349	27108	33155	37599	43386	48338	52596	59364	67464	76904	86389
Pressure drop system side	kPa	19	21	21	25	27	29	20	25	29	23	26	32	34
Heating system side 4-pipe system (2)														
Heating capacity	kW	124,5	133,2	161,0	178,8	213,6	242,8	293,3	325,1	354,8	390,1	439,8	496,5	588,6
Input power	kW	29,2	31,6	37,8	42,6	50,9	58,4	70,0	78,4	83,2	91,1	102,6	117,8	131,6
Heating total input current	A	54,0	57,0	67,0	75,0	95,0	103,0	110,0	122,0	129,0	153,0	171,0	194,0	216,0
COP	W/W	4,26	4,21	4,26	4,20	4,19	4,16	4,19	4,15	4,26	4,28	4,29	4,21	4,24
Water flow rate source side	l/h	27905	29767	36085	39952	47734	54174	65416	72379	79441	87568	98845	111238	125462
Pressure drop source side	kPa	37	42	41	50	53	58	42	50	38	46	52	66	70
Water flow rate system side	l/h	21604	23109	27935	31015	37062	42149	50928	54446	61601	67743	76363	46215	96994
Pressure drop system side	kPa	23	26	25	30	33	36	26	32	23	28	33	40	43
Simultaneous operation (heating + cooling), 4 pipes (3)														
Cooling capacity	kW	96,2	102,5	124,8	138,9	165,4	190,6	225,7	250,3	282,6	308,1	340,2	392,0	444,9
Recovered heating power	kW	123,3	131,9	160,0	178,4	212,6	244,6	290,8	322,7	360,1	392,6	435,1	500,6	566,0
Input power	kW	28,2	30,5	36,5	40,9	49,0	56,2	67,8	75,5	80,9	88,2	99,2	113,4	126,6
Water flow rate cold side	l/h	18734	20124	24349	27108	33155	37599	43386	48338	52596	59364	67464	76904	86389
Pressure drop cold side	kPa	19	21	21	25	27	29	20	25	19	23	26	32	34
Water flow rate hot side	l/h	21604	23109	27936	31015	37062	42149	50928	56446	61601	67743	76363	86215	96944

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C; All the units are Eurovent certified
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C
(3) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

Size		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Pressure drop hot side	kPa	23	26	25	30	33	36	26	32	23	28	33	40	43

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C; All the units are Eurovent certified
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C
(3) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

ENERGY INDICES (REG. 2016/2281 EU)

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,L	W/W	5,25	5,44	5,52	5,43	5,52	5,39	5,61	5,82	6,09	6,00	6,05	6,43	6,45
Seasonal efficiency	°,L	%	207,0%	214,6%	217,8%	214,2%	217,8%	212,6%	221.4%	229,9%	240,5%	237,1%	239,1%	254,2%	254,9%
SEPR - (EN 14825: 2018) High temperature (2)															
SEPR	°,L	W/W	-	-	-	-	-	-	-	7,08	7,30	7,21	7,23	-	-
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (3)															
Pdesignh	°,L	kW	163	173	212	234	280	318	385	-	-	-	-	-	-
SCOP	°,L	W/W	4,78	4,68	4,78	4,65	4,65	4,58	4,73	-	-	-	-	-	-
ηsh	°,L	%	183.0%	179.0%	183.0%	178.0%	178.0%	175.0%	181.0%	-	-	-	-	-	-
Energy index															
TER	°,L	W/W	7,77	7,68	7,80	7,75	7,71	7,75	7,62	7,59	7,94	7,94	7,82	7,87	7,99

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

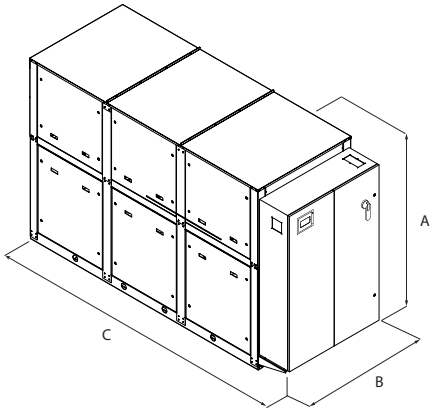
Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Electric data															
Maximum current (FLA)	°,L	A	71,0	77,0	91,0	102,0	124,0	135,0	163,0	179,0	195,0	208,0	237,0	266,0	295,0
Peak current (LRA)	°,L	A	214,0	220,0	206,0	216,0	267,0	323,0	332,0	340,0	356,0	459,0	488,0	600,0	629,0

GENERAL TECHNICAL DATA

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Compressor															
Type	°,L	type	Scroll												
Number	°,L	no.	3	3	4	4	4	4	4	4	4	4	4	4	4
Circuits	°,L	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,L	type	R410A												
2-pipe system - System side heat exchanger (hot/cold)															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Sizes (in/out)	°,L	Ø	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"	3"	3"	3"	3"	3"	3"
2-pipe system - Recovery side heat exchanger (domestic hot water)															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Sizes (in/out)	°,L	Ø	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"	3"	3"	3"	3"	3"	3"
4-pipe system - System side heat exchanger (cold side)															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Sizes (in/out)	°,L	Ø	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"	3"	3"	3"	3"	3"	3"
4-pipe system - Recovery side heat exchanger (hot side)															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Sizes (in/out)	°,L	Ø	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"	3"	3"	3"	3"	3"	3"
Sound data calculated in cooling mode (1)															
Sound power level	°	dB(A)	78,0	79,0	79,0	80,0	82,0	86,0	88,0	88,0	88,0	90,0	90,0	92,0	92,0
	L	dB(A)	72,0	73,0	73,0	74,0	76,0	80,0	82,0	82,0	82,0	84,0	84,0	86,0	86,0
Sound pressure level (10 m)	°	dB(A)	46,0	47,0	47,0	48,0	50,0	54,0	56,0	56,0	56,0	58,0	58,0	60,0	60,0
	L	dB(A)	40,0	41,0	41,0	42,0	44,0	48,0	50,0	50,0	50,0	52,0	52,0	54,0	54,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Dimensions and weights															
A	°	mm	1976	1976	1976	1976	1976	1976	2021	2021	2021	2021	2021	2021	2021
	L	mm	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120
B	°,L	mm	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250
C	°,L	mm	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600
Dimensions and weights with pump/s															
A	°	mm	1976	1976	1976	1976	1976	1976	2021	2021	2021	2021	2021	2021	2021
	L	mm	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120
B	°,L	mm	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250
C	°	mm	3452	3452	3452	3452	3452	3452	3452	3452	3750	3750	3750	3750	3750
	L	mm	3452	3452	3452	3452	3452	3750	3750	3750	3750	3750	2600	2600	2600

	Version	System side - pumps	Recovery side - pumps		0500	0550	0600	0650	0700	0750
Empty weight	°	°	°	kg	990	1000	1110	1130	1180	1380
	°	°	U/V	kg	1230	1240	1360	1380	1450	1690
	°	M/N	°/U/V	kg	1230	1240	1360	1380	1450	1690
	°	°/M/N	W/Z	kg	1340	1350	1490	1500	1600	1880
	°	O/P	°/U/V/W/Z	kg	1340	1350	1490	1500	1600	1880
	L	°	°	kg	1230	1230	1340	1360	1420	1570
	L	°	U/V	kg	1560	1570	1690	1710	1780	2020
	L	M/N	°/U/V	kg	1560	1570	1690	1710	1780	2020
	L	°/M/N	W/Z	kg	1670	1680	1820	1830	1930	2210
	L	O/P	°/U/V/W/Z	kg	1670	1680	1820	1830	1930	2210

	Version	System side - pumps	Recovery side - pumps		0800	0900	1000	1250	1400	1500	1650
Empty weight	°	°	°	kg	1680	1700	1890	1960	2060	2100	2270
	°	°	U/V	kg	1960	2060	2310	2380	2500	2540	2720
	°	M/N	°/U/V	kg	1960	2060	2310	2380	2500	2540	2720
	°	°/M/N	W/Z	kg	2110	2300	2560	2630	2770	2810	3010
	°	O/P	°/U/V/W/Z	kg	2110	2300	2560	2630	2770	2810	3010
	L	°	°	kg	1910	1930	2120	2190	2270	2400	2500
	L	°	U/V	kg	2290	2390	2660	2730	2850	2890	3070
	L	M/N	°/U/V	kg	2290	2390	2660	2730	2850	2890	3070
	L	°/M/N	W/Z	kg	2240	2630	2910	2980	3120	3160	3360
	L	O	°/U/V/W/Z	kg	2240	2630	2910	2980	3120	3160	3360
	L	P	°/U/V/W	kg	2240	2630	2910	2980	3120	3160	3360
	L	P	Z	kg	2440	2630	2910	2980	3120	3160	3360

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PRECISION AIR CONDITIONERS

Aermec is well established in the data centre market, with a multiple year experience and prestigious projects aimed at reducing the overall cost of ownership of modern data centres.
This process is achieved by applying state of the art product solutions with a strong focus on integrated design and sophisticated analyses of individual data centre customer requirements, with the aim of achieving a personalised and optimised solution for each and every individual installation site.

PRECISION AIR CONDITIONING

		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
P 10-932	Direct expansion (air or water cooled); chilled water	-	7-160	-	896
G 070-1342	Direct expansion (air or water cooled); chilled water	-	50-222	-	901
R 20-361	Direct expansion (air or water cooled); chilled water	-	10-37	-	905

P 10-932

Precision Air Conditioners

Cooling capacity 7 ÷ 160 kW

- **Strict control of room temperature and humidity**
- **High efficiency values**
- **Wide selection of configurations**
- **Reduced ground view clearance**

Last generation control panel

DESCRIPTION

P series precision air conditioning units have design and operational features suitable for rooms where sensible nature heat loads are prevailing.

CONFIGURATIONS

PXO: upwards flow air conditioners with direct expansion with air or water condensation.
PWO: upwards flow air conditioners with chilled water.
PXU: downwards flow air conditioners with direct expansion with air or water condensation.
PWU: downwards airflow air conditioners with chilled water.

FEATURES

The **P** series precision air conditioning units are designed for precision air conditioning of technological rooms characterized by elevated thermal loads to be eliminated, such as computing centres and other applications where high performances and maximum reliability are required.
Precision Air Conditioning units can be customized as per necessities, in order to offer a complete control of temperature, of humidity and of air quality through accessories such as humidifier, after-heating and high efficiency filters.
In order to guarantee the maximum reliability and flexibility, there are available both solutions with double circuit and solution with different cooling mediums:

Two Sources

The Twin Sources system ensures cooling continuity in case of unavailability, for whatever reason, of the primary source: overhead, maintenance, night or seasonal stop or stop for any emergency.
This system includes the assembly inside the air conditioner of a second cooling source, complete with its regulation and completely independent from the primary one.
They only share the aluminium finned pack, allowing both a high thermal exchange efficiency.

Free Cooling

This system employs external air, a renewable energy source, for cooling the Free Cooling water circuit by an external dry cooler.
The Free Cooling circuit works in place of, or along, the mechanical cooling with direct expansion.

STRUCTURE

The structure consists of a steel frame painted with dark grey epoxy powders (RAL7024) guaranteeing a durable finish. Acoustic insulation self-extinguishing panels covered with anti-friction film.

FANS

Centrifugal fans with backward curved blades (plug fans) with EC motor directly coupled to the electronic control to minimize power consumption and noise emissions.

FILTERS

Corrugated baffle filters, not regenerable, self-extinguishing, G4 efficiency class (according to EN 779).
Differential pressure switch (STANDARD) for dirty filter alarm.
The control of filter dirt conditions via Modbus is available as an option.

ELECTRONIC CONTROLLER

The evolved electronic adjustment maximises energy saving and optimizes all operating modes of the units, both direct expansion and chilled water.
— The controller allows to supervise all main components of the unit, with more than 50 different variables that guarantee real time monitoring of all operating cycles.
— The units have a standard RS485 Modbus board, BACnet, LonWorks and SNMP are available as options, for a simple and quick interface with BMS (Building Management System) supervising systems.
— View of all operating parameters in 8 languages.

CHILLED WATER COILS

Only for W configurations
Large surface batteries, positioned in such a way as to optimise airflow and heat transfer, made of refrigerating quality copper tubes with aluminium louvers mechanically merged, fitted with motorised 3way valve (2way is also available in the selection process).

COMPRESSORS

Only for X configurations
High efficiency scroll compressor with low power consumption.
These units in the direct expansion configurations work with R410A refrigerant, which does not damage the ozone layer.

In dual circuit configuration you can control the power output thanks to electronic adjustment that automatically manages the compressors activation depending on the load request.

Electronic expansion valve standard on all sizes.

ACCESSORIES

Direct expansion

— DC brushless compressors with inverter control
— Electric power supply line for remote condenser
— Electric power supply line with speed adjustment for remote condenser
— Condenser adjustment with 0-10V signal for remote condenser with EC fans
— Water condenser
— Condensate adjustment pressure valve
— "LAC" (Low Ambient Control) valve has the function of bypassing the condenser, injecting warm gas in the liquid piping, to maintain the refrigerant pressure stable. Use is recommended in very cold climates, in case of inverter compressors and in case of oversized condensers with respect to the real necessities of the units.

Chilled water

— Two ways modulating valves
— Inlet and outlet water temperature probes
— "Power Valve" kit: automatic adjustment and balancing valve of the water circuit, which allows to guarantee a constant water flow rate and monitor the efficiency of the unit in real time.

Heating

— Low thermal inertia electric batteries with differentiated stages regulation
— Low thermal inertia electric batteries with modulating regulation
— Water heating batteries with 2 or 3 ways modulating valve (available on request on some models only)

Humidification

— Room humidity probe
— Flow humidity probe
— Submerged electrodes humidifier (also available with low conductivity cylinder)

Water presence detection

— Available as punctual probe or fabric belt (length 5 m) Allows to have an alarm in case water presence,even partial, is detected.

Mechanicals and structural

— Condensate discharge pump
— Condensation and humidifier drain pump
— Flow overpressure dampers
— Motorised damper on suction
— M5 (EU5) efficiency air filter on air supply
— Flow plenum with adjustable grills.
— Sub-base plenum with front grids.
— **Plenum Free Cooling:** available for direct expansion and downward flow versions, complete with motorised dampers and the external air temperature probe. Used to perform **direct Free Cooling** taking advantage of external air and will work in place of or supporting the direct expansion mechanical cooling.
— Height adjustable support for raised floor installation
— Grilled panels for front flow
— Closed panels for downwards air intake
— Panels with "sandwich" counter-panels (available on request on some models only)
— Panels with increased soundproof upholstery (available on request on some models only)

Electrical

— The unit has a standard power supply 400V ~ 3N 50Hz. The following voltages are available as an alternative: 400V ~ 3N 60Hz, 230V ~ 3 60Hz, 380V ~ 3N 60Hz
— Electric power supply line without neutral
— "Basic" version automatic transfer switch (ATS)
— Advanced" version automatic transfer switch (ATS)

Regulation

— Constant flow rate ventilation adjustment
— Constant pressure ventilation adjustment
— Local area network configuration and cable
— User terminal for remote installation

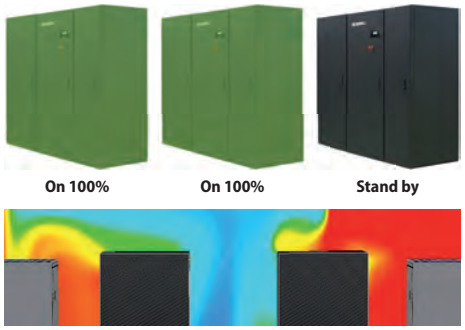
■ *For further details refer to the technical documentation or to the selection program.*

SMARTNET

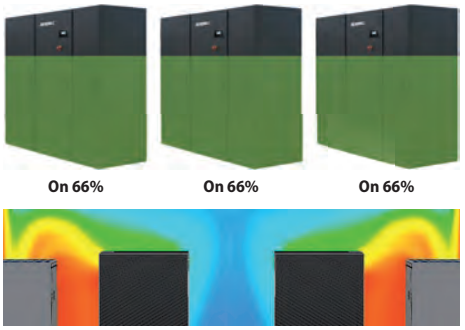
The innovative **SMARTNET** system revolutionises the local area network concept.
This system, using the modulation capabilities of its components, allows dividing the workload across all units in the local area network.

Compared to the Duty Stand-by (n+1 o n+n) redundancy system, where the backup units were stopped waiting for a problem to arise, **the SMARTNET system allows to maintain the units connected on the network always active** with various advantages:
— greater efficiency of the units with partial loads;
— optimal air distribution, eliminating the risk of environment hotspots;
— internal system redundancy,

DUTY / STAND-BY



SMARTNET



TECHNICAL DATA

PXO: upwards airflow - direct expansion with air or water condensation

		PXO 071	PXO 141	PXO 211	PXO 251	PXO 321	PXO 322	PXO 361	PXO 422	PXO 461	PXO 512	PXO 662	PXO 852	PXO 932
Cooling performances (1)														
Total cooling capacity	kW	8,2	14,7	21,0	27,4	35,2	33,8	38,1	43,7	48,1	57,8	67,3	84,4	94,9
Sensible cooling capacity	kW	7,9	12,9	21,0	25,7	35,2	33,8	38,1	43,7	46,8	53,6	66,2	73,7	86,3
EER (2)	W/W	3,83	3,40	3,30	3,14	3,13	3,34	3,57	3,47	3,63	3,34	3,26	3,27	3,64
Fans														
Type	type	Plug-fan EC inverter												
Air flow rate	m^3/h	2200	3200	7000	7000	12000	12000	14000	14000	14000	14000	18000	18000	21000
Refrigerant circuit														
Number	no.	1	1	1	1	1	2	1	2	1	2	2	2	2
Sound data														
Sound pressure (3)	dB(A)	51	59	56	57	67	67	58	58	58	59	61	61	61
Possible configurations														
Free Cooling		-	-	-	-	Yes	-	-	-	Yes	-	Yes	Yes	-
Two Sources		-	-	Yes	-	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes
Electric data														
Power supply		400V ~ 3N 50Hz												

(1) Condensation temperature 45 °C; incoming air 24 °C / 45 % u.r.; external static pressure: 30Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
(2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).
(3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

PWO: upwards airflow - with chilled water

		PWO 10	PWO 20	PWO 30	PWO 50	PWO 60	PWO 70	PWO 80	PWO 110	PWO 160	PWO 220
Cooling performances (1)											
Total cooling capacity	kW	9,9	17,2	30,0	41,0	52,8	63,1	65,5	80,0	110,0	160,0
Sensible cooling capacity	kW	9,3	14,9	27,8	36,2	47,4	54,2	61,8	73,0	99,7	146,0
EER (2)	W/W	38,26	29,13	30,00	24,54	22,75	24,17	24,79	24,17	29,33	21,17
Fans											
Type	type	Plug-fan EC inverter									
Air flow rate	m^3/h	2200	3200	7000	8000	12000	12000	16000	18000	24000	36000
Refrigerant circuit											
Number	no.	1	1	1	1	1	1	1	1	1	1
Sound data											
Sound pressure (3)	dB(A)	51	59	56	60	67	68	61	62	62	65
Possible configurations											
Free Cooling		-	-	-	-	-	-	-	-	-	-
Two Sources		-	-	-	Yes	-	-	-	Yes	Yes	-
Electric data											
Power supply		400V ~ 3N 50Hz									

(1) Incoming air 24 °C / 45 % r.h.; water 7 °C / 12 °C; external static pressure: 30 Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
(2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).
(3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

PXU: downwards airflow - direct expansion with air or water condensation

		PXU 071	PXU 141	PXU 211	PXU 251	PXU 321	PXU 322	PXU 361	PXU 422	PXU 461	PXU 512	PXU 662	PXU 852	PXU 932
Cooling performances (1)														
Total cooling capacity	kW	8,2	14,7	21,0	27,4	35,2	33,8	38,1	43,7	48,1	57,8	67,3	84,4	94,9
Sensible cooling capacity	kW	7,9	12,9	21,0	25,7	35,2	33,8	38,1	43,7	46,8	53,6	66,2	73,7	86,3
EER (2)	W/W	3,74	3,29	3,24	3,10	3,09	3,29	3,50	3,41	3,57	3,30	3,15	3,18	3,59
Fans														
Type	type	Plug-fan EC inverter												
Air flow rate	m^3/h	2200	3200	7000	7000	12000	12000	14000	14000	14000	14000	18000	18000	21000
Refrigerant circuit														
Number	no.	1	1	1	1	1	2	1	2	1	2	2	2	2
Sound data														
Sound pressure (3)	dB(A)	51	57	62	62	67	68	59	59	59	59	63	63	62
Possible configurations														
Free Cooling		-	-	-	-	Yes	-	-	-	Yes	-	Yes	Yes	-
Two Sources		-	-	Yes	-	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes
Electric data														
Power supply		400V ~ 3N 50Hz												

(1) Condensation temperature 45 °C; incoming air 24 °C / 45 % u.r.; external static pressure: 30Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
(2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).
(3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

PWU: downwards airflow - with chilled water

		PWU 10	PWU 20	PWU 30	PWU 50	PWU 60	PWU 70	PWU 80	PWU 110	PWU 160	PWU 220
Cooling performances (1)											
Total cooling capacity	kW	9,9	17,2	30,0	41,0	52,8	63,1	65,4	80,0	110,0	160,0
Sensible cooling capacity	kW	9,3	14,9	27,8	36,2	47,4	54,2	61,8	73,0	99,7	146,0
EER (2)	W/W	32,09	23,54	27,03	20,91	21,28	22,77	23,21	19,80	24,39	19,80
Fans											
Type	type	Plug-fan EC inverter									
Air flow rate	m^3/h	2200	3200	7400	8200	12000	12000	16000	18000	24000	36000
Refrigerant circuit											
Number	no.	1	1	1	1	1	1	1	1	1	1
Sound data											
Sound pressure (3)	dB(A)	51	60	57	62	68	68	62	63	63	66
Possible configurations											
Free Cooling		-	-	-	-	-	-	-	-	-	-
Two Sources		-	-	-	Yes	-	-	-	Yes	Yes	-
Electric data											
Power supply		400V ~ 3N 50Hz									

(1) Incoming air 24 °C / 45 % r.h.; water 7 °C / 12 °C; external static pressure: 30 Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
(2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).
(3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

UPWARDS FLOW CONFIGURATIONS

Standard version with frontal air intake and upwards ˜o w.

Version with front air intake and frontal air ˜o w with distribution plenum with grid.

Version with air intake from the bottom, stand for raised ˜oor , blind front panel and up˜o w air supply.

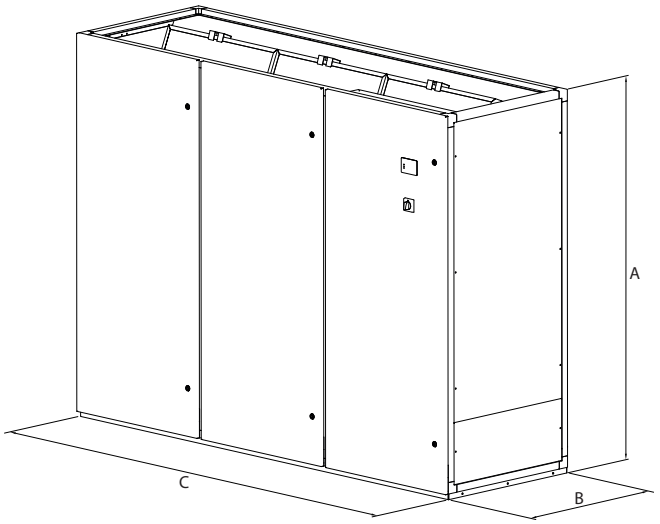
DOWNWARDS FLOW CONFIGURATIONS

Standard version with upwards suction and downwards air˜o w, with sub-base for raised ˜ooring .

Version with upwards suction with frontal air ˜o w with grilled plenum distribution.

Version with upwards suction with frontal air ˜o w with grilled front panel.

DIMENSIONS



		PXO 071	PXO 141	PXO 211	PXO 251	PXO 321	PXO 322	PXO 361	PXO 422	PXO 461	PXO 512	PXO 662	PXO 852	PXO 932
Dimensions and weights														
A	mm	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990
B	mm	600	600	880	880	850	850	880	880	880	880	880	880	880
C	mm	750	750	860	860	1410	1410	1750	1750	1750	1750	2300	2300	2640
Empty weight	kg	180	210	270	270	365	390	440	450	450	500	640	660	860

		PWO 10	PWO 20	PWO 30	PWO 50	PWO 60	PWO 70	PWO 80	PWO 110	PWO 160	PWO 220
Dimensions and weights											
A	mm	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990
B	mm	600	600	880	880	850	850	880	880	880	880
C	mm	750	750	860	860	1410	1410	1750	1750	2640	3495
Empty weight	kg	155	160	220	240	240	260	340	360	540	700

		PXU 071	PXU 141	PXU 211	PXU 251	PXU 321	PXU 322	PXU 361	PXU 422	PXU 461	PXU 512	PXU 662	PXU 852	PXU 932
Dimensions and weights														
A	mm	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990
B	mm	600	600	880	880	850	850	880	880	880	880	880	880	880
C	mm	750	750	860	860	1410	1410	1750	1750	1750	1750	2300	2300	2640
Empty weight	kg	180	210	270	270	365	390	440	450	450	500	640	660	860

		PWU 10	PWU 20	PWU 30	PWU 50	PWU 60	PWU 70	PWU 80	PWU 110	PWU 160	PWU 220
Dimensions and weights											
A	mm	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990
B	mm	600	600	880	880	850	850	880	880	880	880
C	mm	750	750	860	860	1410	1410	1750	1750	2640	3495
Empty weight	kg	155	160	220	240	240	260	340	360	540	700

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G 070-1342

Precision Air Conditioners

Cooling capacity 50 ÷ 222 kW

- **Separate ventilating section for installation under raised floor**
- **Reduced energy consumption of fans**
- **High ratio between supplied cooling capacity and footprint**
- **Optimised distribution of air in the raised floor**

Last generation control panel

DESCRIPTION

Precision air conditioners of the series **G** their construction and operating features are suitable to meet the design criteria of last generation Data Centers.

CONFIGURATIONS

GXU: downwards flow air conditioners with direct expansion with air or water condensation.
GWU: downwards flow air conditioners with chilled water.
For the configuration **W** there is also the version **XH (Extra Height)**. By increasing the height, performance can be enhanced thanks to the larger coil.

FEATURES

Precision air conditioners of the series **G** they are designed for air-conditioning of utility rooms for high power density applications.
In these applications, the structures are characterised by technical floors as high as 1000 mm, creating ample space below to house the flow fans.
The fans are supplied inside a sub-base supplied separately, without increasing the size of the unit, thus optimising the available space with considerable advantages:

— The enlarged coils with ample heat exchange surface enhance performance with less energy consumption.
— Greater filtering surface reducing pressure drops so that less maintenance is needed as they get less dirty.
— Horizontal flow of fans in sub-base with lower pressure drops.

STRUCTURE

The structure consists of a steel frame painted with dark grey epoxy powders (RAL7024) guaranteeing a durable finish. Acoustic insulation self-extinguishing panels covered with anti-friction film.
The ventilating sub-base is supplied separately and must be electrically connected at the worksite or on-site.

FANS

Centrifugal fans with backward curved blades (plug fans) with EC motor directly coupled to the electronic control to minimize power consumption and noise emissions.

FILTERS

Corrugated baffle filters, not regenerable, self-extinguishing, G4 efficiency class (according to EN 779).
Differential pressure switch (STANDARD) for dirty filter alarm.
The control of filter dirt conditions via Modbus is available as an option.

ELECTRONIC CONTROLLER

The evolved electronic adjustment maximises energy saving and optimizes all operating modes of the units, both direct expansion and chilled water.

— The controller allows to supervise all main components of the unit, with more than 50 different variables that guarantee real time monitoring of all operating cycles.
— The units have a standard RS485 Modbus board, BACnet, LonWorks and SNMP are available as options, for a simple and quick interface with BMS (Building Management System) supervising systems.
— View of all operating parameters in 8 languages.

CHILLED WATER COILS

Only for W configurations
Large surface coils, positioned in such a way as to optimise airflow and heat transfer, made of copper tubes with aluminium louvers mechanically merged, fitted with 2-way modulating valve (3-way is also available in the selection process).

COMPRESSORS

Only for X configurations
High efficiency scroll compressor with low power consumption.
These units in the direct expansion configurations work with R410A refrigerant, which does not damage the ozone layer.
The dual circuit configuration controls the power output thanks to electronic adjustment that automatically manages the compressors activation depending on the load request.
Electronic expansion valve standard on all sizes.

ACCESSORIES

Direct expansion
— DC brushless compressors with inverter control
— Electric power supply line for remote condenser
— Electric power supply line with speed adjustment for remote condenser
— Condenser adjustment with 0-10V signal for remote condenser with EC fans
— Water condenser
— Condensate adjustment pressure valve
— "LAC" (Low Ambient Control) valve has the function of bypassing the condenser, injecting warm gas in the liquid piping, to maintain the refrigerant pressure stable. Use is recommended in very cold climates, in case of inverter compressors and in case of oversized condensers with respect to the real necessities of the units.

Chilled water
— Three-way modulating valves
— Inlet and outlet water temperature probes
— "Power Valve" kit: automatic adjustment and balancing valve of the water circuit, which allows to guarantee a constant water flow rate and monitor the efficiency of the unit in real time.

Heating
— Low thermal inertia electric batteries with differentiated stages regulation

Humidification
— Room humidity probe
— Flow humidity probe
— Submerged electrodes humidifier (also available with low conductivity cylinder)

Water presence detection
— Available as punctual probe or fabric belt (length 5 m) Allows to have an alarm in case water presence,even partial, is detected.

Mechanicals and structural
— Condensate discharge pump
— Condensation and humidifier drain pump
— Motorised damper on suction
— M5 (EU5) efficiency air filter on air supply
— Ventilated plenum with panelling for front or rear flow
— Ventilated plenum with panelling for downflow (installation above raised floor)
— Panels with "sandwich" counter-panels (available on request on some models only)
— Panels with increased soundproof upholstery (available on request on some models only)

Electrical
— The unit has a standard power supply 400V ~ 3N 50Hz. The following voltages are available as an alternative: 400V ~ 3N 60Hz, 460V ~ 3 60Hz, 380V ~ 3N 60Hz
— Electric power supply line without neutral
— "Basic" version automatic transfer switch (ATS)
— Advanced" version automatic transfer switch (ATS)

Regulation
— Constant flow rate ventilation adjustment
— Constant pressure ventilation adjustment
— Local area network configuration and cable
— User terminal for remote installation

■ *For further details refer to the technical documentation or to the selection program.*

SMARTNET

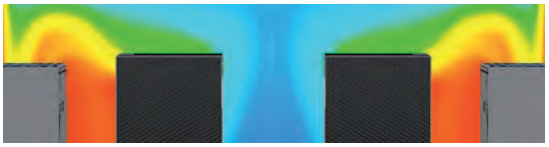
The innovative **SMARTNET** system revolutionises the local area network concept.
This system, using the modulation capabilities of its components, allows dividing the workload across all units in the local area network.
Compared to the Duty Stand-by (n+1 o n+n) redundancy system, where the backup units were stopped waiting for a problem to arise, **the SMARTNET system allows to maintain the units connected on the network always active** with various advantages:
— greater efficiency of the units with partial loads;
— optimal air distribution, eliminating the risk of environment hotspots;
— internal system redundancy,

DUTY / STAND-BY

On 100% **On 100%** **Stand by**

SMARTNET

On 66% **On 66%** **On 66%**



TECHNICAL DATA

GXU: downwards airflow - direct expansion with air or water condensation

		GXU 932	GXU 1342
Cooling performances (1)			
Total cooling capacity	kW	91,2	130,5
Sensible cooling capacity	kW	77,5	121,2
EER (2)	W/W	3,70	3,81
Fans			
Type	type	Plug-fan EC inverter	
Air flow rate	m^3/h	18000	31500
Refrigerant circuit			
Number	no.	2	2
Sound data			
Sound pressure (3)	dB(A)	56	61
Electric data			
Power supply		400V ~ 3N 50Hz	

(1) Condensation temperature 45 °C; incoming air 24 °C / 45 % u.r.; external static pressure: 30Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
(2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).
(3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

GWU: downwards airflow - with chilled water

		GWU 070	GWU 150	GWU 230	GWU 300
Cooling performances (1)					
Total cooling capacity	kW	58,6	96,4	143,6	208,8
Sensible cooling capacity	kW	49,0	79,4	118,0	184,3
EER (2)	W/W	31,83	46,92	62,41	33,68
Fans					
Type	type		Plug-fan EC inverter		
Air flow rate	m^3/h	11000	17600	25800	45200
Refrigerant circuit					
Number	no.	2	2	2	2
Sound data					
Sound pressure (3)	dB(A)	58	55	56	62
Electric data					
Power supply			400V ~ 3N 50Hz		

(1) Incoming air 24 °C / 45 % r.h.; water 7 °C / 12 °C; external static pressure: 30 Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
(2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).
(3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

		GWU 150 XH	GWU 230 XH
Cooling performances (1)			
Total cooling capacity	kW	113,2	222,9
Sensible cooling capacity	kW	93,1	178,2
EER (2)	W/W	55,78	79,32
Fans			
Type	type	Plug-fan EC inverter	
Air flow rate	m^3/h	20400	36000
Refrigerant circuit			
Number	no.	2	2
Sound data			
Sound pressure (3)	dB(A)	57	63
Electric data			
Power supply		400V ~ 3N 50Hz	

(1) Incoming air 24 °C / 45 % r.h.; water 7 °C / 12 °C; external static pressure: 30 Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
(2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).
(3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

DOWNWARDS FLOW CONFIGURATIONS

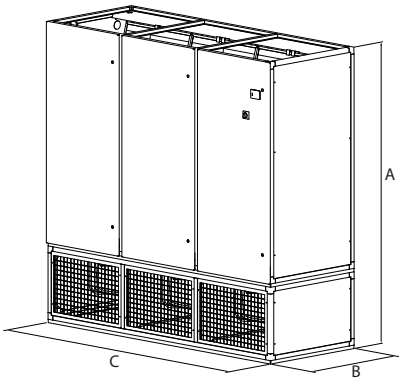
Standard execution for perimeter installation inside Data Centres: the height of the raised ˜ooring must be minimum 550 mm.

Execution for perimeter installation inside Data Centre. In this case, the sub-base side closure panels must be installed above the ˜ooring . It is in any case essential to make sure that the height of the ceiling allows good air intake.

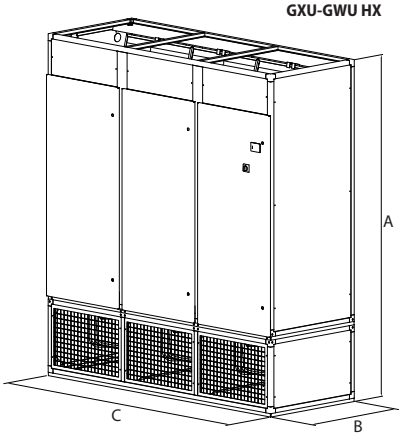
Execution for installation outside Data Centre, without raised ˜ooring and rear delivery. In this case, the sub-base side closure panels and rear delivery grilles. Installation of the plenum with the rear return system is optional, if there is no channelling system.

DIMENSIONS

GXU-GWU



GXU-GWU HX



		GXU 932	GXU 1342
Dimensions and weights			
A	mm	1990	1990
B	mm	921	921
C	mm	2390	3290
Empty weight	kg	870	1000

		GWU 070	GWU 150	GWU 150 XH	GWU 230	GWU 230 XH	GWU 300
Dimensions and weights							
A	mm	1990	1990	2350	1990	2350	1990
B	mm	921	921	1050	921	1050	921
C	mm	1320	1840	1840	2740	2740	4020
Empty weight	kg	610	750	640	930	950	1250

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R 20-361

Precision Air Conditioners

Cooling capacity 10 ÷ 37 kW

- **"In row" installation between the server lines**
- **Horizontal air flow to offer an effective localised cooling**
- **Rear and front accessibility for simplified maintenance**
- **Front and side air flow**

Last generation control panel

DESCRIPTION

Precision air conditioners of the R **Series** have construction features and sizes so that they can be installed next to the servers of the Data Center.

CONFIGURATIONS

RXA: air conditioners with delivery downwards and direct expansion with air or water condensation.
RXU: air conditioners with air delivery horizontal with cooled water.
Both configurations are available in compact version with reduced depth.

FEATURES

Precision air conditioners in the **R** series are designed and built to have the same dimensions as the racks, rear intake from the warm corridor and front delivery towards the cold corridor.

Two Sources

The Twin Sources system ensures cooling continuity in case of unavailability, for whatever reason, of the primary source: overhead, maintenance, night or seasonal stop or stop for any emergency.
This system includes the assembly inside the air conditioner of a second cooling source, complete with its regulation and completely independent from the primary one.
They only share the aluminium finned pack, allowing both a high thermal exchange efficiency.

Free Cooling

This system employs external air, a renewable energy source, for cooling the Free Cooling water circuit by an external dry cooler.
The Free Cooling circuit works in place of, or along, the mechanical cooling with direct expansion.

STRUCTURE

The structure consists of a steel frame painted with dark grey epoxy powders (RAL7024) guaranteeing a durable finish. Acoustic insulation self-extinguishing panels covered with anti-friction film.

FANS

Centrifugal fans with backward curved blades (plug fans) with EC motor directly coupled to the electronic control to minimize power consumption and noise emissions.

FILTERS

Corrugated baffle filters, not regenerable, self-extinguishing, G4 efficiency class (according to EN 779).
Differential pressure switch (STANDARD) for dirty filter alarm.
The control of filter dirt conditions via Modbus is available as an option.

ELECTRONIC CONTROLLER

The evolved electronic adjustment maximises energy saving and optimizes all operating modes of the units, both direct expansion and chilled water.

— The controller allows to supervise all main components of the unit, with more than 50 different variables that guarantee real time monitoring of all operating cycles.
— The units have a standard RS485 Modbus board, BACnet, LonWorks and SNMP are available as options, for a simple and quick interface with BMS (Building Management System) supervising systems.
— View of all operating parameters in 8 languages.

CHILLED WATER COILS

Only for U configurations.
Large surface batteries, positioned in such a way as to optimise airflow and heat transfer, made of refrigerating quality copper tubes with aluminium louvers mechanically merged, fitted with motorised 3way valve (2way is also available in the selection process).

COMPRESSORS

Only for A configurations
Single circuit configurations with DC brushless compressor with inverter, which allows to optimise the provided power guaranteeing a low electrical absorption.
These units work with R410A refrigerant, which does not damage the ozone layer.
Electronic expansion valve standard on all sizes.

ACCESSORIES

Direct expansion
— Electric power supply line for remote condenser
— Electric power supply line with speed adjustment for remote condenser
— Condenser adjustment with 0-10V signal for remote condenser with EC fans
— Water condenser
— Condensate adjustment pressure valve
— "LAC" (Low Ambient Control) valve has the function of bypassing the condenser, injecting warm gas in the liquid piping, to maintain the refrigerant pressure stable. Use is recommended in very cold climates, in case of inverter compressors and in case of oversized condensers with respect to the real necessities of the units.

Chilled water
— Two ways modulating valves
— Inlet and outlet water temperature probes
— "Power Valve" kit: automatic adjustment and balancing valve of the water circuit, which allows to guarantee a constant water flow rate and monitor the efficiency of the unit in real time.

Heating
— Single stage electric coils with low thermal inertia.

Humidification
— Room humidity probe
— Flow humidity probe
— Submerged electrodes humidifier (also available with low conductivity cylinder)

Water presence detection
— Available as punctual probe or fabric belt (length 5 m) Allows to have an alarm in case water presence,even partial, is detected.

Mechanicals and structural
— Condensate discharge pump
— M5 (EU5) efficiency air filter on air supply
— Closed front panel for side flow
— Closed side panels for front flow
— Wheels for movement

Electrical
— The unit has a standard power supply 400V ~ 3N 50Hz. The following voltages are available as an alternative: 400V ~ 3N 60Hz, 230V ~ 3 60Hz, 380V ~ 3N 60Hz
— Electric power supply line without neutral
— "Basic" version automatic transfer switch (ATS)
— Advanced" version automatic transfer switch (ATS)

Regulation
— Constant flow rate ventilation adjustment
— Constant pressure ventilation adjustment
— Local area network configuration and cable
— User terminal for remote installation

■ *For further details refer to the technical documentation or to the selection program.*

SMARTNET

The innovative **SMARTNET** system revolutionises the local area network concept.
This system, using the modulation capabilities of its components, allows dividing the workload across all units in the local area network.
Compared to the Duty Stand-by (n+1 o n+n) redundancy system, where the backup units were stopped waiting for a problem to arise, **the SMARTNET system allows to maintain the units connected on the network always active** with various advantages:
— greater efficiency of the units with partial loads;
— optimal air distribution, eliminating the risk of environment hotspots;
— internal system redundancy,

DUTY / STAND-BY

SMARTNET

TECHNICAL DATA

RXA: horizontal air delivery - direct expansion with air or water condensation

		RXA 121	RXA 201	RXA 231	RXA 361
Cooling performances (1)					
Total cooling capacity	kW	9,6	19,3	20,8	32,5
Sensible cooling capacity	kW	9,6	15,1	17,2	26,3
EER (2)	W/W	3,14	3,09	3,36	3,43
Fans					
Type	type	Plug-fan EC inverter			
Air flow rate	m^3/h	3200	3600	6000	6600
Refrigerant circuit					
Number	no.	1	1	1	1
Sound data					
Sound pressure (3)	dB(A)	51	54	54	57
Possible configurations					
Free Cooling		-	-	Yes	-
Two Sources		-	-	Yes	-
Electric data					
Power supply		400V ~ 3N 50Hz			

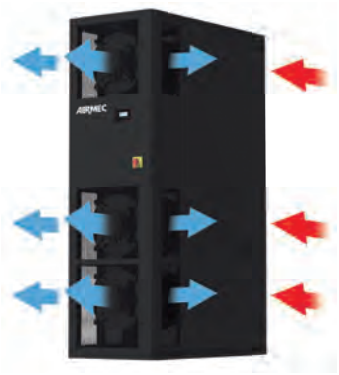
(1) Condensation temperature 45 °C; incoming air 24 °C / 45 % u.r.; external static pressure: 30Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
(2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).
(3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

RXU: horizontal air delivery - cooled water

		RXU 20	RXU 40
Cooling performances (1)			
Total cooling capacity	kW	24,9	37,8
Sensible cooling capacity	kW	22,2	33,9
EER (2)	W/W	22,81	27,78
Fans			
Type	type	Plug-fan EC inverter	
Air flow rate	m^3/h	5600	9000
Refrigerant circuit			
Number	no.	1	1
Sound data			
Sound pressure (3)	dB(A)	54	62
Possible configurations			
Free Cooling		-	-
Two Sources		-	Yes
Electric data			
Power supply		400V ~ 3N 50Hz	

(1) Incoming air 24 °C / 45 % r.h.; water 7 °C / 12 °C; external static pressure: 30 Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
(2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).
(3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

HORIZONTAL FLOW CONFIGURATIONS



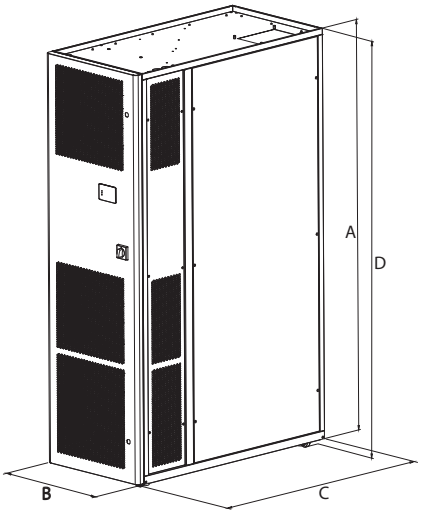
Standard execution
for "In-row" installation
with front and side air delivery
(RXA 121-201, RXU 20).

Execution for "In-row" installation
with only front air delivery
(RXA 231-361, RXU 40).

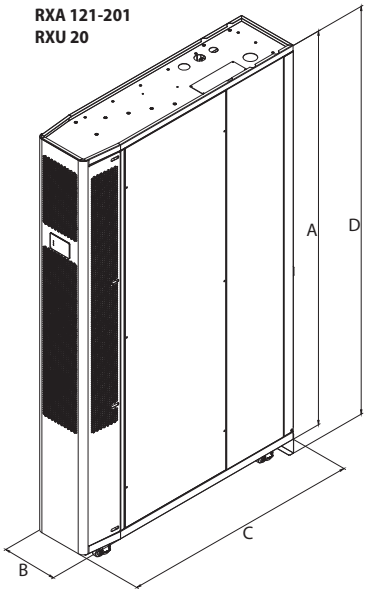
Execution for "In-row" installation
with only side air delivery
(RXA 231-361, RXU 40).

DIMENSIONS

RXA 231-361
RXU 40



RXA 121-201
RXU 20



		RXA 121	RXA 201	RXA 231	RXA 361
Dimensions and weights					
A	mm	1975	1975	1985	1985
B	mm	300	300	600	600
C	mm	1200	1200	1222	1222
D	mm	2045	2045	2015	2015
Empty weight	kg	200	215	215	215

		RXU 20	RXU 40
Dimensions and weights			
A	mm	1975	1985
B	mm	300	600
C	mm	1200	1222
D	mm	2045	2015
Empty weight	kg	120	190

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ROOM AIR CONDITIONERS

A complete range of units designed to meet all climate control requirements:
Aermec the answer to air conditioning.
A vast choice not only in terms of models but also alternatives and possibilities: state-of-the-art technology such as the inverter that optimises performance at all times according to the set temperature to achieve maximum energy saving; versatile installation options to solve all problems of space.
Quality design and materials, cooling and heating power suited to cover all requirements both in the residential and commercial sector, exclusive elegant design complete the range features, ranking Aermec among the leaders on the market.

ROOM AIR CONDITIONERS

			Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Monobloc					
	FK	Monobloc window	-	2,7-3,6	-	912
	CMP (COMPACT)	Monobloc without outdoor unit	-	2,35	2,36	915
new	**PST**	Portable air conditioner	-	3,5	2,9	918
	Monosplit					
	SPG	Monosplit	-	2,5-6,2	2,8-6,5	921
	SGE	Monosplit	-	2,8-5,9	2,9-6,0	926
	SCG_1	Monosplit	-	7,2-12,5	7,9-14,5	930
	CKG	Monosplit	-	2,7-6,6	2,9-6,8	934
	LPG	Monosplit	-	3,5-16,0	4,0-17,0	940
	MVAS	Monosplit high head duct	-	22,4-28,0	24,0-30,0	949
	Multisplit					
	MPG	Multisplit	-	4,1-12,1	4,4-13,0	952
	MGE	Multisplit		4,1-7,9	4,4-8,2	969
new	**MGEHW**	Multisplit	-	7,91	8,21	979

FK

Monobloc window

Cooling capacity 2,7 ÷ 3,6 kW

- **New R32 ecological refrigerant gas.**
- **Flush-mounting installation on the window.**
- **Plug & Play.**

A

DESCRIPTION

The packed air-conditioners of the FK range, for flush-mounting window installation, are ideal for use in commercial contexts such as shops, hotels, offices, laboratories and prefabricated garages.

FEATURES



Inner and outer side

— Remote control and holder standard supply with each unit.
— Fans with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Clean filter signal function.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— Inner side 3-speed fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Sleep** night time function well-being program.
— DC inverter rotary compressor.

General features

— New R32 ecological refrigerant gas with low GWP.
— Monobloc **Plug & Play** unit equipped with power supply with schuko plug.
— Operating mode: cooling, dehumidification and fan only.
— Condensate discharge tub included.
— Particularly quiet operation.
— Microproccessor control.
— Auto-restart function.
— Self-diagnosis function.

INSTALLATION TYPE

PERFORMANCE SPECIFICATIONS

		FK260	FK360
Nominal cooling performances			
Cooling capacity (1)	kW	2,70	3,65
Cooling input power (1)	kW	0,78	1,03
EER (2)	W/W	3,45	3,54
Moisture removed	l/h	1,0	1,6
Maximum cooling performances			
Cooling input current	A	3,5	4,6
Seasonal efficiency			
SEER	W/W	5,20	5,40
Efficiency energy class (3)		A	A
Pdesignc	kW	2,7	3,7
Annual power consumption	kWh/annum	182	240

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.

GENERAL DATA

		FK260	FK360
Electric data			
Rated power input (1)	kW	1,10	1,30
Rated current input (1)	A	5,5	6,5
Power supply			
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

INNER SIDE

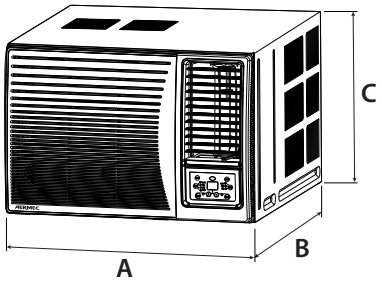
		FK260	FK360
Inner side			
Type of fan	Type	Inverter centrifugal	Inverter centrifugal
Inner side air flow rate			
Maximum	m^3/h	400	480
Average	m^3/h	360	430
Minimum	m^3/h	320	380
Inner side sound pressure			
Maximum	dB(A)	50,0	50,0
Average	dB(A)	48,0	48,0
Minimum	dB(A)	46,0	46,0
Inner side sound power			
Maximum	dB(A)	59,0	59,0
Average	dB(A)	57,0	57,0
Minimum	dB(A)	55,0	55,0

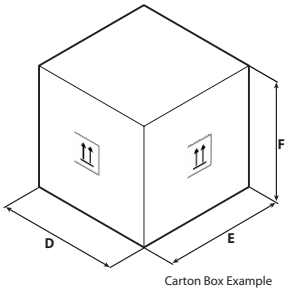
OUTER SIDE

		FK260	FK360
Outer side			
Type of fan	Type	Inverter axial	Inverter axial
Outer side air flow rate			
Maximum	m^3/h	800	1200
Outer side sound power			
Maximum	dB(A)	65,0	65,0
Average	dB(A)	63,0	63,0
Minimum	dB(A)	61,0	61,0
Outer side sound pressure			
Maximum	dB(A)	56,0	56,0
Average	dB(A)	54,0	54,0
Minimum	dB(A)	52,0	52,0
Compressor			
Type	type	Inverter rotary	Inverter rotary
Compressor			
Refrigerant	type	R32	R32
Refrigerant charge (1)	kg	0,5	0,6
Compressor			
Potential global heating	GWP	675kgCO_2eq	675kgCO_2eq
Equivalent CO_2	t	0,34	0,43
Outer side			
Protection rating		IPX4	IPX4

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DIMENSIONS AND WEIGHTS





Carton Box Example

		FK260	FK360
Dimensions and weights			
A	mm	560	660
B	mm	710	700
C	mm	375	428
D	mm	623	739
E	mm	806	793
F	mm	425	505
Net weight	kg	43,0	50,0
Weight for transport	kg	47,0	54,0

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CMP

Monobloc without outdoor unit

Cooling capacity 2,35 kW
Heating capacity 2,36 kW

- **Two holes, no outdoor units.**
- **Modern design to blend with all furnishing styles.**
- **Extremely thin, with a depth of just 165 mm.**

DESCRIPTION

The air-conditioners of the CMP range are of the single-block type and are ideal for heating, cooling, dehumidification or ventilation only, whether in the home or the office.
The absence of an outdoor unit permits installation in all those cases where architectural restraints prevent the positioning of a split air-conditioner.
The unit boasts a compressor and a fan with inverter technology.

FEATURES

Unit

Indoor unit designed for installation on internal walls.
— No need for an outdoor unit just make two 162 mm holes in the outer wall so the air-conditioner can exchange heat with the external environment.
— Folding grilles included.
— On-board control panel with display and soft-touch keys.
— Included remote control.
Cooling operation with outside temperatures up to 35 °C.
Heating operation with outdoor temperatures down to 7 °C.

Folding grilles

With two folding grilles which, activated by the inlet and outlet air, open when the machine is working and close when the machine is switched off. In this way they guarantee enhanced indoor comfort, less dust, noise and pollution, reduced maintenance and are even less visible from the outside.

Control panel

The on-board control panel with display and soft-touch keys allows you to set the required temperature set-point easily and accurately.

The "heating" function is deactivated by a simple intervention on the control panel: the device then works in "cooling only" mode, without requiring the condensate discharge tube.
The air delivery fin is easily orientated by means of the relative key.

Remote control

Handy remote control that's not too bulky.
Fitted with a practical magnet so it can be fixed to the unit.
All the control panel functions are available via the remote control too.

GENERAL FEATURES

— Condensate drip tray constantly pre-heated in the winter during heat pump operation, without any risk of the water freezing.
— Operating mode: cooling, dehumidification and fan only.
— Particularly quiet operation.
— Microproccessor control.

ACCESSORIES AS STANDARD

— Condensate drip.
— Two folding grilles.
— Remote control.

PERFORMANCE SPECIFICATIONS

		CMP23I
Nominal cooling performances		
Cooling capacity (1)	kW	2,35
Cooling input power (1)	kW	0,73
EER (2)	W/W	3,22
Maximum cooling performances		
Cooling capacity	kW	3,10
Nominal cooling performances		
Moisture removed	l/h	1,1
Seasonal efficiency		
Efficiency energy class (3)		A+
Annual power consumption	kWh/annum	425
Nominal heating performances		
Heating capacity (4)	kW	2,36
Heating input power (4)	kW	0,72
COP (2)	W/W	3,28
Maximum heating performances		
Heating capacity	kW	3,05
Seasonal efficiency (temperate climate)		
Efficiency energy class (3)		A

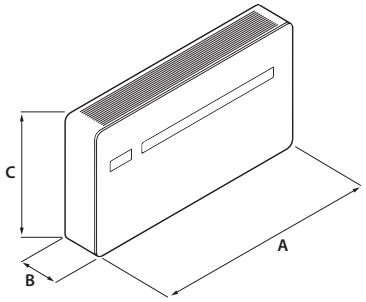
(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

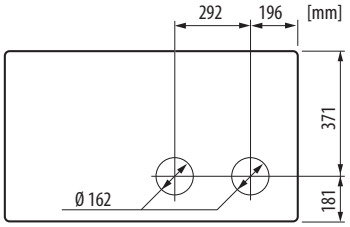
GENERAL DATA

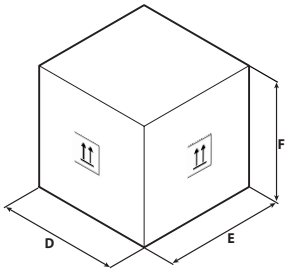
		CMP23I
Fan		
Type	type	Inverter centrifugal
Number	no.	1
Inner side air flow rate		
Maximum	m^3/h	400
Average	m^3/h	320
Minimum	m^3/h	270
Outer side air flow rate		
Maximum	m^3/h	480
Average	m^3/h	390
Minimum	m^3/h	340
Compressor		
Number	no.	1
Refrigerant	type	R410A
Refrigerant charge (1)	kg	0,6
Potential global heating	GWP	2088kgCO_2eq
Sound data calculated in cooling mode (2)		
Sound power level	dB(A)	58,0
Sound pressure level (1,5 m)	dB(A)	46,0

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS AND WEIGHTS







Carton Box Example

		CMP23I
Dimensions and weights		
A	mm	1030
B	mm	170
C	mm	555
D	mm	1100
E	mm	260
F	mm	660
Net weight	kg	48,0
Weight for transport	kg	49,0

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PST

Portable air conditioner

Cooling capacity 3,5 kW
Heating capacity 2,9 kW

- **New R290 natural refrigerant gas.**
- **Reversible heat pump.**
- **Standard Wi-Fi control.**
- **Compact, manoeuvrable and silent.**
- **Modern design to blend with all furnishing styles.**
- **Special coil with fin golden coating.**

DESCRIPTION

PST portable air conditioner, ideal for heating, cooling, dehumidification or ventilation only both at home and at the office.
Adapts to any kind of decor, thanks to its compact and elegant design; it is mounted on wheels and can be used in multiple rooms, and is easily transportable and installable.
Equipped with a specific tank to collect the moisture removed from the environment during cooling, heating or dehumidification.
The on-board control panel with display, allows to easily and precisely set the desired temperature set-points.

FEATURES



Operation

The cooled, heated and/or dehumidified air exits the front grille and directed vertically by movable louvers.
The air to be treated is drawn through filters from the rear.
The exhausted air is expelled through a hose that is attached by means of a special flange on the rear of the portable air conditioner unit.
The air filters are easy to remove and wash.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

GENERAL FEATURES

Remote control standard supply with each unit.
New R290 natural refrigerant gas.
Operating mode: cooling, heating, dehumidification, automatic and fan only.
Regenerable air filter easy to remove and clean.
Particularly quiet operation.
Timer for programming switch-off and switch-on.
Indoor unit front panel with LED display and indicator lights.
3-speed fan, to meet every possible need.
Auto function for a continuous speed variation.
Sleep night time function well-being program.
followMe function for activating the ambient temperature probe inside the remote control, for improved comfort.
Auto-restart function.

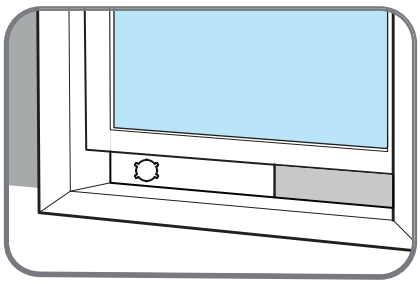
ACCESSORIES AS STANDARD

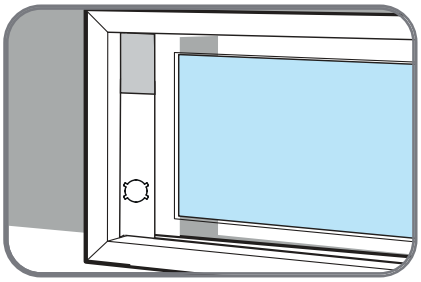
— Air expulsion hose with special joints and collectors.
— Condensate discharge hose, discharge tap and relative fixing accessories.
— Window kit and protection mesh to connect the hot air expulsion hose.
— Cap for the wall and connection for the hot air expulsion hose.
— Remote control.

FLEXIBLE PIPE

		PST350
Flexible pipe		
Minimum length	mm	330
Maximum length	mm	1450
Size (out)	Ø	155

WINDOW KIT





PERFORMANCE SPECIFICATIONS

		PST350
Nominal cooling performances		
Cooling capacity	kW	3,50
Nominal heating performances		
Heating capacity	kW	2,90

Rating data Cooling (EN 14511 e EN 14825) Ambient air temperature 35°C d.b. / 24°C w.b. - Max speed
Rating data Heating (EN 14511 e EN 14825) Ambient air temperature 20°C d.b./ 12°C w.b. - Max speed

GENERAL DATA

		PST350
Electric data		
Rated power input	W	1450
Rated current input	A	8,0
Power supply		
Power supply		220-240V ~ 50Hz
Outer side		
Condensate discharge diameter	mm	13,5
Power supply cable		
Type of power supply cable	Type	3G1,5 mm^2/L= 2,3 m/Schuko plug

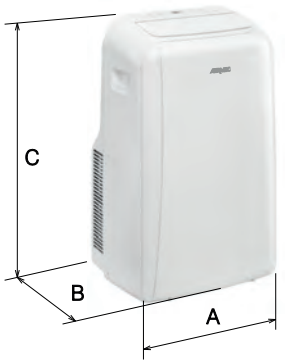
The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN-60335-1 and EN-60335-2-40.

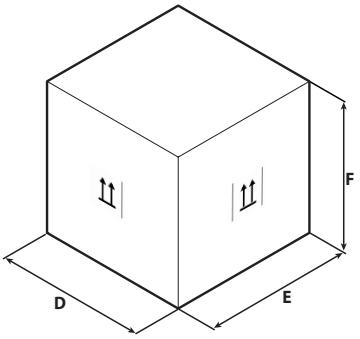
UNIT DATA

		PST350
Compressor		
Type	type	Rotary
Fan		
Type	type	Centrifugal
Air flow rate		
Minimum	m^3/h	355
Average	m^3/h	370
Maximum	m^3/h	420
Sound data		
Sound power level	dB(A)	64,0

Sound Power: measured in reverberation room at a distance of 1,5 - in accordance with EN12102.

DIMENSIONS AND WEIGHTS





Carton Box Example

		PST350
Dimensions and weights		
A	mm	467
B	mm	397
C	mm	765
D	mm	512
E	mm	442
F	mm	880
Net weight	kg	33,2
Weight for transport	kg	37,0

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SPG

Monosplit

Cooling capacity 2,5 ÷ 6,2 kW
Heating capacity 2,8 ÷ 6,5 kW

- **New R32 ecological refrigerant gas.**
- **Wi-fi control using the relative accessory.**
- **Modern design to blend with all furnishing styles.**
- **Special coil with fin blue coating.**
- **Indoor units compatible with multisplit systems.**

DESCRIPTION

The monosplit air conditioners of the SPG range are combined with SPG_W (Wall) indoor units for wall installation.
Universal indoor units: some indoor units can be combined with both multisplit outdoor units of the series MPG and monosplit outdoor units of the series SPG:

Indoor units	SPG_W				
	SPG200W	SPG250W	SPG350W	SPG500W	SPG700W
Monosplit outdoor units SPG		•	•	•	•
Multisplit utdoor units MPG	•	•	•	•	•

The external unit boasts a compressor and a fan with inverter technology.

FEATURES



Indoor unit

Wall indoor unit designed to be installed on indoor walls.
— Every indoor unit comes with a remote control and a remote control holder.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— 3-speed fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.

Outdoor unit

Monosplit air conditioner.
Reversible air/air heat pump with DC inverter technology.
— Compressor and fan with DC inverter technology.

X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.

Smart APP Ewpe

Using the specific **accessory**, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.

Special blue fin coil

Unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

General features

- New R32 ecological refrigerant gas with low GWP.
- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Easy installation and maintenance.

ACCESSORIES

CC2: Centralised control with 7" touchscreen display for managing several indoor units within a number of multisplit systems. The centralised control has an integrated external contact. For more information, refer to the specific documentation. *

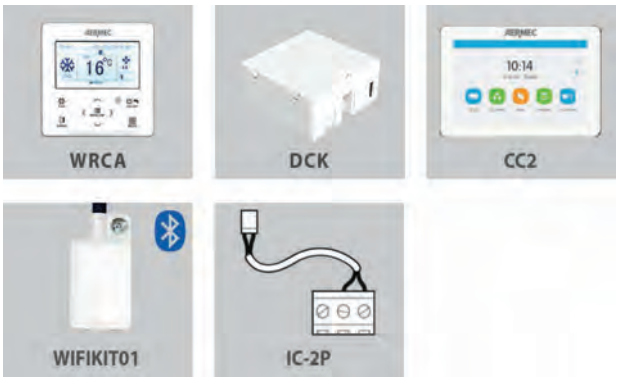
WRCA: Wired panel with liquid crystal display and soft-touch buttons. This accessory can be used to control not only the traditional system functions but also a weekly timer with a maximum of 8 daily time bands.

*** The CC2 centralised control can manage up to 36 SPG system.**

In order to use accessory CC2, for each indoor unit, the WRCA wired panel (accessory) must be installed, with the IC-2P adapter accessory.

DCK: Remote Contact Kit. This accessory allows you to switch the system on and off using an external contact.

WIFIKIT01: Plug & Play module to be installed in the indoor unit for Wi-Fi control, equipped with Bluetooth® connection to ensure a better connection with smart devices. (Cable length 250 mm)



DTG1: Diagnostic tool for indoor and outdoor units of the entire series (tool reserved for service centres or installers).

Accessories compatibility

SPG_W

Accessory	SPG500W	SPG700W
CC2 (1)	•	•
WRCA (1)	•	•

(1) Auto-restart function.

Accessory	SPG500W	SPG700W
IC-2P	•	•

Accessory	SPG200W	SPG250W	SPG350W	SPG500W	SPG700W
DCK				•	•
WIFIKIT01	•	•	•	•	•

PERFORMANCE SPECIFICATIONS

Indoor unit		SPG250W	SPG350W	SPG500W	SPG700W
Outdoor unit		**SPG250**	**SPG350**	**SPG500**	**SPG700**
Indoor unit quantity		**1**	**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**	**1**
Nominal cooling performances					
Cooling capacity (1)	kW	2,50	3,20	4,60	6,20
Cooling input power (1)	kW	0,72	0,99	1,36	1,77
EER (2)	W/W	3,47	3,23	3,39	3,50
Moisture removed	l/h	0,6	1,4	1,8	1,8
Minimum cooling performances					
Cooling capacity	kW	0,50	0,90	1,00	1,60
Cooling input power	kW	0,15	0,22	0,42	0,45
Maximum cooling performances					
Cooling capacity	kW	3,25	3,60	5,30	6,90
Cooling input power	kW	1,30	1,30	1,80	2,20
Cooling input current	A	3,2	4,4	5,9	7,9
Seasonal efficiency					
Annual power consumption	kWh/annum	135	184	251	319
SEER	W/W	6,50	6,10	6,40	6,80
Efficiency energy class (3)		A++	A++	A++	A++
Nominal heating performances					
Heating capacity (4)	kW	2,80	3,40	5,20	6,50
Heating input power (4)	kW	0,75	0,91	1,34	1,65
COP (2)	W/W	3,73	3,71	3,88	3,95
Minimum heating performances					
Heating capacity	kW	0,50	0,90	1,00	1,30
Heating input power	kW	0,14	0,22	0,42	0,45
Maximum heating performances					
Heating capacity	kW	3,50	4,00	5,65	7,91
Heating input power	kW	1,50	1,50	1,90	2,20
Heating input current	A	3,2	4,0	5,8	7,3
Seasonal efficiency (temperate climate)					
Annual power consumption	kWh/annum	875	945	1295	1645
Efficiency energy class (3)		A+	A+	A+	A+
SCOP	W/W	4,00	4,00	4,00	4,00

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

INDOOR UNIT DATA

		SPG250W	SPG350W	SPG500W	SPG700W
Indoor unit					
Type of fan	Type		Inverter centrifugal		
Air flow rate					
Turbo	m^3/h	500	590	850	1100
Maximum	m^3/h	470	520	800	950
Average	m^3/h	390	400	700	750
Minimum	m^3/h	270	320	600	650
Sound power (1)					
Turbo	dB(A)	55,0	56,0	54,0	61,0
Maximum	dB(A)	48,0	49,0	52,0	58,0
Average	dB(A)	44,0	45,0	48,0	52,0
Minimum	dB(A)	34,0	38,0	44,0	49,0
Sound pressure (1 m) (2)					
Turbo	dB(A)	38,0	41,0	44,0	47,0
Maximum	dB(A)	36,0	37,0	42,0	44,0
Average	dB(A)	32,0	33,0	38,0	38,0
Minimum	dB(A)	22,0	26,0	34,0	35,0
Indoor unit					
Condensate discharge diameter	mm	16,0	16,0	16,0	16,0
Power supply					
Indoor unit power supply			220-240V ~ 50Hz		

(1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

OUTDOOR UNIT DATA

		SPG250	SPG350	SPG500	SPG700
Outdoor unit					
Type of fan	Type		Inverter axial		
Air flow rate					
Maximum	m^3/h	1950	1950	1950	2800
Sound power (1)					
Maximum	dB(A)	62,0	64,0	63,0	67,0
Sound pressure (1 m) (2)					
Maximum	dB(A)	51,0	51,0	55,0	58,0
Compressor					
Type	type		Inverter rotary		
Refrigerant	type		R32		
Refrigerant charge	kg	0,50	0,55	0,75	1,30
Potential global heating	GWP		675kgCO_2eq		
Equivalent CO_2	t	0,34	0,37	0,51	0,88
Outdoor unit					
Condensate discharge diameter	mm	16,0	16,0	16,0	16,0

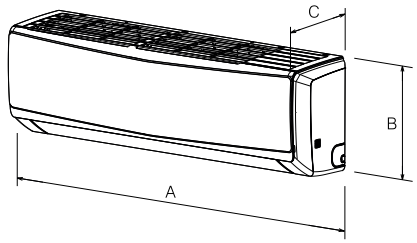
(1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

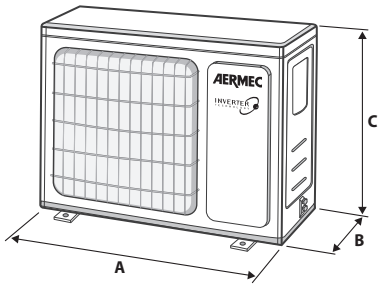
GENERAL DATA

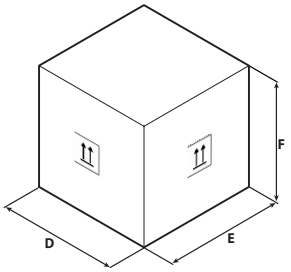
Indoor unit		**SPG250W**	**SPG350W**	**SPG500W**	**SPG700W**
Outdoor unit		**SPG250**	**SPG350**	**SPG500**	**SPG700**
Indoor unit quantity		**1**	**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**	**1**
Electric data					
Rated power input (1)	kW	1,50	1,50	1,90	2,20
Rated current input (1)	A	7,5	7,5	9,0	10,0
Refrigerant lines					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")
Maximum refrigerant tube length	m	15	20	25	25
Maximum refrigerant line level difference	m	10,0	10,0	10,0	10,0
Maximum length of refrigerant lines without addition of refrigerant	m	5	5	5	5
Refrigerant to be added	g/m	16	16	16	16
Power supply					
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
For lines longer than 15m it is necessary to add 5ml of refrigerant oil for every additional 5m of pipe.

DIMENSIONS AND WEIGHTS







Carton Box Example

		SPG250W	SPG350W	SPG500W	SPG700W
Indoor unit					
A	mm	696	770	972	1081
B	mm	251	251	300	325
C	mm	190	190	225	248
D	mm	747	822	1022	1137
E	mm	324	324	374	407
F	mm	262	262	299	334
Net weight	kg	7,5	8,5	13,5	16,5
Weight for transport	kg	9,0	10,0	16,0	19,5

		SPG250	SPG350	SPG500	SPG700
Outdoor unit					
A	mm	732	732	732	873
B	mm	330	330	330	376
C	mm	550	550	555	555
D	mm	792	792	794	951
E	mm	393	393	376	431
F	mm	615	615	615	620
Net weight	kg	25,0	25,0	27,0	37,0
Weight for transport	kg	28,0	28,0	29,0	40,0

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SGE

Monosplit

Cooling capacity 2,8 ÷ 5,9 kW
Heating capacity 2,9 ÷ 6,0 kW

- **New R32 ecological refrigerant gas.**
- **Air Purifiers (Cold Plasma).**
- **Possibility of Wi-Fi control.**
- **Innovative design sleek curved lines.**
- **Special coil with fin golden coating.**

DESCRIPTION

The monosplit air conditioners of the SGE range are combined with SGE_W (Wall) indoor units for wall installation.
The external unit boasts a compressor with inverter technology.

FEATURES

Innovative design

SGE has an elegant and essential design. Its curved lines emphasize a kind of structure with innovative and functional style. The display with working parameters is elegantly integrated in the satin-finish cover and visible only when the unit is on.



Indoor unit

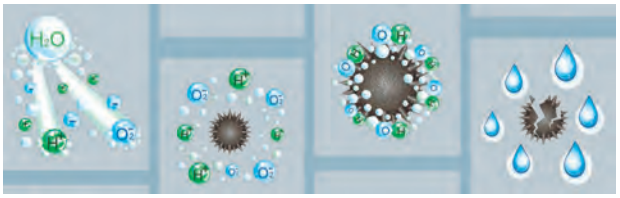
Wall indoor unit designed to be installed on indoor walls.
— Remote control standard supply with each indoor unit.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— 3-speed fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **followMe** function for activating the ambient temperature probe inside the remote control, for improved comfort.

Outdoor unit

Monosplit air conditioner.
Reversible air/air heat pump with DC inverter technology.
Compressor and fan with DC inverter technology.

Air Purifiers (Cold Plasma)

Capable of reducing pollutants breaking down their molecules using electric discharges, causing the splitting of the water molecules in the air into positive and negative ions. These ions neutralise the molecules of the gaseous pollutants obtaining products that are normally present in clean air. The device can eliminate 90% of bacteria. The result is clean, ionised air that has no bad odours.



Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

Nethome Plus app

Using the specific **accessory**, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.

General features

— New R32 ecological refrigerant gas with low GWP.
— Operating mode: cooling, heating, dehumidification, automatic and fan only.
— Particularly quiet operation.
— Microproccessor control.
— Auto-restart function.
— Self-diagnosis function.
— Air filter easily removed and cleaned.
— Easy installation and maintenance.

ACCESSORIES

WIFIKEY: Plug & Play module to be installed in the indoor unit for Wi-Fi control.

Accessories compatibility

Accessory	SGE250W	SGE350W	SGE500W	SGE700W
WIFIKEY	•	•	•	•

PERFORMANCE SPECIFICATIONS

Indoor unit		SGE250W	SGE350W	SGE500W	SGE700W
Outdoor unit		**SGE250**	**SGE350**	**SGE500**	**SGE700**
Indoor unit quantity		**1**	**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**	**1**
Nominal cooling performances					
Cooling capacity (1)	kW	2,77	3,46	5,27	5,86
Cooling input power (1)	kW	0,77	1,06	1,55	1,81
EER (2)	W/W	3,60	3,25	3,40	3,24
Moisture removed	l/h	1,0	1,2	1,8	2,7
Minimum cooling performances					
Cooling capacity	kW	0,91	1,11	3,39	2,08
Cooling input power	kW	0,10	0,13	0,56	0,42
Maximum cooling performances					
Cooling capacity	kW	3,39	4,16	5,83	7,91
Cooling input power	kW	1,24	1,58	2,05	3,15
Cooling input current	A	3,3	4,6	6,7	7,9
Seasonal efficiency					
SEER	W/W	6,30	6,40	7,40	6,80
Efficiency energy class (3)		A++	A++	A++	A++
Annual power consumption	kWh/annum	156	190	247	300
Nominal heating performances					
Heating capacity (4)	kW	2,93	3,57	4,97	6,00
Heating input power (4)	kW	0,73	0,96	1,29	1,61
COP (2)	W/W	4,00	3,71	3,83	3,73
Minimum heating performances					
Heating capacity	kW	0,82	1,08	3,10	1,61
Heating input power	kW	0,12	0,10	0,78	0,30
Maximum heating performances					
Heating capacity	kW	3,37	4,22	5,85	7,91
Heating input power	kW	1,20	1,68	2,00	2,75
Heating input current	A	3,2	4,2	5,6	7,0
Seasonal efficiency (temperate climate)					
SCOP	W/W	4,00	4,00	4,00	4,00
Efficiency energy class (3)		A+	A+	A+	A+
Annual power consumption	kWh/annum	910	945	1435	1818
Seasonal efficiency (hot climate)					
SCOP	W/W	5,10	5,10	5,10	5,00
Efficiency energy class (3)		A+++	A+++	A+++	A++
Annual power consumption	kWh/annum	714	686	1260	1705

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

INDOOR UNIT

		SGE250W	SGE350W	SGE500W	SGE700W
Indoor unit					
Type of fan	Type		Tangential		
Air flow rate					
Maximum	m^3/h	466	540	840	980
Average	m^3/h	360	430	680	817
Minimum	m^3/h	325	314	540	662
Sound power (1)					
Maximum	dB(A)	54,0	55,0	56,0	59,0
Sound pressure (1 m) (2)					
Maximum	dB(A)	38,5	40,5	42,5	45,0
Average	dB(A)	32,0	34,5	36,0	40,5
Minimum	dB(A)	25,0	25,0	26,0	36,0

(1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

OUTDOOR UNIT

		SGE250	SGE350	SGE500	SGE700
Outdoor unit					
Type of fan	Type	Axial	Axial	Axial	Axial
Air flow rate					
Maximum	m^3/h	1750	1800	2100	3500
Sound power (1)					
Maximum	dB(A)	62,0	63,0	63,0	67,0
Sound pressure (1 m) (2)					
Maximum	dB(A)	55,5	56,0	56,0	59,0
Compressor					
Type	type	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary
Refrigerant	type	R32	R32	R32	R32
Refrigerant charge	kg	0,55	0,55	1,08	1,42
Potential global heating	GWP	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq
Equivalent CO_2	t	0,37	0,37	0,73	0,96

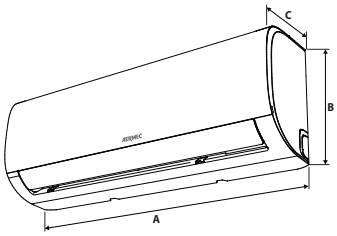
(1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

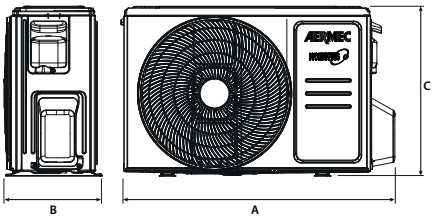
GENERAL DATA

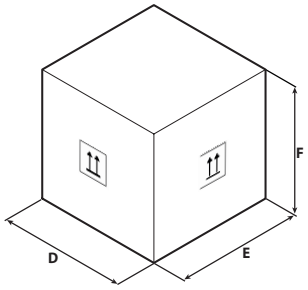
Indoor unit		**SGE250W**	**SGE350W**	**SGE500W**	**SGE700W**
Outdoor unit		**SGE250**	**SGE350**	**SGE500**	**SGE700**
Indoor unit quantity		**1**	**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**	**1**
Electric data					
Rated power input (1)	kW	2,20	2,20	2,50	3,50
Rated current input (1)	A	10,0	10,0	13,0	15,5
Refrigeration pipework					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4″)	6,35 (1/4″)	6,35 (1/4″)	9,52 (3/8″)
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8″)	9,52 (3/8″)	12,7 (1/2″)	15,9 (5/8″)
Maximum refrigerant tube length	m	25	25	30	50
Maximum refrigerant line level difference	m	10,0	10,0	20,0	25,0
Refrigerant to be added	g/m	12	12	12	24
Power supply					
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

DIMENSIONS AND WEIGHTS







Carton Box Example

		SGE250W	SGE350W	SGE500W	SGE700W
Indoor unit					
A	mm	805	805	957	1040
B	mm	285	285	302	327
C	mm	194	194	213	220
D	mm	870	870	1035	1120
E	mm	270	270	295	405
F	mm	365	365	385	315
Net weight	kg	7,6	7,6	10,0	12,3
Weight for transport	kg	9,7	9,8	13,0	15,8
		SGE250	**SGE350**	**SGE500**	**SGE700**
Outdoor unit					
A	mm	720	720	805	890
B	mm	270	270	330	342
C	mm	495	495	554	673
D	mm	835	835	915	995
E	mm	300	300	370	398
F	mm	540	540	615	740
Net weight	kg	23,2	23,2	32,7	42,9
Weight for transport	kg	25,0	25,0	35,4	45,9

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SCG_1

Monosplit

Cooling capacity 7,2 kW ÷ 12,5 kW
Heating capacity 7,9 kW ÷ 14,5 kW

- **New R32 ecological refrigerant gas.**
- **Standard Wi-Fi module.**
- **Modern design to blend with all furnishing styles.**
- **Easy installation and maintenance.**
- **Ideal for installations in the service sector: hotels, restaurants, offices.**

DESCRIPTION

The monosplit air conditioners of the SCG_1 range are combined with SCG_1V (column) indoor units for floor installation.
Thanks to their compact size, ease of installation and modern design, they are suitable for environments such as shops, restaurants, shopping centers, doctor's offices, etc.
The outdoor unit features a compressor with inverter technology and an electronic valve.

FEATURES

Indoor unit

Indoor unit **column** designed to be installed for indoor floor installation.
— Every indoor unit comes with a remote control and a remote control holder.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— 3-speed fan, to meet every possible need.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Auto** function for a continuous speed variation.

Outdoor unit

Monosplit air conditioner.
Reversible air/air heat pump with DC inverter technology.
— Compressor and fan with DC inverter technology.
— Fitted with an electronic expansion valve.

X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.

Smart APP Ewpe

This system is fitted **standard** with a wi-fi module that can be used, along with the app for iOS and Android devices (available free on Apple Store and Google Play), to control the system remotely on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.

Special blue fin coil

Unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

General features

- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Easy installation and maintenance.

ACCESSORIES

DTG1: Diagnostic tool for indoor and outdoor units of the entire series (tool reserved for service centres or installers).

PERFORMANCE SPECIFICATIONS

Indoor unit		**SCG701V**	**SCG1201V**	**SCG1201VT**
Outdoor unit		**SCG701**	**SCG1201**	**SCG1201T**
Indoor unit quantity		**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**
Nominal cooling performances				
Cooling capacity (1)	kW	7,20	12,30	12,50
Cooling input power	kW	2,05	4,17	3,79
Cooling input current	A	9,0	18,0	5,6
EER (2)	W/W	3,51	2,95	3,30
Moisture removed	l/h	2,5	5,0	5,0
Minimum cooling performances				
Cooling capacity (1)	kW	0,97	1,50	3,10
Cooling input power	kW	0,35	0,55	0,30
Maximum cooling performances				
Cooling capacity (1)	kW	8,40	13,50	14,50
Cooling input power	kW	2,95	5,06	5,70
Seasonal efficiency				
SEER	W/W	6,10	5,70	6,10
Efficiency energy class (3)		A++	-	-
Annual power consumption	kWh/annum	413	-	-
ηsc	%	-	227,00	241,00
Nominal heating performances				
Heating capacity (4)	kW	7,90	12,60	14,50
Heating input power	kW	2,33	3,82	3,86
Heating input current	A	10,5	16,0	5,7
COP (2)	W/W	3,39	3,30	3,76
Minimum heating performances				
Heating capacity (4)	kW	0,64	2,50	3,30
Heating input power	kW	0,39	0,50	0,64
Maximum heating performances				
Heating capacity (4)	kW	8,80	14,00	16,50
Heating input power	kW	3,03	5,06	4,70
Seasonal efficiency (temperate climate)				
SCOP	W/W	3,80	3,70	4,00
Efficiency energy class (3)		A	-	-
Annual power consumption	kWh/annum	2063	-	-
ηsh	%	-	146,00	157,00

(1) Cooling (EN-14511 and EN-14825) Ambient air temperature 27°C D.B. / 19°C W.B.; Outside air temperature 35°C; Max speed; Length of Refrigerant Lines 5m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN-14511 and EN-14825) Ambient air temperature 20°C D.B.; Outside air temperature 7°C D.B./6°C W.B.; Max speed; Length of Refrigerant Lines 5m.

INDOOR UNIT DATA

		SCG701V	SCG1201V	SCG1201VT
Indoor unit				
Type of fan	Type		Centrifugal	
Air flow rate				
Turbo	m^3/h	1250	2000	2400
Maximum	m^3/h	950	1850	2200
Average	m^3/h	850	1700	2000
Minimum	m^3/h	750	1580	1800
Sound power (1)				
Turbo	dB(A)	56,0	64,0	66,0
Maximum	dB(A)	52,0	61,0	64,0
Average	dB(A)	50,0	60,0	63,0
Minimum	dB(A)	46,0	58,0	61,0
Sound pressure (2)				
Turbo	dB(A)	45,0	53,0	56,0
Maximum	dB(A)	41,0	51,0	54,0
Average	dB(A)	39,0	50,0	53,0
Minimum	dB(A)	35,0	48,0	51,0

(1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

OUTDOOR UNIT DATA

		SCG701	SCG1201	SCG1201T
Outdoor unit				
Type of fan	Type		Axial	
Air flow rate				
Maximum	m^3/h	3600	4000	5200
Sound power (1)				
Maximum	dB(A)	70,0	73,0	74,0
Sound pressure (2)				
Maximum	dB(A)	61,0	63,0	63,0
Compressor				
Type	type		Rotativo Inverter	
Refrigerant	type		R32	
Potential global heating	GWP		675kgCO_2eq	
Refrigerant charge	kg	1,50	2,00	2,80
Equivalent CO_2	t	1,01	1,35	1,89

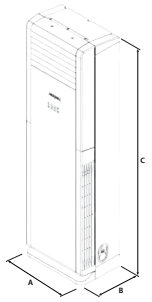
(1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

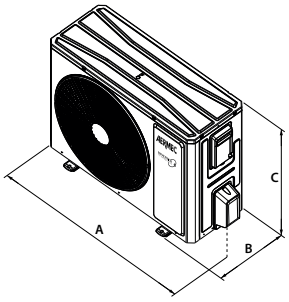
GENERAL DATA

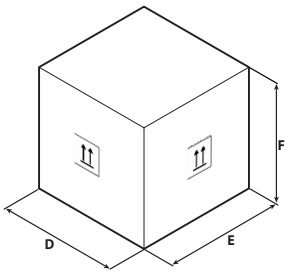
Indoor unit		SCG701V	SCG1201V	SCG1201VT
Outdoor unit		**SCG701**	**SCG1201**	**SCG1201T**
Indoor unit quantity		**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**
Electric data				
Rated power input (1)	kW	3,03	5,06	5,70
Rated current input - cooling	A	14,5	20,0	9,8
Rated current input - heating	A	13,5	22,0	8,1
Refrigerant lines				
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Maximum refrigerant tube length	m	25	30	30
Maximum refrigerant line level difference	m	10,0	20,0	20,0
Maximum length of refrigerant lines without addition of refrigerant	m	5	5	5
Refrigerant to be added	g/m	40	40	40
Power supply				
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	380-415V ~ 3N 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

DIMENSIONS AND WEIGHTS







Carton Box Example

		SCG701V	SCG1201V	SCG1201VT
Indoor unit				
A	mm	507	587	587
B	mm	320	394	394
C	mm	1770	1882	1882
D	mm	608	718	718
E	mm	410	485	485
F	mm	1983	2128	2128
Net weight	kg	38,0	53,0	57,0
Weight for transport	kg	47,0	65,0	69,0

		SCG701	SCG1201	SCG1201T
Outdoor unit				
A	mm	958	1000	1020
B	mm	402	427	427
C	mm	660	746	820
D	mm	1032	1080	1093
E	mm	456	483	497
F	mm	737	810	955
Net weight	kg	43,0	55,0	86,0
Weight for transport	kg	47,5	60,0	99,0

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CKG

Universal

Cooling capacity 2,7 ÷ 5,2 kW
Heating capacity 2,9 ÷ 5,3 kW

- **Standard Wi-Fi module.**
- **New R32 ecological refrigerant gas.**
- **Air Purifiers (Cold Plasma).**
- **Low cooling function: cooling operation with outdoor temperatures down to -15 °C.**
- **Low heating function: heating operation with outdoor temperatures down to -22 °C.**

DESCRIPTION

The monosplit air conditioners of the CKG_1 range are combined with CKG_1FS (Console) indoor units with an inverter fan unit, offering twin delivery for optimum air flow control and enhanced environmental comfort.

Universal indoor units:
all indoor units can be combined with both multisplit outdoor units of the series MPG and MLG and monosplit outdoor units of the series CKG_1.

CKG_1FS	CKG261FS	CKG361FS	CKG501FS
Universal indoor units compatible with MPG multisplit system	•	•	•
Universal indoor units compatible with MLG multisplit system	•	•	

The outdoor unit features a compressor with inverter technology, an electronic valve and electric heater to ensure proper winter operation and prevent ice formation on the coil.

FEATURES



Indoor unit

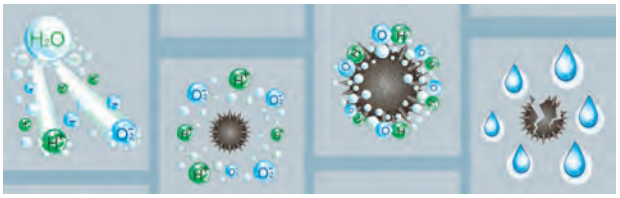
Console indoor unit designed to be installed on indoor floors.
— Every indoor unit comes with a remote control and a remote control holder.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Indoor unit front panel with LED display and indicator lights.
— 5-speed fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.

Outdoor unit

Monosplit air conditioner.
Reversible air/air heat pump with DC inverter technology.
— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
— Compressor and fan with DC inverter technology.
— Fitted with an electronic expansion valve.

Air Purifiers (Cold Plasma)

Capable of reducing pollutants breaking down their molecules using electric discharges, causing the splitting of the water molecules in the air into positive and negative ions. These ions neutralise the molecules of the gaseous pollutants obtaining products that are normally present in clean air. The device can eliminate 90% of bacteria. The result is clean, ionised air that has no bad odours.



X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.

Smart APP Ewpe

This system is fitted **standard** with a wi-fi module that can be used, along with the app for iOS and Android devices (available free on Apple Store and Google Play), to control the system remotely on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.

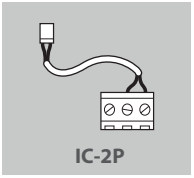
General features

- New R32 ecological refrigerant gas with low GWP.
- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Easy installation and maintenance.

ACCESSORIES

*** The CC2 centralised control can manage up to 36 CKG_1 system.**

In order to use accessory CC2, for each indoor unit, the WRCA wired panel (accessory) must be installed, with the IC-2P adapter accessory.



Single air delivery

Dual air delivery (default)

Intake

ACCESSORIES COMPATIBILITY

Accessory	CKG261FS	CKG361FS	CKG501FS
CC2	•	•	•
WRCA	•	•	•

The accessory CC2 version 01 is compatible with the indoor units of the CKG_1FS series, from version 01.

Accessory	CKG261FS	CKG361FS	CKG501FS
IC-2P	•	•	•

PERFORMANCE SPECIFICATIONS

Indoor unit		CKG261FS	CKG361FS	CKG501FS
Outdoor unit		**CKG261**	**CKG361**	**CKG501**
Indoor unit quantity		**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**
Nominal cooling performances				
Cooling capacity (1)	kW	2,70	3,52	5,20
Cooling input power (1)	kW	0,70	0,93	1,45
EER (2)	W/W	3,86	3,80	3,60
Moisture removed	l/h	0,8	1,2	1,8
Cooling input current	A	5,5	7,0	11,5
Minimum cooling performances				
Cooling capacity	kW	0,50	0,80	1,20
Cooling input power	kW	0,15	0,23	0,10
Maximum cooling performances				
Cooling capacity	kW	3,40	4,40	6,20
Cooling input power	kW	1,10	1,55	2,25
Seasonal efficiency				
SEER	W/W	7,80	7,20	7,20
Efficiency energy class (3)		A++	A++	A++
Annual power consumption	kWh/annum	121	175	253
Nominal heating performances				
Heating capacity (4)	kW	2,90	3,80	5,33
Heating input power (4)	kW	0,73	0,96	1,55
Heating input current	A	6,0	7,5	11,5
COP (2)	W/W	3,97	3,96	3,45
Minimum heating performances				
Heating capacity	kW	0,60	1,05	1,10
Heating input power	kW	0,16	0,18	0,20
Maximum heating performances				
Heating capacity	kW	3,65	4,40	6,20
Heating input power	kW	1,20	1,70	2,40
Seasonal efficiency (temperate climate)				
SCOP	W/W	4,20	4,10	4,00
Efficiency energy class (3)		A+	A+	A+
Annual power consumption	kWh/annum	867	1093	1680

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

INDOOR UNIT DATA

		CKG261FS	CKG361FS	CKG501FS
Indoor unit				
Input power	W	Powered by the outdoor unit	Powered by the outdoor unit	Powered by the outdoor unit
Type of fan	Type	Centrifugal	Centrifugal	Centrifugal
Air flow rate indoor units				
Quiet	m^3/h	250	260	350
Minimum	m^3/h	280	360	430
Average minimum	m^3/h	330	400	470
Average	m^3/h	370	440	520
Average maximum	m^3/h	410	480	600
Maximum	m^3/h	430	520	670
Turbo	m^3/h	500	600	750
Sound power (1)				
Quiet	db(A)	35,0	36,0	43,0
Minimum	dB(A)	38,0	40,0	48,0
Average minimum	dB(A)	41,0	44,0	51,0
Average	dB(A)	44,0	47,0	53,0
Average maximum	dB(A)	46,0	49,0	56,0
Maximum	dB(A)	48,0	51,0	58,0
Turbo	dB(A)	52,0	55,0	60,0
Sound pressure (2)				
Quiet	db(A)	23,0	25,0	32,0
Minimum	dB(A)	26,0	29,0	37,0
Average minimum	dB(A)	29,0	33,0	40,0
Average	dB(A)	32,0	36,0	42,0
Average maximum	dB(A)	34,0	38,0	45,0
Maximum	dB(A)	36,0	40,0	47,0
Turbo	dB(A)	39,0	44,0	49,0
Sound power (1)				
Quiet	db(A)	34,0	36,0	42,0
Minimum	dB(A)	37,0	40,0	47,0
Average minimum	dB(A)	41,0	44,0	49,0
Average	dB(A)	44,0	47,0	52,0
Average maximum	dB(A)	46,0	49,0	54,0
Maximum	dB(A)	48,0	51,0	57,0
Turbo	dB(A)	52,0	55,0	60,0
Sound pressure (2)				
Quiet	db(A)	22,0	25,0	33,0
Minimum	dB(A)	25,0	29,0	38,0
Average minimum	dB(A)	29,0	33,0	40,0
Average	dB(A)	32,0	36,0	43,0
Average maximum	dB(A)	34,0	38,0	45,0
Maximum	dB(A)	36,0	40,0	48,0
Turbo	dB(A)	39,0	44,0	51,0
Indoor unit				
Condensate discharge diameter	mm	17,0	17,0	17,0

(1) Sound Power measured in Semi-Anechoic Chamber at 1,0m from the source, according to EN 12102-1:2017
(2) Sound Pressure measured in Semi-Anechoic Chamber at 1,0m from the source, according to EN 12102-1:2017

OUTDOOR UNIT DATA

		CKG261	CKG361	CKG501
Outdoor unit				
Type of fan	Type		Axial	
Air flow rate				
Maximum	m^3/h	1950	2200	3600
Sound power (1)				
Maximum	dB(A)	61,0	63,0	65,0
Sound pressure (2)				
Maximum	dB(A)	51,0	53,0	59,0
Compressor				
Type	type		Rotativo Inverter	
Refrigerant	type		R32 / 675kgCO_2eq	
Refrigerant charge	kg	0,51	0,75	1,00
Potential global heating	GWP			
Equivalent CO_2	t	0,34	0,51	0,68
Outdoor unit				
Condensate discharge diameter	mm	16,0	16,0	16,0

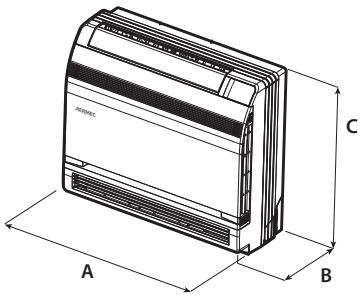
(1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

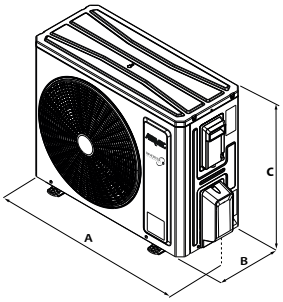
GENERAL DATA

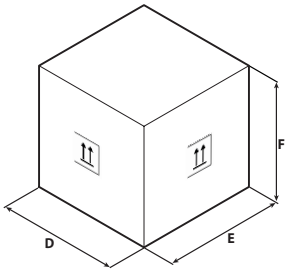
Indoor unit		**CKG261FS**	**CKG361FS**	**CKG501FS**
Outdoor unit		**CKG261**	**CKG361**	**CKG501**
Indoor unit quantity		**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**
Electric data				
Rated power input (1)	kW	0,73	0,96	1,55
Rated current input - cooling	A	5,5	7,0	11,5
Rated current input - heating	A	6,0	7,5	11,5
Refrigerant lines				
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")
Maximum refrigerant tube length	m	15	20	25
Maximum refrigerant line level difference	m	10,0	10,0	10,0
Maximum length of refrigerant lines without addition of refrigerant	m	5	5	5
Refrigerant to be added	g/m	16	16	16
Power supply				
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

DIMENSIONS AND WEIGHTS







Carton Box Example

		CKG261FS	CKG361FS	CKG501FS
Indoor unit				
A	mm	700	700	700
B	mm	215	215	215
C	mm	600	600	600
D	mm	788	788	788
E	mm	283	283	283
F	mm	697	697	697
Net weight	kg	15,5	16,0	16,0
Weight for transport	kg	18,5	19,0	19,0

		CKG261	CKG361	CKG501
Outdoor unit				
A	mm	732	802	958
B	mm	330	350	402
C	mm	555	555	660
D	mm	794	872	1032
E	mm	376	398	456
F	mm	615	620	737
Net weight	kg	24,0	27,5	41,0
Weight for transport	kg	26,5	30,0	45,5

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LPG

Monosplit

Cooling capacity 3,5 ÷ 16,0 kW
Heating capacity 4,0 ÷ 17,0 kW

- **SEER up to 7.2.**
- **Wi-fi control using the relative accessory.**

DESCRIPTION

The monosplit air conditioners of the LPG range are combined with:
— LPG_D (Duct) for duct type horizontal installation.
— LPG_C / CS (Cassette) for false ceiling installation.
— LPG_F (Floor ceiling) wall and/or ceiling installation.

TYPE OF INDOOR UNIT

Indoor unit LPG_D

Duct indoor unit, designed for indoor duct type horizontal installation.

— Every indoor unit comes with a remote control and a remote control holder.
— **WRC50** wired panel standard supply with each indoor unit.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.
— Equipped with condensate drain pump.

Indoor unit LPG_CS

Indoor unit **Cassette** of dimensions (570x570 mm) designed to be installed on suspended ceiling indoors.

— Every indoor unit comes with a remote control and a remote control holder.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.
— Equipped with condensate drain pump.

Indoor unit LPG_C

Indoor unit **Cassette** of dimensions (840x840 mm) designed to be installed on suspended ceiling indoors.

— Every indoor unit comes with a remote control and a remote control holder.

— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.
— Equipped with condensate drain pump.

Indoor unit LPG_F

Indoor unit **Floor ceiling** designed to be installed on the wall or ceiling indoors.

— Every indoor unit comes with a remote control and a remote control holder.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.

General features

— New R32 ecological refrigerant gas with low GWP.
— Operating mode: cooling, heating, dehumidification, automatic and fan only.
— Particularly quiet operation.
— Microproccessor control.
— Auto-restart function.
— Self-diagnosis function.
— Air filter easily removed and cleaned.
— Easy installation and maintenance.

Low cooling function
cooling operation with outdoor temperatures down to -20 °C.
Low heating function
heating with external temperatures up to -20 °C.

X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.

Smart APP Ewpe

Using the specific WRC50W panel, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.

Special blue fin coil

Unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

TYPE OF OUTDOOR UNIT

Outdoor unit

Reversible air/air heat pump with DC inverter technology.
— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
— Compressor and fan with DC inverter technology.
— Fitted with an electronic expansion valve.

ACCESSORIES

CC2: Centralised control with 7" touchscreen display for managing several indoor units within a number of multisplit systems. The centralised control has an integrated external contact. For more information, refer to the specific documentation. *

WRC50: Wired panel with liquid crystal display and soft-touch buttons.

WRC50W: Flush panel with LCD display and Soft-Touch keys. With this accessory it is possible to control not only the traditional system functions but also a weekly timer with daily time slots. It is equipped with WiFi and Bluetooth® connection for better connection stability.

For more information about the accessories and their functions (such as the auto-restart function), refer to the specific documentation of the single accessory.

DCG10: This accessory makes it possible to remotely control the main functions of the unit via the relay externally with third-party loads that are suitably powered and sized.

ECD10: This accessory makes it possible to manage the switching on/off of the indoor units via the ON-OFF device.

GLG 40: Air supply and flow grid with dimensions (950x950 mm) for cassette internal unit.

GLG 40S: Air supply and flow grid with dimensions (620x620 mm) for cassette internal unit.

MINIMODBUS20: Thanks to its compact size, this accessory can be easily installed inside the indoor unit. It allows the units to communicate with each other by providing a ModBus RTU serial on RS485 for supervision with external BMS.

*** The CC2 centralised control can manage up to 36 LPG systems.**

Accessories compatibility

LPG_D

Accessory	LPG350D	LPG500D	LPG700D	LPG850D	LPG1000D	LPG1200D	LPG1400D	LPG1600D
CC2 (1)	•	•	•	•	•	•	•	•
WRC50W	•	•	•	•	•	•	•	•

(1) Auto-restart function.
The use of the CC2 centralised control requires the installation of 1 MINIMODBUS20 for each indoor unit installed.
Wired panel WRC50 standard supply.

Accessory	LPG350D	LPG500D	LPG700D	LPG850D	LPG1000D	LPG1200D	LPG1400D	LPG1600D
DCG10	•	•	•	•	•	•	•	•
ECD10	•	•	•	•	•	•	•	•
MINIMODBUS20 (1)	•	•	•	•	•	•	•	•

(1) The units can only be routed using the wired control panel. For more information about the procedure refer to the user manual.

LPG_C / CS

Accessory	LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1200C	LPG1400C	LPG1600C
CC2 (1)	•	•	•	•	•	•	•	•
WRC50	•	•	•	•	•	•	•	•
WRC50W	•	•	•	•	•	•	•	•

(1) Auto-restart function.
The use of the CC2 centralised control requires the installation of 1 MINIMODBUS20 for each indoor unit installed.

Accessory	LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1200C	LPG1400C	LPG1600C
DCG10	•	•	•	•	•	•	•	•
ECD10	•	•	•	•	•	•	•	•
MINIMODBUS20 (1)	•	•	•	•	•	•	•	•

(1) The units can only be routed using the wired control panel. For more information about the procedure refer to the user manual.

Accessory	LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1200C	LPG1400C	LPG1600C
GLG40 (1)			•	•	•	•	•	•
GLG40S (1)	•	•						

(1) Mandatory accessory.

LPG_F

Accessory	LPG350F	LPG500F	LPG700F	LPG850F	LPG1000F	LPG1200F	LPG1400F	LPG1600F
CC2 (1)	•	•	•	•	•	•	•	•
WRC50	•	•	•	•	•	•	•	•
WRC50W	•	•	•	•	•	•	•	•

(1) Auto-restart function.
The use of the CC2 centralised control requires the installation of 1 MINIMODBUS20 for each indoor unit installed.

Accessory	LPG350F	LPG500F	LPG700F	LPG850F	LPG1000F	LPG1200F	LPG1400F	LPG1600F
DCG10	•	•	•	•	•	•	•	•
ECD10	•	•	•	•	•	•	•	•
MINIMODBUS20 (1)	•	•	•	•	•	•	•	•

(1) The units can only be routed using the wired control panel. For more information about the procedure refer to the user manual.

OUTDOOR UNIT PERFORMANCE DATA

		LPG350	LPG500	LPG700	LPG850	LPG1000	LPG1000T	LPG1200	LPG1200T	LPG1400	LPG1400T	LPG1600T
Outdoor unit												
Type of fan	Type	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial
Air flow rate												
Maximum	m^3/h	1800	2200	3600	3600	4800	4800	5200	5200	5200	5200	5500
Sound power (1)												
Maximum	dB(A)	56,0	65,0	69,0	70,0	70,0	70,0	73,0	73,0	73,0	75,0	75,0
Sound pressure (2)												
Maximum	dB(A)	48,0	52,0	55,0	57,0	57,0	57,0	58,0	58,0	59,0	59,0	60,0
Compressor												
Type	type	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary
Refrigerant	type	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	0,57	0,85	1,50	1,50	2,10	2,10	2,25	2,25	2,80	2,80	3,50
Potential global heating	GWP	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq
Equivalent CO_2	t	0,38	0,57	1,01	1,01	1,42	1,42	1,52	1,52	1,89	1,89	2,36
Refrigeration pipework												
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Maximum refrigerant tube length	m	30	30	30	30	75	75	75	75	75	75	75
Maximum refrigerant line level difference	m	15,0	20,0	20,0	25,0	30,0	30,0	30,0	30,0	30,0	30,0	30,0
Refrigerant to be added	g/m	16	16	20	20	20	20	20	20	35	35	35
Power supply												
Outdoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	380-415V ~ 3N 50Hz	220-240V ~ 50Hz	380-415V ~ 3N 50Hz	220-240V ~ 50Hz	380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz

(1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

INDOOR UNIT PERFORMANCE DATA

LPG_D

Indoor unit		LPG350D	LPG500D	LPG700D	LPG850D	LPG1000D	LPG1000D	LPG1200D	LPG1200D	LPG1400D	LPG1400D	LPG1600D
Outdoor unit		**LPG350**	**LPG500**	**LPG700**	**LPG850**	**LPG1000**	**LPG1000T**	**LPG1200**	**LPG1200T**	**LPG1400**	**LPG1400T**	**LPG1600T**
Indoor unit quantity		**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Nominal cooling performances												
Cooling capacity (1)	kW	3,50	5,30	7,10	8,50	10,50	10,50	12,10	12,10	13,40	13,40	16,00
Cooling input power (1)	kW	1,03	1,51	1,92	2,50	3,00	3,00	3,58	3,58	4,50	4,50	5,40
EER (2)	W/W	3,40	3,51	3,70	3,40	3,50	3,50	3,38	3,38	2,98	2,98	2,96
Moisture removed	l/h	1,0	1,7	2,4	2,8	3,3	3,3	3,7	3,7	3,9	3,9	4,6
Minimum cooling performances												
Cooling capacity	kW	0,90	1,60	2,40	2,90	3,20	3,20	3,60	3,60	4,00	4,00	4,80
Cooling input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum cooling performances												
Cooling capacity	kW	4,00	5,80	7,60	9,00	11,00	11,00	13,10	13,10	14,20	14,20	17,00
Cooling input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency												
SEER	W/W	6,50	6,30	6,60	6,40	6,40	6,40	6,10	6,10	6,10	6,10	6,10
Efficiency energy class (3)		A++	A++	A++	A++	A++	A++	-	-	-	-	-
Pdesignc	kW	3,5	5,3	7,1	8,5	10,5	10,5	-	-	-	-	-
Annual power consumption	kWh/annum	189	294	377	465	574	574	-	-	-	-	-
Nominal heating performances												
Heating capacity (4)	kW	4,00	5,60	8,00	8,80	11,50	11,50	13,50	13,50	15,50	15,50	17,00
Heating input power (4)	kW	1,00	1,42	2,00	2,25	2,80	2,80	3,70	3,70	4,50	4,50	4,70
COP (2)	W/W	4,00	3,94	4,00	3,91	4,11	4,11	3,65	3,65	3,44	3,44	3,62
Minimum heating performances												
Heating capacity	kW	0,90	1,60	2,20	2,50	3,00	3,00	3,60	3,60	3,90	3,90	4,50
Heating input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum heating performances												
Heating capacity	kW	4,50	6,10	8,60	9,50	12,50	12,50	14,50	14,50	16,00	16,00	18,00
Heating input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency (temperate climate)												
SCOP	W/W	4,00	4,00	4,10	4,10	4,20	4,20	4,10	4,10	4,00	4,00	4,00
Efficiency energy class (3)		A+	A+	A+	A+	A+	A+	-	-	-	-	-
Pdesignh	kW	3,00	3,90	4,70	6,00	7,00	7,00	-	-	-	-	-
Annual power consumption	kWh/annum	1050	1365	1605	2049	2333	2333	-	-	-	-	-
Electric data												
Rated power input (5)	kW	1,30	1,90	2,80	3,30	4,70	4,40	5,30	5,30	5,60	5,60	6,80
Rated current input (5)	A	6,0	9,5	14,0	15,0	21,0	7,0	23,0	9,0	25,0	11,0	12,0
Refrigeration pipework												
Diameter of liquid refrigerant connections	mm (inch)	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9.52 (3/8")	12.7 (1/2")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
Nominal length of refrigerant lines	m	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0	7,5	7,5	7,5
Power supply												
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	380-415V 3N~ 50/60Hz	220-240V ~ 50Hz	380-415V 3N~ 50/60Hz	220-240V ~ 50Hz	380-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(5) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		LPG350D	LPG500D	LPG700D	LPG850D	LPG1000D	LPG1200D	LPG1400D	LPG1600D
Indoor unit									
Type of fan	Type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate									
Turbo	m^3/h	600	900	1100	1400	1700	2000	2300	2600
Maximum	m^3/h	550	800	1000	1300	1600	1800	2100	2300
Average	m^3/h	500	700	900	1100	1400	1600	1800	2000
Minimum	m^3/h	400	600	800	1000	1200	1400	1500	1700
High static pressure									
Nominal	Pa	25	25	25	37	50	50	50	50
Maximum	Pa	80	80	160	160	155	155	200	200
Sound pressure									
Turbo	dB(A)	35,0	36,0	37,0	43,0	39,0	43,0	43,0	46,0
Maximum	dB(A)	33,0	35,0	35,0	41,0	38,0	42,0	42,0	44,0
Average	dB(A)	32,0	33,0	33,0	39,0	37,0	41,0	40,0	42,0
Minimum	dB(A)	30,0	31,0	31,0	37,0	36,0	40,0	38,0	40,0
Indoor unit									
Condensate discharge diameter	mm	26,0	26,0	26,0	26,0	26,0	26,0	26,0	26,0

Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source (1,5m for type Duct and Cassette)

LPG_CS / C

Indoor unit		LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1000C	LPG1200C	LPG1200C	LPG1400C	LPG1400C	LPG1600C
Outdoor unit		**LPG350**	**LPG500**	**LPG700**	**LPG850**	**LPG1000**	**LPG1000T**	**LPG1200**	**LPG1200T**	**LPG1400**	**LPG1400T**	**LPG1600T**
Indoor unit quantity		**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Nominal cooling performances												
Cooling capacity (1)	kW	3,50	5,00	7,10	8,50	10,50	10,50	12,10	12,10	13,40	13,40	14,50
Cooling input power (1)	kW	0,92	1,47	2,03	2,50	3,10	3,10	3,90	3,90	4,60	4,60	5,30
EER (2)	W/W	3,80	3,40	3,50	3,40	3,40	3,40	3,10	3,10	2,91	2,91	2,74
Moisture removed	l/h	1,0	1,7	2,4	2,8	3,3	3,3	3,7	3,7	3,9	3,9	4,8
Minimum cooling performances												
Cooling capacity	kW	0,90	1,60	2,40	2,90	3,20	3,20	3,60	3,60	4,00	4,00	4,80
Cooling input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum cooling performances												
Cooling capacity	kW	4,00	5,20	7,60	9,00	11,00	11,00	13,10	13,10	14,20	14,20	15,00
Cooling input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency												
SEER	W/W	7,10	6,60	6,70	6,90	6,60	6,60	6,10	6,10	6,30	6,30	6,10
Efficiency energy class (3)		A++	A++	A++	A++	A++	A++	-	-	-	-	-
Pdesignc	kW	3,5	5,0	7,1	8,5	10,5	10,5	-	-	-	-	-
Annual power consumption	kWh/annum	173	266	371	432	557	557	-	-	-	-	-
Nominal heating performances												
Heating capacity (4)	kW	4,00	5,60	7,80	8,80	11,50	11,50	13,50	13,50	15,50	15,50	17,00
Heating input power (4)	kW	1,00	1,60	2,00	2,25	2,95	2,95	3,97	3,97	4,70	4,70	5,70
COP (2)	W/W	4,00	3,50	3,90	3,90	3,90	3,90	3,40	3,40	3,30	3,30	2,98
Minimum heating performances												
Heating capacity	kW	0,90	1,60	2,20	2,50	3,00	3,00	3,60	3,60	3,90	3,90	4,50
Heating input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum heating performances												
Heating capacity	kW	4,50	6,10	8,60	9,50	12,50	12,50	14,50	14,50	16,00	16,00	17,50
Heating input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency (temperate climate)												
SCOP	W/W	4,20	4,00	4,30	4,30	4,40	4,40	4,10	4,10	4,00	4,00	4,00
Efficiency energy class (3)		A+	A+	A+	A+	A+	A+	-	-	-	-	-
Pdesignh	kW	3,10	3,90	5,00	6,00	7,00	7,00	-	-	-	-	-
Annual power consumption	kWh/annum	1034	1365	1628	1954	2227	2227	-	-	-	-	-
Electric data												
Rated power input (5)	kW	1,30	1,90	2,80	3,30	4,70	4,40	5,30	5,30	5,60	5,60	6,80
Rated current input (5)	A	6,0	9,5	14,0	15,0	21,0	7,0	23,0	9,0	25,0	11,0	12,0
Refrigeration pipework												
Diameter of liquid refrigerant connections	mm (inch)	6.35 (1/4")	6.35 (1/4")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
Diameter of refrigerant gas connections	mm (inch)	9.52 (3/8")	12.7 (1/2")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
Nominal length of refrigerant lines	m	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0	7,5	7,5	7,5
Power supply												
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	380-415V 3N~ 50Hz	220-240V ~ 50Hz	380-415V 3N~ 50Hz	220-240V ~ 50Hz	380-415V 3N~ 50Hz	380-415V 3N~ 50Hz

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(5) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1200C	LPG1400C	LPG1600C
Indoor unit									
Type of fan	Type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate									
Turbo	m^3/h	600	720	1100	1400	1500	1700	2000	2300
Maximum	m^3/h	550	650	1000	1300	1400	1500	1800	2100
Average	m^3/h	500	600	900	1100	1200	1300	1600	1900
Minimum	m^3/h	400	500	800	1000	1000	1100	1400	1600
Sound pressure									
Turbo	dB(A)	36,0	43,0	39,0	47,0	43,0	48,0	50,0	52,0
Maximum	dB(A)	35,0	41,0	38,0	46,0	41,0	46,0	48,0	50,0
Average	dB(A)	33,0	39,0	36,0	42,0	39,0	43,0	45,0	48,0
Minimum	dB(A)	29,0	35,0	34,0	38,0	38,0	39,0	41,0	44,0
Indoor unit									
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0

Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source (1,5m for type Duct and Cassette)

LPG_F

Indoor unit		LPG350F	LPG500F	LPG700F	LPG850F	LPG1000F	LPG1000F	LPG1200F	LPG1200F	LPG1400F	LPG1400F	LPG1600F
Outdoor unit		**LPG350**	**LPG500**	**LPG700**	**LPG850**	**LPG1000**	**LPG1000T**	**LPG1200**	**LPG1200T**	**LPG1400**	**LPG1400T**	**LPG1600T**
Indoor unit quantity		**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Nominal cooling performances												
Cooling capacity (1)	kW	3,50	5,30	7,10	8,50	10,00	10,00	12,10	12,10	13,40	13,40	16,00
Cooling input power (1)	kW	0,92	1,56	2,03	2,50	2,94	2,94	3,67	3,67	4,30	4,30	5,30
EER (2)	W/W	3,80	3,40	3,50	3,40	3,40	3,40	3,30	3,30	3,12	3,12	3,02
Moisture removed	l/h	1,1	1,7	2,4	2,8	3,3	3,3	3,7	3,7	3,9	3,9	4,7
Minimum cooling performances												
Cooling capacity	kW	0,90	1,60	2,40	2,90	3,20	3,20	3,60	3,60	4,00	4,00	4,80
Cooling input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum cooling performances												
Cooling capacity	kW	4,00	5,50	7,60	9,00	10,50	10,50	13,10	13,10	14,20	14,20	17,00
Cooling input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency												
SEER	W/W	7,20	6,50	7,20	6,80	6,30	6,30	6,30	6,30	6,30	6,30	6,10
Efficiency energy class (3)		A++	A++	A++	A++	A++	A++	-	-	-	-	-
Pdesignc	kW	3,5	5,3	7,1	8,5	10,0	10,0	-	-	-	-	-
Annual power consumption	kWh/annum	170	285	345	438	556	556	-	-	-	-	-
Nominal heating performances												
Heating capacity (4)	kW	4,00	5,60	7,70	8,80	11,50	11,50	13,50	13,50	15,50	15,50	17,00
Heating input power (4)	kW	0,93	1,44	1,95	2,25	2,95	2,95	3,75	3,75	4,20	4,20	4,80
COP (2)	W/W	4,30	3,90	3,95	3,90	3,90	3,90	3,60	3,60	3,69	3,69	3,54
Minimum heating performances												
Heating capacity	kW	0,90	1,60	2,20	2,50	3,00	3,00	3,60	3,60	3,90	3,90	4,50
Heating input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum heating performances												
Heating capacity	kW	4,50	6,10	8,40	9,50	12,00	12,00	14,50	14,50	16,00	16,00	18,00
Heating input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency (temperate climate)												
SCOP	W/W	4,10	4,20	4,30	4,50	4,20	4,20	4,00	4,00	4,00	4,00	4,00
Efficiency energy class (3)		A+	A+	A+	A+	A+	A+	-	-	-	-	-
Pdesignh	kW	3,10	3,90	4,70	6,00	7,00	7,00	-	-	-	-	-
Annual power consumption	kWh/annum	1059	1300	1530	1867	2333	2333	-	-	-	-	-
Electric data												
Rated power input (5)	kW	1,30	1,90	2,80	3,30	4,70	4,40	5,30	5,30	5,60	5,60	6,80
Rated current input (5)	A	6,0	9,5	14,0	15,0	21,0	7,0	23,0	9,0	25,0	11,0	12,0
Refrigeration pipework												
Diameter of liquid refrigerant connections	mm (inch)	6.35 (1/4")	6.35 (1/4")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
Diameter of refrigerant gas connections	mm (inch)	9.52 (3/8")	12.7 (1/2")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
Nominal length of refrigerant lines	m	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0	7,5	7,5	7,5
Power supply												
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	380-415V 3N~ 50Hz	220-240V ~ 50Hz	380-415V 3N~ 50Hz	220-240V ~ 50Hz	380-415V 3N~ 50Hz	380-415V 3N~ 50Hz

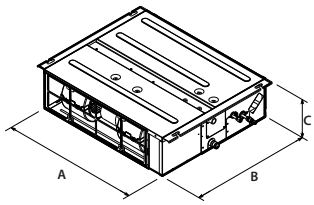
(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(5) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		LPG350F	LPG500F	LPG700F	LPG850F	LPG1000F	LPG1200F	LPG1400F	LPG1600F
Indoor unit									
Type of fan	Type	Inverter centrifugal							
Air flow rate									
Turbo	m^3/h	650	900	1250	1400	1600	1900	2300	2400
Maximum	m^3/h	600	800	1100	1300	1500	1800	2100	2200
Average	m^3/h	500	700	1000	1200	1400	1600	1800	1900
Minimum	m^3/h	400	600	900	1000	1200	1400	1500	1600
Sound pressure									
Turbo	dB(A)	35,0	41,0	41,0	46,0	48,0	45,0	51,0	53,0
Maximum	dB(A)	34,0	40,0	39,0	45,0	46,0	43,0	48,0	51,0
Average	dB(A)	31,0	38,0	37,0	43,0	45,0	40,0	45,0	48,0
Minimum	dB(A)	28,0	36,0	35,0	39,0	43,0	38,0	43,0	44,0
Indoor unit									
Condensate discharge diameter	mm	17,0	17,0	17,0	17,0	17,0	17,0	17,0	17,0

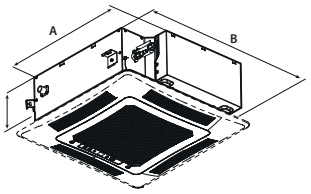
Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source (1,5m for type Duct and Cassette)

INDOOR UNIT WEIGHTS AND DIMENSIONS

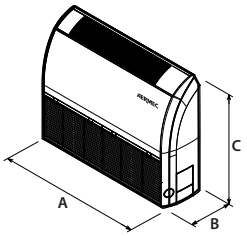
LPG_D

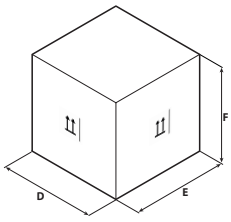


LPG_C / CS



LPG_F





Carton Box Example

LPG_D

		LPG350D	LPG500D	LPG700D	LPG850D	LPG1000D	LPG1200D	LPG1400D	LPG1600D
Indoor unit									
A	mm	710	1000	900	900	1340	1340	1400	1400
B	mm	450	450	655	655	655	655	700	700
C	mm	200	200	260	260	260	260	300	300
Net weight	kg	18,0	24,0	29,5	29,5	43,0	43,0	52,0	55,0
Dimensions and weights for transport									
D	mm	1008	1308	1115	1115	1568	1568	1601	1601
E	mm	568	568	772	772	770	770	813	813
F	mm	275	275	320	320	323	323	365	365
Weight for transport	kg	22,0	29,0	33,5	33,5	49,0	49,0	58,0	62,0

LPG_C / CS

		LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1200C	LPG1400C	LPG1600C
Indoor unit									
A	mm	570	570	840	840	840	840	840	840
B	mm	570	570	840	840	840	840	840	840
C	mm	260	260	200	200	240	240	290	290
Net weight	kg	17,0	17,0	21,0	21,0	23,0	23,0	25,0	26,0
Dimensions and weights for transport									
D	mm	698	698	943	943	933	933	933	933
E	mm	653	653	923	923	903	903	903	903
F	mm	295	295	245	245	272	272	335	335
Weight for transport	kg	21,0	21,0	27,0	27,0	29,0	29,0	32,0	33,0

LPG_F

		LPG350F	LPG500F	LPG700F	LPG850F	LPG1000F	LPG1200F	LPG1400F	LPG1600F
Indoor unit									
A	mm	870	870	1200	1200	1200	1570	1570	1570
B	mm	235	235	235	235	235	235	235	235
C	mm	665	665	665	665	665	665	665	665
Net weight	kg	24,0	25,0	31,0	32,0	32,0	40,0	42,0	42,0
Dimensions and weights for transport									
D	mm	973	973	1303	1303	1303	1669	1669	1669
E	mm	770	770	770	770	770	770	770	770
F	mm	300	300	300	300	300	300	300	300
Weight for transport	kg	28,0	29,0	36,0	37,0	37,0	47,0	49,0	49,0

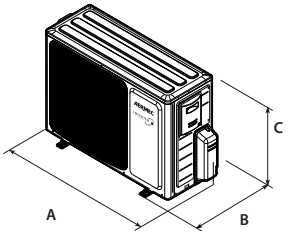
Grid dimensions and weights

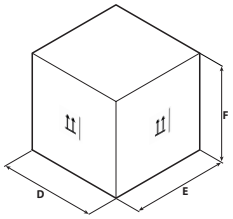
GLG40 - GLG40S

		GLG40	GLG40S
Indoor unit			
A	mm	950	620
B	mm	950	620
C	mm	52	48
D	mm	1033	701
E	mm	1038	701
F	mm	112	125
Net weight	kg	6,0	3,0
Weight for transport	kg	10,0	5,0

Mandatory accessory to be provided when ordering.

OUTDOOR UNIT WEIGHTS AND DIMENSIONS





Carton Box Example

LPG350 - LCGP500 - LPG700 - LPG850
LPG1000 - LPG1000T - LPG1200
LPG1200T LPG1400 - LPG1400T - LP-G1600T

		LPG350	LPG500	LPG700	LPG850	LPG1000	LPG1000T	LPG1200	LPG1200T	LPG1400	LPG1400T	LPG1600T
Outdoor unit												
A	mm	732	802	958	958	1020	1020	1020	1020	1020	1020	1070
B	mm	330	350	402	402	427	427	427	427	427	427	427
C	mm	553	555	660	660	820	820	820	820	820	820	960
Net weight	kg	24,5	30,5	41,5	46,0	65,0	75,0	66,0	76,0	73,0	81,0	94,0
Dimensions and weights for transport												
D	mm	794	872	1032	1032	1095	1095	1095	1095	1095	1095	1150
E	mm	376	398	456	456	500	500	500	500	500	500	475
F	mm	605	609	730	730	955	955	955	955	955	955	1095
Weight for transport	kg	27,0	33,0	45,0	50,0	72,0	88,0	73,0	89,0	86,0	94,0	103,0

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MVAS

Monosplit high head duct

Cooling capacity 22,4 ÷ 28,0 kW
Heating capacity 24,0 ÷ 30,0 kW

- **Suitable for long-distance channels.**
- **Effective static pressure that can reach 150 Pa.**
- **Special coil with fin golden coating.**

DESCRIPTION

The monosplit air conditioners of the MVAS range are combined with MVA_DH monosplit (high head duct) indoor units for duct type horizontal installation.
The outdoor unit features a compressor with inverter technology, an electronic valve and electric heater to ensure proper winter operation and prevent ice formation on the coil.

FEATURES

Indoor unit

High head duct indoor unit, designed for indoor duct type horizontal installation.

— Every indoor unit comes with a remote control and a remote control holder.
— **WRC** wired panel standard supply with each indoor unit.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— 5-speed fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.

Outdoor unit

Monosplit air conditioner.
Reversible air/air heat pump with DC inverter technology.

— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
— Compressor and fan with DC inverter technology.
— Fitted with an electronic expansion valve.

X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

General features

- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Easy installation and maintenance.

ACCESSORIES

MVAGW: This accessory allows you to manage up to 16 MV systems (with a maximum of 255 total indoor units), making available a serial in ModBus RTU protocol on RS485, ModBus TCP or BACnet / IP for supervision with an external BMS.

USBDC / USBDC1: The kit includes a converter (from CanBus to ModBus) and the VRF debugger software. IT is designed to meet the requirements of after sales services and qualified technicians who need to carry out control and debugging procedures on the MV_ ranges.

WRC: Wired panel with liquid crystal display and soft-touch buttons.

WRC1: Simplified wired panel with liquid crystal display and soft-touch buttons with built-in external contact. This panel is particularly suitable for hotel applications.

For more information about the accessories and their functions (such as the auto-restart function), refer to the specific documentation of the single accessory.

PERFORMANCE SPECIFICATIONS

Indoor unit		MVA2240DH	MVA2800DH
Outdoor unit		**MVAS2242T**	**MVAS2803T**
Indoor unit quantity		**1**	**1**
Outdoor unit quantity		**1**	**1**
Nominal cooling performances			
Cooling capacity (1)	kW	22,40	28,00
Cooling input power (1)	kW	6,12	13,02
Cooling input current	A	10,9	-
EER (2)	W/W	3,66	2,15
Nominal heating performances			
Heating capacity (3)	kW	24,00	28,00
Heating input power (3)	kW	4,90	8,00
Heating input current	A	8,8	-
COP (2)	W/W	4,90	3,50

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

INDOOR UNIT

		MVA2240DH	MVA2800DH
Indoor unit			
Type of fan	Type	Inverter centrifugal	Inverter centrifugal
Air flow rate			
Maximum	m^3/h	4000	4400
High static pressure			
Nominal	Pa	150	150
Sound power (1)			
Maximum	dB(A)	64,0	65,0
Average	dB(A)	62,0	62,0
Minimum	dB(A)	59,0	60,0
Sound pressure (2)			
Maximum	dB(A)	54,0	55,0
Average	dB(A)	52,0	52,0
Minimum	dB(A)	49,0	50,0
Indoor unit			
Condensate discharge diameter	mm	30,0	30,0

(1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

OUTDOOR UNIT

		MVAS 2242T	MVAS 2803T
Outdoor unit			
Type of fan	Type	Inverter axial	Inverter axial
Sound power (1)			
Maximum	dB(A)	74,0	-
Sound data calculated in cooling mode			
Maximum sound pressure level	dB(A)	58,0	62,0
Maximum sound power level	dB(A)	78,0	80,0
Sound data calculated in heating mode			
Maximum sound pressure level	dB(A)	58,0	64,0
Maximum sound power level	dB(A)	79,0	82,0
Compressor			
Type	type	Rotary	Rotary
Refrigerant	type	R410A	R410A
Potential global heating	GWP	2088kgCO_2eq	2088kgCO_2eq

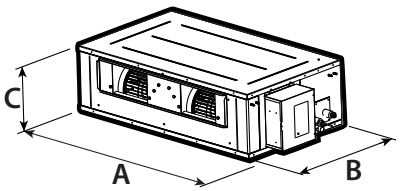
(1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.

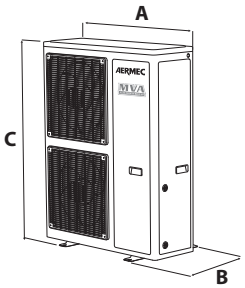
GENERAL DATA

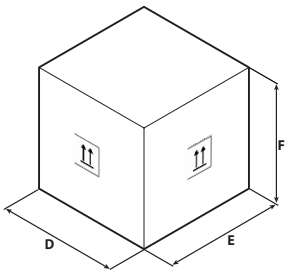
Indoor unit		**MVA2240DH**	**MVA2800DH**
Outdoor unit		**MVAS2242T**	**MVAS2803T**
Indoor unit quantity		**1**	**1**
Outdoor unit quantity		**1**	**1**
Electric data			
Rated power input (1)	kW	9,60	-
Refrigeration pipework			
Type refrigerant connections	Type	To be soldered	To be soldered
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	19,05 (3/4")	22,2 (7/8")
Power supply			
Power supply		380-415V ~ 3N 50/60Hz	380-415V ~ 3N 50/60Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

DIMENSIONS AND WEIGHTS







Carton Box Example

		MVA2240DH	MVA2800DH
Indoor unit			
A	mm	1483	1686
B	mm	791	870
C	mm	385	450
D	mm	1758	1788
E	mm	883	988
F	mm	470	580
Net weight	kg	82,0	105,0
Weight for transport	kg	104,0	140,0

		MVAS2242T	MVAS2803T
Outdoor unit			
A	mm	940	940
B	mm	320	460
C	mm	1430	1615
D	mm	1038	1038
E	mm	438	578
F	mm	1580	1765
Net weight	kg	133,0	163,0
Weight for transport	kg	144,0	175,0

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MPG

Multisplit

Cooling capacity 4,1 ÷ 12,1 kW
Heating capacity 4,4 ÷ 13,0 kW

- **New R32 ecological refrigerant gas.**
- **Wi-fi control using the relative accessory.**
- **Modern design to blend with all furnishing styles.**
- **Wide choice of indoor units available.**
- **Special coil with fin blue coating.**

MPG_CS / MPG_C

SPG_W

MPG_D / MPG_DH

CKG_FS

MLG_F

DESCRIPTION

The multisplit air conditioners of the MPG range are combined with:
— **SPG_W Wall**, for wall installation.
— **CKG_FS Console**, for wall installation.
— **MLG_F Floor ceiling**, for wall and/or ceiling installation.
— **MPG_CS** and **MPG_C Cassette**, for false ceiling installation.
— **MPG_D** and **MPG_DH Duct**, for duct type horizontal installation.
Outdoor units equipped with base electric resistance to avoid the possible formation of ice and facilitate the disposal of condensate during heating operation, compressor and fan with DC inverter technology and electronic expansion valve.

TYPE OF INDOOR UNIT

SPG_W indoor unit

Wall indoor unit designed to be installed on indoor walls.
Universal indoor units: some indoor units can be combined with both multisplit outdoor units of the series MPG and monosplit outdoor units of the series SPG:

	Indoor units SPG_W				
	SPG200W	SPG250W	SPG350W	SPG500W	SPG700W
Monosplit outdoor units SPG		•	•	•	•
Multisplit utdoor units MPG	•	•	•	•	•

— Every indoor unit comes with a remote control and a remote control holder.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— 3-speed fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.

Smart APP Ewpe

Using the specific **accessory**, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play), the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.

CKG_FS indoor unit

Console indoor unit designed to be installed on indoor floors.
Universal indoor units: all indoor units can be combined with both multi-split outdoor units of the series MPG and monosplit outdoor units of the series CKG.



- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Indoor unit front panel with LED display and indicator lights.
- 5-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
- **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Air Purifiers (Cold Plasma) is able to reduce pollutants.
- Standard Wi-Fi module.

Single air delivery

Dual air delivery (default)

Intake

Smart APP Ewpe

The system is equipped standard with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.

Air Purifiers (Cold Plasma)

Capable of reducing pollutants breaking down their molecules using electric discharges, causing the splitting of the water molecules in the air into positive and negative ions. These ions neutralise the molecules of the gaseous pollutants obtaining products that are normally present in clean air. The device can eliminate 90% of bacteria. The result is clean, ionised air that has no bad odours.

MLG_F indoor unit

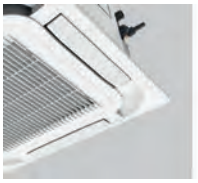
Indoor unit **floor ceiling** designed to be installed on the wall or ceiling indoors.



- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- 3-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
- **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.

MPG_CS indoor unit

Indoor unit **cassette** of dimensions (570x570 mm) designed to be installed on suspended ceiling indoors.



- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- 7-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
- **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Equipped with condensate drain pump.

MPG_C indoor unit

Indoor unit **cassette** of dimensions (840x840 mm) designed to be installed on suspended ceiling indoors.

— Every indoor unit comes with a remote control and a remote control holder.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— 7-speed fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.
— Equipped with condensate drain pump.

MPG_D indoor unit

Duct indoor unit designed for indoor duct type installation.

— Every indoor unit comes with a remote control and a remote control holder.
— **WRCB** wired panel standard supply with each indoor unit.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— 7-speed fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.
— Equipped with condensate drain pump.

MPG_DH indoor unit

Duct indoor unit designed for indoor duct type installation.

— Every indoor unit comes with a remote control and a remote control holder.
— **WRCB** wired panel standard supply with each indoor unit.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— 7-speed fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **X-fan** prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **iFeel** function for activating the ambient temperature probe inside the remote control, for improved comfort.
— Equipped with condensate drain pump.

General features

— New R32 ecological refrigerant gas with low GWP.
— Operating mode: cooling, heating, dehumidification, automatic and fan only.
— Particularly quiet operation.
— Microproccessor control.
— **Auto-restart** function.
— **Self-diagnosis** function.
— Air filter easily removed and cleaned.
— Systems with multi-line refrigerant connections, where every indoor unit is connected directly to the outdoor unit via dedicated refrigerant lines.
— Easy installation and maintenance.

X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.

Smart APP Ewpe

Using the specific **accessory**, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.

Special blue fin coil

Unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

Supplied components for indoor units

Models	SPG_W	CKG_FS	MLG_F	MPG_CS	MPG_C	MPG_D	MPG_DH
Remote control	•	•	•	•	•	•	•
Remote control holder	•	•	•	•	•	•	•
WRCB wired panel WRCB with integrated Wi-Fi module						•	•
Air Purifiers (Cold Plasma)		•					
Wi-Fi module		•					
Condensate discharge pump				•	•	•	•

TYPE OF OUTDOOR UNIT

MPG outdoor unit

Multisplit reversible air/air heat pump with DC inverter technology.

Types:

— **Dualsplit**: outdoor units MPG420 and MPG520 can be combined with 1 or 2 indoor units.
— **Trialsplit**: outdoor units MPG630 and MPG730 can be combined with 2 or 3 indoor units.
— **Quadrisplit**: outdoor unit MPG840 and MPG1040 can be combined with 2, 3 or 4 indoor units.
— **Pentasplit**: outdoor unit MPG1250 can be combined with 2, 3, 4 or indoor units.

Main features:

— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
— Compressor and fan with DC inverter technology.
— Fitted with an electronic expansion valve.

INDOOR UNIT VERSIONS AVAILABLE

Nominal cooling capacity in kBTU/h	Indoor units						
7	SPG200W						
9	SPG250W	CKG260FS	MLG250F			MPG250D	MPG250DH
12	SPG350W	CKG360FS	MLG350F	MPG350CS		MPG350D	MPG350DH
18	SPG500W	CKG500FS	MLG500F	MPG500CS		MPG500D	MPG500DH
24	SPG700W		MLG700F		MPG700C	MPG700D	MPG700DH

ALLOWED COMBINATIONS OF INDOOR UNITS

For trialsplit, quadrisplit, pentasplit it is mandatory to install at least 2 indoor units for correct functioning of the system.

For further information, please refer to the technical documentation on the website www.aermec.com

MPG420 (14kBTU/h)		MPG520 (18kBTU/h)		MPG630 (21kBTU/h)	
N° unità interne					
1	2	1	2	2	3
7	**7+7**	9	7+7	7+7	**7+7+7**
9	7+9	12	7+9	7+9	7+7+9
12	7+12		7+12	7+12	7+7+12
	9+9		**9+9**	7+18	7+9+9
	9+12		9+12	9+9	7+9+12
			12+12	9+12	7+12+12
				9+18	9+9+9
				12+12	9+9+12
				12+18	

MPG730 (24kBTU/h)		MPG840 (28kBTU/h)		
2	3	2	3	4
7+7	7+7+7	7+7	7+7+7	**7+7+7+7**
7+9	7+7+9	7+9	7+7+9	7+7+7+9
7+12	7+7+12	7+12	7+7+12	7+7+7+12
7+18	7+7+18	7+18	7+7+18	7+7+7+18
9+9	**7+9+9**	9+9	7+9+9	7+7+9+9
9+12	7+9+12	9+12	7+9+12	7+7+9+12
9+18	7+9+18	9+18	7+9+18	7+7+9+18
12+12	7+12+12	12+12	7+12+12	7+7+12+12
12+18	9+9+9	12+18	7+12+18	7+9+9+9
18+18	9+9+12	18+18	9+9+9	7+9+9+12
	9+9+18		9+9+12	7+9+12+12
	9+12+12		9+9+18	9+9+9+9
	12+12+12		9+12+12	9+9+9+12
			9+12+18	9+9+12+12
			12+12+12	
			12+12+18	

Any configuration outside of those listed in the above tables will cause errors on the external drives, resulting in system failure and/or damage.

MPG1040 (36kBTU/h)			MPG1250 (42kBTU/h)					
2	3	4	2	3	4		5	
7+12	7+7+7	7+7+7+7	7+18	7+7+7	7+7+7+7	7+12+12+12	7+7+7+7+7	7+9+9+9+9
7+18	7+7+9	7+7+7+9	7+21	7+7+9	7+7+7+9	7+12+12+21	7+7+7+7+9	7+9+9+9+12
7+21	7+7+12	7+7+7+12	7+24	7+7+12	7+7+7+12	7+12+12+24	7+7+7+7+12	7+9+9+9+18
7+24	7+7+18	7+7+7+18	9+12	7+7+18	7+7+7+18	7+12+18+18	7+7+7+7+18	7+9+9+9+21
9+9	7+7+21	7+7+7+21	9+18	7+7+21	7+7+7+21	7+12+18+21	7+7+7+7+21	7+9+9+9+24
9+12	7+7+24	7+7+7+24	9+21	7+7+24	7+7+7+24	7+12+18+24	7+7+7+7+24	7+9+9+12+12
9+18	7+9+9	7+7+9+9	9+24	7+9+9	7+7+9+9	7+12+21+21	7+7+7+9+9	7+9+9+12+18
9+21	7+9+12	7+7+9+12	12+12	7+9+12	7+7+9+12	7+18+18+18	7+7+7+9+12	7+9+9+12+21
9+24	7+9+18	7+7+9+18	12+18	7+9+18	7+7+9+18	9+9+9+9	7+7+7+9+18	7+9+9+12+24
12+12	7+9+21	7+7+9+21	12+21	7+9+21	7+7+9+21	9+9+9+12	7+7+7+9+21	7+9+9+18+18
12+18	7+9+24	7+7+9+24	12+24	7+9+24	7+7+9+24	9+9+9+18	7+7+7+9+24	7+9+12+12+12
12+21	7+12+12	7+7+12+12	18+18	7+12+12	7+7+12+12	9+9+9+21	7+7+7+12+12	7+9+12+12+18
12+24	7+12+18	7+7+12+18	18+21	7+12+18	7+7+12+18	9+9+9+24	7+7+7+12+18	7+9+12+12+21
18+18	7+12+21	7+7+12+21	18+24	7+12+21	7+7+12+21	**9+9+12+12**	7+7+7+12+21	7+12+12+12+12
18+21	7+12+24	7+7+12+24	21+21	7+12+24	7+7+12+24	9+9+12+18	7+7+7+12+24	7+12+12+12+18
18+24	7+18+18	7+7+18+18	21+24	7+18+18	7+7+18+18	9+9+12+21	7+7+7+18+18	9+9+ 9+9+9
21+21	7+18+21	7+7+18 +21	24+24	7+18+21	7+7+18 +21	9+9+12+24	7+7+7+18+21	9+9+ 9+9+12
21+21	7+18+24	7+9+9+9		7+18+24	7+7+18 +24	9+9+18+18	7+7+7+18+24	9+9+ 9+9+18
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	7+21+24	7+9+9+18		7+21+24	7+7+21 +24	9+9+18+24	7+7+9+9+9	9+9+ 9+9+24
	9+9+9	7+9+9+21		7+24+24	7+7+24 +24	9+9+21+21	7+7+9+9+12	9+9+9+12+12
	9+9+12	7+9+9+24		9+9+9	7+9+9+9	9+9+21+24	7+7+9+9+18	9+9+9+12+18
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	9+9+21	7+9+12+18		9+9+18	7+9+9+18	9+12+12+18	7+7+9+9+24	9+9+9+12+24
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	9+12+12	7+9+12+24		9+9+24	7+9+9+24	9+12+12+24	7+7+9+12+18	9+9+12+12+12
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	9+12+24	7+12+12+18		9+12+21	7+9+12+21	9+12+18+24	7+7+9+18+18	9+12+12+12+12
	9+18+18	7+12+12+21		9+12+24	7+9+12+24	9+12+21+21	7+7+9+18+21	9+12+12+12+18
	9+18+21	**9+9+9+9**		9+18+18	7+9+18+18	9+18+18+18	7+7+12+12+12	12+12+12+12+12
	9+18+24	9+9+9+12		9+18+21	7+9+18+21	12+12+12+12	7+7+12+12+18	
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	12+12+12	9+9+9+24		9+21+24	7+9+21+24	12+12+12+24	7+7+12+18+18	
	12+12+18	9+9+12+12		9+24+24		12+12+18+18		
	12+12+21	9+9+12+18		12+12+12		12+12+18+21		
	12+12+24	9+9+12+21		12+12+18				
	12+18+18	9+9+12+24		12+12+21				
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				18+18+24				
				18+21+21				
				18+21+24				
				21+21+21				

Any configuration outside of those listed in the above tables will cause errors on the external drives, resulting in system failure and/or damage.

ACCESSORIES

CC2: Centralised control with 7" touchscreen display for managing several indoor units within a number of multisplit systems. The centralised control has an integrated external contact. For more information, refer to the specific documentation. *
WRCA: Wired panel with liquid crystal display and soft-touch buttons. This accessory can be used to control not only the traditional system functions but also a weekly timer with a maximum of 8 daily time bands.
WRCB: Wired panel with liquid crystal display and soft-touch buttons, equipped with an integrated wi-fi module for remote control of the unit (via the dedicated EWPE Smart App).

*** The CC2 centralised control can manage up to 36 MPG systems.**

In order to use accessory CC2, for each indoor unit, the WRCA / WRCB wired panel (accessory) must be installed, with the IC-2P adapter accessory.

For more information about the accessories and their functions (such as the auto-restart function), refer to the specific documentation of the single accessory.

DCK: Remote Contact Kit. This accessory allows you to switch the system on and off using an external contact.
WIFIKIT01: Plug & Play module to be installed in the indoor unit for Wi-Fi control, equipped with Bluetooth® connection to ensure a better connection with smart devices. (Cable length 250 mm)

The accessories WRCA and WIFIKIT01 are compatible with one another and can therefore be connected to the same indoor unit simultaneously.

GLG40S: Air supply and flow grid with dimensions (620x620 mm) for cassette internal unit.
GLG40: Air supply and flow grid with dimensions (950x950 mm) for cassette internal unit.

DTG1: Diagnostic tool for indoor and outdoor units of the entire series (tool reserved for service centres or installers).

ACCESSORIES COMPATIBILITY

SPG_W

Accessory	SPG500W	SPG700W
CC2 (1)	•	•
WRCA (1)	•	•

(1) Auto-restart function.

Accessory	SPG500W	SPG700W
IC-2P	•	•

Accessory	SPG200W	SPG250W	SPG350W	SPG500W	SPG700W
DCK				•	•
WIFIKIT01	•	•	•	•	•

CKG_FS

Accessory	CKG260FS	CKG360FS	CKG500FS
CC2 (1)	•	•	•
WRCA (1)	•	•	•

(1) Auto-restart function.

Accessory	CKG260FS	CKG360FS	CKG500FS
IC-2P	•	•	•

MLG_F

Accessory	MLG250F	MLG350F	MLG500F	MLG700F
CC2 (1)	•	•	•	•
WRCA (1)	•	•	•	•
WRCB (1)	•	•	•	•

(1) Auto-restart function.

Accessory	MLG250F	MLG350F	MLG500F	MLG700F
IC-2P	•	•	•	•

Accessory	MLG250F	MLG350F	MLG500F	MLG700F
DCK	•	•	•	•

MPG_CS

Accessory	MPG350CS	MPG500CS
CC2 (1)	•	•
WRCA (1)	•	•
WRCB (1)	•	•

(1) Auto-restart function.

Accessory	MPG350CS	MPG500CS
IC-2P	•	•

Accessory	MPG350CS	MPG500CS
GLG40S (1)	•	•

(1) Mandatory accessory.

Accessory	MPG350CS	MPG500CS
DCK	•	•

MPG_C

Accessory	MPG700C
CC2 (1)	•
WRCA (1)	•
WRCB (1)	•

(1) Auto-restart function.

Accessory	MPG700C
IC-2P	•

Accessory	MPG700C
GLG40 (1)	•

(1) Mandatory accessory.

Accessory	MPG700C
DCK	•

MPG_D

Accessory	MPG250D	MPG350D	MPG500D	MPG700D
CC2 (1)	•	•	•	•
WRCA (1)	•	•	•	•
WRCB (1)	•	•	•	•

(1) Auto-restart function.
Wired panel WRCB standard supply.

Accessory	MPG250D	MPG350D	MPG500D	MPG700D
IC-2P	•	•	•	•

Accessory	MPG250D	MPG350D	MPG500D	MPG700D
DCK	•	•	•	•

MPG_DH

Accessory	MPG250DH	MPG350DH	MPG500DH	MPG700DH
CC2 (1)	•	•	•	•
WRCA (1)	•	•	•	•
WRCB (1)	•	•	•	•

(1) Auto-restart function.
Wired panel WRCB standard supply.

Accessory	MPG250DH	MPG350DH	MPG500DH	MPG700DH
IC-2P	•	•	•	•

Accessory	MPG250DH	MPG350DH	MPG500DH	MPG700DH
DCK	•	•	•	•

OUTDOOR UNIT PERFORMANCE DATA

		MPG420	MPG520	MPG630	MPG730	MPG840	MPG1040	MPG1250
Nominal cooling performances								
Cooling capacity (1)	kW	4,10	5,30	6,10	7,10	8,00	10,60	12,10
Cooling input power (1)	kW	1,10	1,48	1,48	1,88	2,12	3,00	3,40
EER (2)	W/W	3,73	3,58	4,12	3,78	3,77	3,53	3,56
Minimum cooling performances								
Cooling capacity	kW	2,05	2,14	2,20	2,30	2,30	2,60	2,60
Cooling input power	kW	0,20	0,30	0,40	0,60	0,80	0,60	0,60
Maximum cooling performances								
Cooling capacity	kW	5,00	5,80	8,30	9,20	11,00	12,00	15,20
Cooling input power	kW	2,20	2,50	2,90	3,40	3,60	4,60	4,60
Seasonal efficiency								
SEER	W/W	6,70	6,50	6,90	6,50	6,10	6,50	6,48
Annual power consumption	kWh/annum	214	285	309	382	459	571	-
Efficiency energy class (3)		A++	A++	A++	A++	A++	A++	-
Nominal heating performances								
Heating capacity (4)	kW	4,40	5,65	6,50	8,60	9,50	12,00	13,00
Heating input power (4)	kW	0,97	1,25	1,43	2,23	2,20	3,04	3,19
COP (2)	W/W	4,54	4,52	4,55	3,86	4,32	3,95	4,08
Minimum heating performances								
Heating capacity	kW	2,49	2,58	3,60	3,65	3,65	3,00	3,00
Heating input power	kW	0,30	0,40	0,40	0,60	0,70	0,80	0,80
Maximum heating performances								
Heating capacity	kW	5,40	6,50	8,50	9,20	10,25	14,00	15,50
Heating input power	kW	2,25	2,50	2,90	3,00	3,60	5,00	5,00
Seasonal efficiency (temperate climate)								
SCOP	W/W	4,00	4,00	3,80	3,80	4,00	3,80	3,80
Annual power consumption	kWh/annum	1295	1435	2247	2247	2345	3795	-
Efficiency energy class (3)		A+	A+	A	A	A+	A	-
Outdoor unit								
Type of fan	Type	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial
Air flow rate								
Maximum	m^3/h	2300	2300	3800	3800	3800	5800	5800
Sound power (5)								
Maximum	dB(A)	62,0	64,0	68,0	68,0	68,0	70,0	74,0
Sound pressure (1 m) (6)								
Maximum	dB(A)	52,0	54,0	58,0	58,0	58,0	60,0	60,0
Compressor								
Type	type	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary
Refrigerant	type	R32	R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	0,75	0,90	1,60	1,70	1,80	2,40	2,40
Potential global heating	GWP	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq
Equivalent CO_2	t	0,51	0,61	1,08	1,15	1,22	1,62	1,62
Electric data								
Rated power input (7)	kW	2,30	2,50	2,90	3,40	3,60	5,00	5,00
Rated current input (7)	A	10,0	11,0	12,9	15,0	16,0	21,7	21,7
Refrigeration pipework								
Maximum refrigerant tube length	m	40	40	60	60	70	80	100
Maximum single cooling line length	m	20,0	20,0	20,0	20,0	20,0	25,0	25,0
Maximum unit (indoor/external) cooling line level difference in height	m	15,0	15,0	15,0	15,0	15,0	25,0	25,0
Maximum (indoor/outdoor) cooling line level difference	m	15,0	15,0	15,0	15,0	15,0	25,0	25,0
Refrigerant to be added	g/m	20	20	20	20	20	20	20
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Power supply								
Outdoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(5) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(6) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
(7) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
All technical data refer to the respective reference combinations of the indoor units.

INDOOR UNIT PERFORMANCE DATA

SPG_W

		SPG200W	SPG250W	SPG350W	SPG500W	SPG700W
Nominal cooling performances						
Cooling capacity (1)	kW	2,20	2,50	3,20	4,60	6,20
Moisture removed	l/h	0,6	0,6	1,4	1,8	1,8
Nominal heating performances						
Heating capacity (2)	kW	2,40	2,80	3,40	5,20	6,50
Indoor unit						
Type of fan	Type			Inverter centrifugal		
Input power	W	13	13	23	38	38
Air flow rate						
Minimum	m^3/h	250	270	320	600	650
Average	m^3/h	420	390	400	700	750
Maximum	m^3/h	470	470	520	800	950
Turbo	m^3/h	500	500	590	850	1100
Sound power (3)						
Minimum	dB(A)	34,0	34,0	38,0	44,0	49,0
Average	dB(A)	45,0	44,0	45,0	48,0	52,0
Maximum	dB(A)	49,0	48,0	49,0	52,0	58,0
Turbo	dB(A)	55,0	55,0	56,0	54,0	61,0
Sound pressure (1 m) (4)						
Minimum	dB(A)	22,0	22,0	26,0	34,0	35,0
Average	dB(A)	33,0	32,0	33,0	38,0	38,0
Maximum	dB(A)	36,0	36,0	37,0	42,0	44,0
Turbo	dB(A)	39,0	38,0	41,0	44,0	47,0
Indoor unit						
Condensate discharge diameter	mm	16,0	16,0	16,0	16,0	16,0
Power supply						
Indoor unit power supply				220-240V ~ 50Hz		

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(4) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
Sound power calculated in free field, in accordance with UNI EN ISO 3744.

CKG_FS

		CKG260FS	CKG360FS	CKG500FS
Nominal cooling performances				
Cooling capacity (1)	kW	2,70	3,50	5,20
Moisture removed	l/h	0,8	1,2	1,8
Nominal heating performances				
Heating capacity (2)	kW	2,90	3,80	5,33
Indoor unit				
Type of fan	Type		Inverter centrifugal	
Input power	W	35	40	50
Air flow rate				
Minimum	m^3/h	280	360	410
Average	m^3/h	370	440	520
Maximum	m^3/h	430	520	650
Turbo	m^3/h	500	600	700
Sound power (3)				
Minimum	dB(A)	38,0	39,0	47,0
Average	dB(A)	44,0	46,0	51,0
Maximum	dB(A)	48,0	50,0	55,0
Turbo	dB(A)	50,0	54,0	57,0
Sound pressure (4)				
Minimum	dB(A)	26,0	29,0	37,0
Average	dB(A)	31,0	36,0	41,0
Maximum	dB(A)	36,0	40,0	45,0
Turbo	dB(A)	39,0	44,0	47,0
Indoor unit				
Condensate discharge diameter	mm	17,0	17,0	17,0
Power supply				
Indoor unit power supply			220-240V ~ 50Hz	

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(4) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.
Sound power calculated in free field, in accordance with UNI EN ISO 3744.

MLG_F

		MLG250F	MLG350F	MLG500F	MLG700F
Nominal cooling performances					
Cooling capacity (1)	kW	2,60	3,50	4,50	7,10
Moisture removed	l/h	0,8	1,4	1,8	2,5
Nominal heating performances					
Heating capacity (2)	kW	2,70	4,00	5,00	8,00
Electric data					
Rated power input (3)	W	38	38	38	60
Indoor unit					
Type of fan	Type		Inverter centrifugal		
Input power	W	38	38	38	60
Air flow rate					
Minimum	m^3/h	420	420	410	720
Average	m^3/h	540	540	520	800
Maximum	m^3/h	610	610	590	870
Turbo	m^3/h	700	700	680	950
Sound power (4)					
Minimum	dB(A)	40,0	40,0	40,0	41,0
Average	dB(A)	44,0	44,0	44,0	45,0
Maximum	dB(A)	49,0	49,0	49,0	52,0
Turbo	dB(A)	52,0	52,0	52,0	52,0
Sound pressure (5)					
Minimum	dB(A)	26,0	26,0	26,0	27,0
Average	dB(A)	30,0	30,0	30,0	31,0
Maximum	dB(A)	35,0	35,0	35,0	35,0
Turbo	dB(A)	38,0	38,0	38,0	38,0
Indoor unit					
Condensate discharge diameter	mm	17,0	17,0	17,0	17,0
Power supply					
Indoor unit power supply			220-240V ~ 50Hz		

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.
Sound power calculated in free field, in accordance with UNI EN ISO 3744.

MPG_CS

		MPG350CS	MPG500CS
Nominal cooling performances			
Cooling capacity (1)	kW	3,50	5,00
Moisture removed	l/h	1,4	1,8
Nominal heating performances			
Heating capacity (2)	kW	4,00	5,50
Indoor unit			
Type of fan	Type	Inverter centrifugal	
Input power	W	30	35
Air flow rate			
Minimum	m^3/h	380	380
Average	m^3/h	450	450
Maximum	m^3/h	540	540
Turbo	m^3/h	560	650
Sound power (3)			
Minimum	dB(A)	46,0	46,0
Average	dB(A)	50,0	50,0
Maximum	dB(A)	55,0	55,0
Turbo	dB(A)	57,0	59,0
Sound pressure (1 m) (4)			
Turbo	dB(A)	41,0	43,0
Minimum	dB(A)	30,0	30,0
Average	dB(A)	34,0	34,0
Maximum	dB(A)	39,0	39,0
Indoor unit			
Condensate discharge diameter	mm	25,0	25,0
Power supply			
Indoor unit power supply		220-240V ~ 50Hz	

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(4) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
Sound power calculated in free field, in accordance with UNI EN ISO 3744.

MPG_C

		MPG700C
Nominal cooling performances		
Cooling capacity (1)	kW	7,00
Moisture removed	l/h	2,5
Nominal heating performances		
Heating capacity (2)	kW	8,00
Indoor unit		
Type of fan	Type	Inverter centrifugal
Input power	W	50
Air flow rate		
Minimum	m^3/h	830
Average	m^3/h	910
Maximum	m^3/h	1050
Turbo	m^3/h	1100
Sound pressure (1 m) (3)		
Turbo	dB(A)	44,0
Minimum	dB(A)	38,0
Average	dB(A)	40,0
Maximum	dB(A)	43,0
Sound power (4)		
Minimum	dB(A)	57,0
Average	dB(A)	59,0
Maximum	dB(A)	61,0
Turbo	dB(A)	62,0
Indoor unit		
Condensate discharge diameter	mm	25,0
Power supply		
Indoor unit power supply		220-240V ~ 50Hz

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
Sound power calculated in free field, in accordance with UNI EN ISO 3744.

MPG_D

		MPG250D	MPG350D	MPG500D	MPG700D
Nominal cooling performances					
Cooling capacity (1)	kW	2,65	3,50	5,00	7,00
Moisture removed	l/h	0,8	1,4	1,8	2,5
Nominal heating performances					
Heating capacity (2)	kW	2,80	4,00	5,50	8,00
Indoor unit					
Type of fan	Type		Inverter centrifugal		
Input power	W	70	80	80	200
Air flow rate					
Minimum	m^3/h	220	300	420	900
Average	m^3/h	340	420	610	1000
Maximum	m^3/h	450	540	720	1200
Turbo	m^3/h	560	600	800	1300
Sound pressure (1 m) (3)					
Turbo	dB(A)	32,0	36,0	36,0	46,0
Minimum	dB(A)	22,0	27,0	25,0	36,0
Average	dB(A)	22,0	27,0	25,0	36,0
Maximum	dB(A)	28,0	34,0	31,0	42,0
Sound power (4)					
Minimum	dB(A)	37,0	42,0	40,0	51,0
Average	dB(A)	40,0	46,0	43,0	55,0
Maximum	dB(A)	43,0	49,0	46,0	57,0
Turbo	dB(A)	47,0	51,0	51,0	61,0
Indoor unit					
Condensate discharge diameter	mm	26,0	26,0	26,0	26,0
Power supply					
Indoor unit power supply			220-240V ~ 50Hz		

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
Sound power calculated in free field, in accordance with UNI EN ISO 3744.

MPG_DH

		MPG250DH	MPG350DH	MPG500DH	MPG700DH
Nominal cooling performances					
Cooling capacity (1)	kW	2,65	3,50	5,00	7,00
Moisture removed	l/h	0,8	1,4	1,8	2,5
Nominal heating performances					
Heating capacity (2)	kW	2,80	4,00	5,50	8,00
Indoor unit					
Type of fan	Type	Inverter centrifugal			
Input power	W	50	50	75	80
High static pressure					
Maximum	Pa	60	60	60	125
Air flow rate					
Minimum	m^3/h	550	410	750	900
Average	m^3/h	610	480	790	1000
Maximum	m^3/h	670	560	840	1200
Turbo	m^3/h	700	650	880	1500
Sound pressure (1 m) (3)					
Turbo	dB(A)	41,0	39,0	41,0	45,0
Minimum	dB(A)	35,0	33,0	37,0	36,0
Average	dB(A)	37,0	35,0	38,0	38,0
Maximum	dB(A)	39,0	37,0	39,0	40,0
Sound power (4)					
Minimum	dB(A)	51,0	49,0	53,0	53,0
Average	dB(A)	53,0	51,0	54,0	55,0
Maximum	dB(A)	55,0	53,0	55,0	57,0
Turbo	dB(A)	57,0	55,0	57,0	62,0
Indoor unit					
Condensate discharge diameter	mm	26,0	26,0	26,0	26,0
Power supply					
Indoor unit power supply		220-240V ~ 50Hz			

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
Sound power calculated in free field, in accordance with UNI EN ISO 3744.

INDOOR UNIT COOLING FITTINGS

SPG_W

		SPG200W	SPG250W	SPG350W	SPG500W	SPG700W
Refrigeration pipework						
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")

CKG_FS

		CKG260FS	CKG360FS	CKG500FS
Refrigeration pipework				
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")

MLG_F

		MLG250F	MLG350F	MLG500F	MLG700F
Refrigeration pipework					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,7 (1/2)	15,9 (5/8)

MPG_CS

		MPG350CS	MPG500CS
Refrigeration pipework			
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	12,7 (1/2")

MPG_C

		MPG700C
Refrigeration pipework		
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	15,9 (5/8")

MPG_D

		MPG250D	MPG350D	MPG500D	MPG700D
Refrigeration pipework					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	15,9 (5/8")

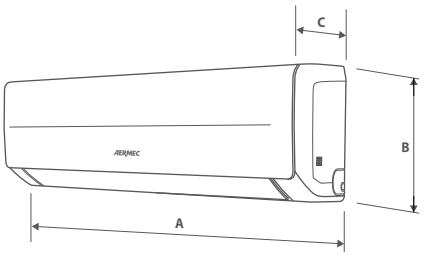
MPG_DH

		MPG250DH	MPG350DH	MPG500DH	MPG700DH
Refrigeration pipework					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	15,9 (5/8")

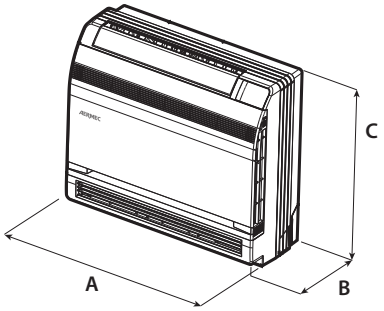
OUTDOOR UNIT COOLING FITTINGS

Models			MPG420	MPG520	MPG630	MPG730	MPG840	MPG1040	MPG1250
			14kBtu/h	18kBtu/h	21kBtu/h	24kBtu/h	28kBtu/h	36kBtu/h	42kBtu/h
Liquid connections	A	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	B	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	C	mm (inch)			9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	D	mm (inch)					9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	E	mm (inch)							9,52 (3/8")
Gas connections	A	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	B	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	C	mm (inch)			6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	D	mm (inch)					6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	E	mm (inch)							6,35 (1/4")

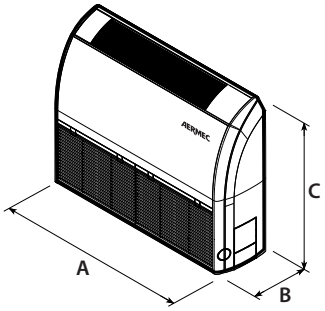
INDOOR UNIT WEIGHTS AND DIMENSIONS



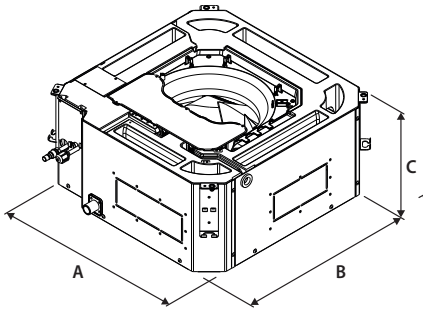
SPG_W



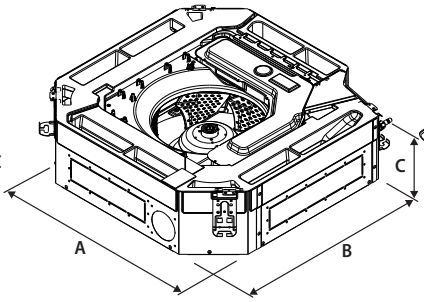
CKG_FS



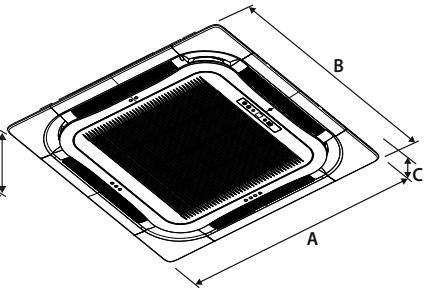
MLG_F



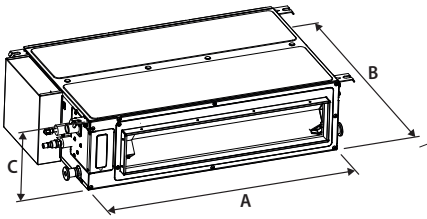
MPG_CS



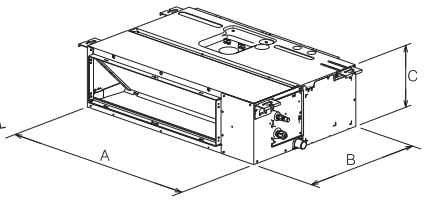
MPG_C



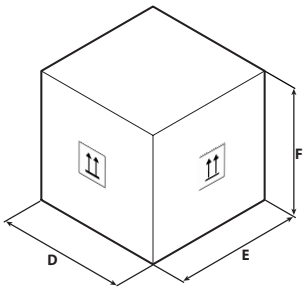
GLG40S / GLG40



MPG_D



MGE_DH



Carton Box Example

SPG_W

		SPG200W	SPG250W	SPG350W	SPG500W	SPG700W
Indoor unit						
A	mm	696	696	770	972	1081
B	mm	251	251	251	300	325
C	mm	190	190	190	225	248
D	mm	747	747	822	1022	1137
E	mm	324	324	324	374	407
F	mm	262	262	262	299	334
Net weight	kg	7,5	7,5	8,5	13,5	16,5
Weight for transport	kg	9,0	9,0	10,0	16,0	19,5

CKG_FS

		CKG260FS	CKG360FS	CKG500FS
Indoor unit				
A	mm	700	700	700
B	mm	215	215	215
C	mm	600	600	600
D	mm	788	788	788
E	mm	283	283	283
F	mm	697	697	697
Net weight	kg	15,5	15,5	15,5
Weight for transport	kg	18,5	18,5	18,5

MLG_F

		MLG250F	MLG350F	MLG500F	MLG700F
Indoor unit					
A	mm	870	870	870	1200
B	mm	235	235	235	235
C	mm	665	665	665	665
D	mm	1033	1033	1033	1363
E	mm	300	300	300	300
F	mm	770	770	770	770
Net weight	kg	25,0	25,0	26,0	33,0
Weight for transport	kg	30,0	30,0	31,0	40,0

MPG_CS

		MPG350CS	MPG500CS
Indoor unit			
A	mm	570	570
B	mm	570	570
C	mm	265	265
D	mm	698	698
E	mm	653	653
F	mm	295	295
Net weight	kg	17,0	17,0
Weight for transport	kg	22,0	22,0

MPG_C

		MPG700C
Indoor unit		
A	mm	840
B	mm	840
C	mm	240
D	mm	963
E	mm	963
F	mm	325
Net weight	kg	29,0
Weight for transport	kg	36,0

GLG40S / GLG40

		GLG40S	GLG40
Indoor unit			
A	mm	620	950
B	mm	620	950
C	mm	48	52
D	mm	701	1033
E	mm	701	1038
F	mm	125	112
Net weight	kg	3,0	6,0
Weight for transport	kg	5,0	10,0

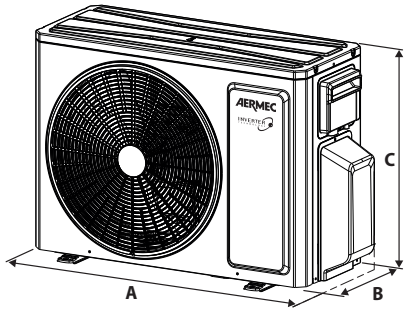
MPG_D

		MPG250D	MPG350D	MPG500D	MPG700D
Indoor unit					
A	mm	710	710	1010	900
B	mm	450	450	450	655
C	mm	200	200	200	260
D	mm	1008	1008	1308	1115
E	mm	568	568	568	772
F	mm	275	275	275	320
Net weight	kg	18,5	19,0	25,0	31,0
Weight for transport	kg	22,5	23,0	30,0	36,0

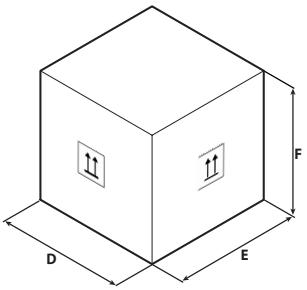
MPG_DH

		MPG250DH	MPG350DH	MPG500DH	MPG700DH
Indoor unit					
A	mm	710	710	1010	900
B	mm	450	450	450	655
C	mm	200	200	200	260
D	mm	1008	1008	1308	1115
E	mm	568	568	568	772
F	mm	275	275	275	320
Net weight	kg	18,5	19,0	25,0	31,0
Weight for transport	kg	22,5	23,0	30,0	36,0

OUTDOOR UNIT WEIGHTS AND DIMENSIONS



MPG



Carton Box Example

MPG

		MPG420	MPG520	MPG630	MPG730	MPG840	MPG1040	MPG1250
Outdoor unit								
A	mm	822	822	964	964	964	1020	1020
B	mm	352	352	402	402	402	427	427
C	mm	555	555	660	660	660	826	826
D	mm	872	872	1032	1032	1032	1095	1095
E	mm	398	398	456	456	456	500	500
F	mm	620	620	737	737	737	955	955
Net weight	kg	30,0	32,0	47,5	47,5	51,0	72,0	73,0
Weight for transport	kg	32,5	34,5	52,0	52,0	55,5	85,0 (1)	86,0 (1)

(1) Packaging + pallet

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

MGE

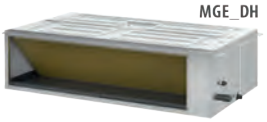
Multisplit

Cooling capacity 4,1 ÷ 12,31 kW
Heating capacity 4,4 ÷ 12,31 kW

- **R32 ecological refrigerant gas.**
- **Wi-fi control using the relative accessory.**
- **Modern design to blend with all furnishing styles.**
- **Wide choice of indoor units available.**
- **Special golden fin coil.**


MGE_CS / MGE_C


SGE_W


MGE_DH


MGE_FS


MGE

DESCRIPTION

The multisplit air conditioners of the MGE range are combined with:
— SGE_W unit **wall**, for wall installation.
— MGE_C_CSunit **Cassette** for false ceiling installation.
— MGE_FS unit **Console**, for wall installation.
— MGE_DH unit **Duct**, for duct type horizontal installation.

TYPE OF OUTDOOR UNIT

Outdoor unit

Multisplit air conditioner.
Reversible air/air heat pump with DC inverter technology.

Types

— **Dualsplit**: outdoor units MGE420 and MGE520 can be combined with 2 indoor units.
— **Trialsplit**: outdoor units MGE630 and MGE830 can be combined with 2 or 3 indoor units.
— **Quadrisplit**: outdoor unit MGE840 and MGE1040 can be combined with 2, 3 or 4 indoor units.
— **Pentasplit**: outdoor unit MGE1250 can be combined with 2, 3, 4 or indoor units.

General features

— Compressor and fan with DC inverter technology.
— Fitted with an electronic expansion valve.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

TYPE OF INDOOR UNIT

Indoor unit SGE_W

Wall indoor unit designed to be installed on indoor walls.
SGE_W has an elegant and essential design. Its curved lines emphasize a kind of structure with innovative and functional style. The display with working parameters is elegantly integrated in the satin-finish cover and visible only when the unit is on.

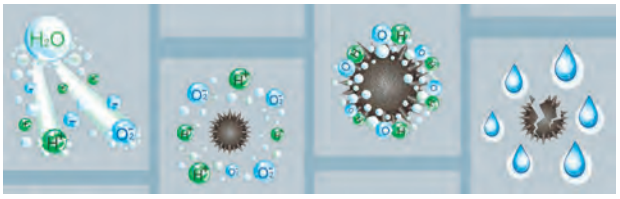
Features

— Remote control standard supply with each indoor unit.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— 3-speed fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function to attain the desired temperature as quickly as possible.
— **Sleep** night time function well-being program.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **followMe** function for activating the ambient temperature probe inside the remote control, for improved comfort.

Air Purifiers (Cold Plasma)

Capable of reducing pollutants breaking down their molecules using electric discharges, causing the splitting of the water molecules in the air into positive and negative ions. These ions neutralise the molecules of the gaseous pollutants obtaining products that are normally present in clean air. The device can eliminate 90% of bacteria. The result is clean, ionised air that has no bad odours.

Not available for SGE200W



MGE_CS - MGE_C Indoor unit

Indoor unit **Cassette** of dimensions 570x570 mm (MGE350CS - MGE500CS) and 830x830 mm (MGE700C) designed to be installed on suspended ceiling indoors.

Features

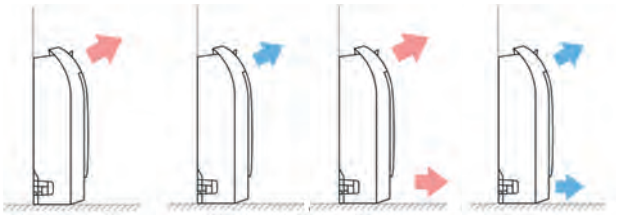
— Remote control standard supply with each indoor unit.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— **4-speed** fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function
— Louver angle memory function.
— **Sleep** night time function well-being program.
— Refrigerant Leak Detection System.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **followMe** function for activating the ambient temperature probe inside the remote control, for improved comfort.
— **Dehumidification** function that allows humidity control

MGE_FS Indoor unit

Console indoor unit designed to be installed on indoor floors.

Features

— Remote control standard supply with each indoor unit.
— Fan with DC inverter technology.
— Regenerable air filter easy to remove and clean.
— Timer for programming switch-off and switch-on.
— Auxiliary emergency command integrated into the unit.
— Indoor unit front panel with LED display and indicator lights.
— **4-speed** fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function
— Louver angle memory function.
— **Sleep** night time function well-being program.
— Refrigerant Leak Detection System.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **followMe** function for activating the ambient temperature probe inside the remote control, for improved comfort.



Single air delivery Dual air delivery

MGE_DH Indoor unit

Duct indoor unit designed for indoor duct type installation.

Features

— Remote control standard supply with each indoor unit.
— **WRPE10** wired panel standard supply with each indoor unit.
— Fan with DC inverter technology.
— Timer for programming switch-off and switch-on.
— **4-speed** fan, to meet every possible need.
— **Auto** function for a continuous speed variation.
— **Turbo** function
— **Sleep** night time function well-being program.
— **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
— **followMe** function for activating the ambient temperature probe inside the remote control, for improved comfort.

General features

— R32 ecological refrigerant gas with low GWP.
— Operating mode: cooling, heating, dehumidification, automatic and fan only.
— Particularly quiet operation.
— Microproccessor control.
— Auto-restart function.
— Self-diagnosis function.
— Air filter easily removed and cleaned.
— Systems with multi-line refrigerant connections, where every indoor unit is connected directly to the outdoor unit via dedicated refrigerant lines.
— Easy installation and maintenance.

Low cooling function

cooling operation with outdoor temperatures down to -15 °C

Low heating function

heating with external temperatures up to -15 °C.

Nethome Plus app

Using the specific **accessory**, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.

ACCESSORIES

WIFIKEY: Plug & Play module to be installed in the indoor unit for Wi-Fi control.
WRPE10: Wired panel with liquid crystal display and soft-touch buttons.
WRPE10W: Flush panel with LCD display and Soft-Touch keys. It is equipped with WiFi and Bluetooth® connection for better connection stability.
GLE10S: Air supply and flow grid with dimensions (620x620 mm) for cassette internal unit. Mandatory accessory.
GLE10: Air supply and flow grid with dimensions (950x950 mm) for cassette internal unit. Mandatory accessory.

Accessories compatibility

SGE_W

Accessory	SGE200W	SGE250W	SGE350W	SGE500W
WIFIKEY	•	•	•	•

MGE_C / CS

Accessory	MGE350CS	MGE500CS	MGE700C
WIFIKEY	•	•	•

Accessory	MGE350CS	MGE500CS	MGE700C
WRPE10	•	•	•
WRPE10W	•	•	•

Accessory	MGE350CS	MGE500CS	MGE700C
GLE10 (1)			•
GLE10S (1)	•	•	

(1) Mandatory accessory.

MGE_DH

Accessory	MGE250DH	MGE350DH	MGE500DH	MGE700DH
WRPE10W	•	•	•	•

Wired panel WRPE10 standard supply.

MGE_FS

Accessory	MGE250FS	MGE350FS	MGE500FS
WIFIKEY	•	•	•

Accessory	MGE250FS	MGE350FS	MGE500FS
WRPE10	•	•	•
WRPE10W	•	•	•

ALLOWED COMBINATIONS OF INDOOR UNITS

For trialsplit, quadrisplit or pentasplit MGE units, it is mandatory to install at least 2 indoor units for correct functioning of the system.
For further information, please refer to the technical documentation on the website www.aermec.com

MGE420	MGE520	MGE630		MGE830		MGE840		
BI (1x2)	BI (1x2)	TRI (1x2)	TRI (1x3)	TRI (1x2)	TRI (1x3)	QUADRI (1x2)	QUADRI (1x3)	QUADRI (1x4)
7+7	7+7	7+7	**7+7+7**	7+7	7+7+7	7+7	7+7+7	7+7+7+7
7+9	7+9	7+9	7+7+9	7+9	7+7+9	7+9	7+7+9	7+7+7+9
7+12	7+12	7+12	7+7+12	7+12	7+7+12	7+12	7+7+12	7+7+7+12
9+9	**9+9**	7+18	7+9+9	7+18	7+7+18	7+18	7+7+18	7+7+7+18
	9+12	9+9	7+9+12	9+9	7+9+9	7+24	7+7+24	7+7+9+9
	12+12	9+12	9+9+9	9+12	7+9+12	9+9	7+9+9	7+7+9+12
		9+18		9+18	7+9+18	9+12	7+9+12	7+7+9+18
		12+12		12+12	7+12+12	9+18	7+9+18	7+7+12+12
				12+18	**9+9+9**	9+24	7+9+24	7+9+9+9
					9+9+12	12+12	7+12+12	7+9+9+12
					9+12+12	12+18	7+12+18	7+9+12+12
					12+12+12	12+24	9+9+9	9+9+9+9
							9+9+12	9+9+9+12
							9+9+18	9+9+12+12
							9+9+24	
							9+12+12	
							9+12+18	
							12+12+12	
							12+12+18	

MGE1040			MGE1250			
QUADRI (1x2)	QUADRI (1x3)	QUADRI (1x4)	PENTA (1x2)	PENTA (1x3)	PENTA (1x4)	PENTA (1x5)
7+12	7+7+7	7+7+7+7	7+18	7+7+7	7+7+7+7	7+7+7+7+7
7+18	7+7+9	7+7+7+9	7+24	7+7+9	7+7+7+9	7+7+7+7+9
7+24	7+7+12	7+7+7+12	9+12	7+7+12	7+7+7+12	7+7+7+7+12
9+9	7+7+18	7+7+7+18	9+18	7+7+18	7+7+7+18	7+7+7+7+18
9+12	7+7+24	7+7+7+24	9+24	7+7+24	7+7+7+24	7+7+7+7+24
9+18	7+9+9	7+7+9+9	12+12	7+9+9	7+7+9+9	7+7+7+9+9
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		12+12+12+12			9+9+9+12	7+9+9+9+12
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						12+12+12+12+18

OUTDOOR UNIT PERFORMANCE DATA

		MGE420	MGE520	MGE630	MGE830	MGE840	MGE1040	MGE1250
Nominal cooling performances								
Cooling capacity (1)	kW	4,10	5,30	6,15	7,90	8,20	10,55	12,31
Cooling input power (1)	kW	1,27	1,64	1,91	2,45	2,54	3,30	3,81
EER (2)	W/W	3,23	3,23	3,23	3,23	3,23	3,20	3,23
Minimum cooling performances								
Cooling capacity	kW	1,47	2,29	1,99	3,18	2,34	3,64	3,02
Cooling input power	kW	0,12	0,69	0,18	0,29	0,20	0,33	0,28
Maximum cooling performances								
Cooling capacity	kW	4,98	5,71	6,59	8,21	10,02	10,84	12,31
Cooling input power	kW	1,67	2,00	2,20	3,10	3,45	4,25	4,65
Seasonal efficiency								
SEER	W/W	5,60	6,10	6,10	6,10	6,10	6,20	6,10
Efficiency energy class (3)		A+	A++	A++	A++	A++	A++	A++
Annual power consumption	kWh/annum	258	309	350	453	470	598	714
Nominal heating performances								
Heating capacity (4)	kW	4,40	5,57	6,45	8,20	8,79	10,85	12,31
Heating input power (4)	kW	1,19	1,50	1,74	2,21	2,20	2,76	3,30
COP (2)	W/W	3,71	3,71	3,71	3,71	4,00	3,93	3,73
Minimum heating performances								
Heating capacity	kW	1,52	2,40	1,99	2,29	2,37	2,85	3,46
Heating input power	kW	0,12	0,60	0,35	0,37	0,43	0,47	0,65
Maximum heating performances								
Heating capacity	kW	4,98	5,74	6,68	8,50	10,49	12,02	12,31
Heating input power	kW	1,67	1,78	1,80	2,90	3,05	4,21	3,80
Seasonal efficiency (temperate climate)								
SCOP	W/W	3,80	3,80	4,00	4,00	3,80	3,80	3,50
Efficiency energy class (3)		A	A	A+	A+	A	A	A
Annual power consumption	kWh/annum	1400	1768	1910	1960	2395	3316	3933
Power supply								
Outdoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

Outdoor unit technical data

		MGE420	MGE520	MGE630	MGE830	MGE840	MGE1040	MGE1250
Outdoor unit								
Type of fan	Type	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Air flow rate								
Maximum	m^3/h	2100	2100	3000	3000	3800	4000	3850
Sound power								
Maximum	dB(A)	64,0	65,0	65,0	67,0	67,0	67,0	69,0
Sound pressure (1 m)								
Maximum	dB(A)	56,0	54,0	58,0	58,0	61,5	61,0	64,0
Compressor								
Type	type	Inverter rotary	Inverter rotary	Inverter rotary	Twin rotary inverter	Twin rotary inverter	Inverter rotary	Inverter rotary
Refrigerant	type	R32	R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	1,10	1,25	1,50	1,85	2,10	2,10	2,90
Potential global heating	GWP	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq	675kgCO_2eq
Equivalent CO_2	t	0,743	0,844	1,013	1,240	1,418	1,420	1,960
Outdoor unit								
Condensate discharge diameter	mm	16,0	16,0	16,0	16,0	16,0	16,0	16,0

- Sound pressure: measured in semi anechoic chamber at a distance of 1 m from the source.
- Sound Power: measured in reverberation room at a distance of 1,5 - in accordance with EN12102.

Outdoor unit general technical data

		MGE420	MGE520	MGE630	MGE830	MGE840	MGE1040	MGE1250
Electric data								
Rated power input (1)	W	2750	3050	3910	4100	4150	4600	4700
Rated current input (1)	A	12,0	13,0	17,0	18,0	19,0	21,5	22,0
Refrigeration pipework								
Maximum refrigerant tube length	m	40	40	60	60	80	80	80
Maximum single cooling line length	m	25,0	25,0	30,0	30,0	35,0	35,0	35,0
Refrigerant to be added	g/m	12	12	12	12	12	12	12
Maximum unit (indoor/external) cooling line level difference in height	m	10,0	10,0	10,0	10,0	10,0	10,0	10,0
Maximum (indoor/outdoor) cooling line level difference	m	15,0	15,0	15,0	15,0	15,0	15,0	15,0
Liquid cooling connections								
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Number	no.	2	2	3	3	4	4	5
Refrigerant gas connections								
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52/12,7 (3/8"-1/2")	9,52/12,7 (3/8"-1/2")	9,52/12,7 (3/8"-1/2")
Number	no.	2	2	3	3	3/1	3/1	4/1

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

INDOOR UNIT PERFORMANCE DATA

SGE_W

		SGE200W	SGE250W	SGE350W	SGE500W	SGE700W
Nominal cooling performances						
Cooling capacity (1)	kW	2,05	2,77	3,46	5,27	5,27
Nominal heating performances						
Heating capacity (2)	kW	2,34	2,93	3,57	4,97	4,97
Indoor unit						
Type of fan	Type	Tangential	Tangential	Tangential	Tangential	Tangential
Air flow rate						
Maximum	m^3/h	460	466	540	840	980
Average	m^3/h	360	360	430	680	817
Minimum	m^3/h	325	325	314	540	662
Sound power (3)						
Maximum	dB(A)	54,0	54,0	55,0	56,0	59,0
Average	dB(A)	-	-	-	-	-
Minimum	dB(A)	-	-	-	-	-
Sound pressure (1 m) (4)						
Minimum	dB(A)	21,0	25,0	25,0	26,0	36,0
Maximum	dB(A)	40,0	38,5	40,5	42,5	45,0
Average	dB(A)	26,0	32,0	34,5	36,0	40,5
Refrigeration pipework						
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12.7 (1/2")	15,9 (5/8")
Power supply						
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(4) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

MGE_CS/MGE_C

		MGE350CS	MGE500CS	MGE700C
Nominal cooling performances				
Cooling capacity	kW	3,52	5,28	7,03
Nominal heating performances				
Heating capacity	kW	3,81	5,57	7,62
Indoor unit				
Type of fan	Type	Tangential	Tangential	Tangential
Air flow rate				
Minimum	m^3/h	330	300	992
Average	m^3/h	520	540	1118
Maximum	m^3/h	620	660	1247
Sound power				
Minimum	dB(A)	-	-	-
Average	dB(A)	-	-	-
Maximum	dB(A)	55,0	59,0	59,0
Sound pressure				
Minimum	dB(A)	31,5	31,5	37,0
Average	dB(A)	38,5	41,0	42,5
Maximum	dB(A)	42,0	44,0	45,0
Indoor unit				
Condensate discharge diameter	mm	25,0	25,0	25,0
Power supply				
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

- Cooling (EN-14511 and EN-14825) Ambient air temperature 27°C D.B. / 19°C W.B.; Outside air temperature 35°C; Max speed; Length of Refrigerant Lines 5m.
- Heating (EN-14511 and EN-14825) Ambient air temperature 20°C D.B.; Outside air temperature 7°C D.B./6°C W.B.; Max speed; Length of Refrigerant Lines 5m.
- The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN-60335-1 and EN-60335-2-40.
- Sound pressure measured in semi anechoic chamber at a distance of 1,4 m from the source.
- Sound Power: measured in reverberation room at a distance of 1,5 - in accordance with EN12102.

MGE_FS

		MGE250FS	MGE350FS	MGE500FS
Nominal cooling performances				
Cooling capacity	kW	2,64	3,52	4,98
Nominal heating performances				
Heating capacity	kW	2,93	3,81	5,28
Indoor unit				
Type of fan	Type	Tangential	Tangential	Tangential
Air flow rate				
Minimum	m^3/h	400	490	600
Average	m^3/h	510	580	690
Maximum	m^3/h	600	650	780
Sound power				
Minimum	dB(A)	-	-	-
Average	dB(A)	-	-	-
Maximum	dB(A)	54,0	54,0	55,0
Sound pressure				
Minimum	dB(A)	27,5	27,0	32,0
Average	dB(A)	33,5	34,0	38,0
Maximum	dB(A)	36,5	37,0	41,0
Indoor unit				
Condensate discharge diameter	mm	16,0	16,0	16,0
Power supply				
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

- Cooling (EN-14511 and EN-14825) Ambient air temperature 27°C D.B. / 19°C W.B.; Outside air temperature 35°C; Max speed; Length of Refrigerant Lines 5m.
- Heating (EN-14511 and EN-14825) Ambient air temperature 20°C D.B.; Outside air temperature 7°C D.B./6°C W.B.; Max speed; Length of Refrigerant Lines 5m.
- The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN-60335-1 and EN-60335-2-40.
- Sound pressure: measured in semi anechoic chamber at a distance of 1 m from the source.
- Sound Power: measured in reverberation room at a distance of 1,5 - in accordance with EN12102.

MGE_DH

		MGE250DH	MGE350DH	MGE500DH	MGE700DH
Nominal cooling performances					
Cooling capacity	kW	2,64	3,52	5,28	7,03
Nominal heating performances					
Heating capacity	kW	2,93	3,81	5,57	7,62
Electric data					
Rated power input	W	88	91	172	217
Indoor unit					
Type of fan	Type	Tangential	Tangential	Tangential	Tangential
Air flow rate					
Minimum	m^3/h	450	470	650	700
Average	m^3/h	540	570	780	1000
Maximum	m^3/h	620	660	900	1200
Sound power					
Minimum	dB(A)	-	-	-	-
Average	dB(A)	-	-	-	-
Maximum	dB(A)	54,0	52,0	53,0	56,0
Sound pressure					
Minimum	dB(A)	31,0	31,0	31,0	31,0
Average	dB(A)	33,0	33,0	34,0	32,5
Maximum	dB(A)	35,0	35,0	36,5	33,5
Indoor unit					
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0
Useful static pressure					
Range of static pressure	Pa	0 ÷ 80	0 ÷ 100	0 ÷ 160	0 ÷ 160
Nominal	Pa	25	25	25	25
Power supply					
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

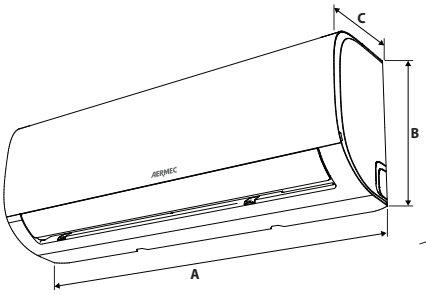
- Cooling (EN-14511 and EN-14825) Ambient air temperature 27°C D.B. / 19°C W.B.; Outside air temperature 35°C; Max speed; Length of Refrigerant Lines 5m.
- Heating (EN-14511 and EN-14825) Ambient air temperature 20°C D.B.; Outside air temperature 7°C D.B./6°C W.B.; Max speed; Length of Refrigerant Lines 5m.
- The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN-60335-1 and EN-60335-2-40.
- Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.
- Sound Power: measured in reverberation room at a distance of 1,5 - in accordance with EN12102.

ADAPTERS SUPPLIED WITH THE OUTDOOR UNIT

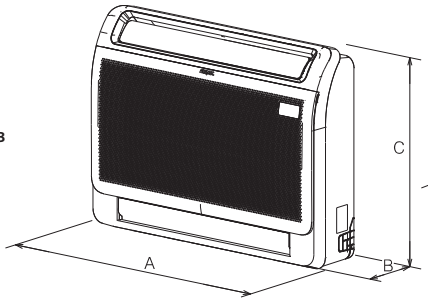
		MGE420	MGE520	MGE630	MGE830	MGE840	MGE1040	MGE1250
Adapters from 9.52mm to 12.7mm								
Number	no.	0	0	1	1	-	-	1
Adapters from 12.7mm to 9.52mm								
Number	no.	-	-	-	-	1	1	1

For further information, please refer to the technical documentation on the website www.aermec.com

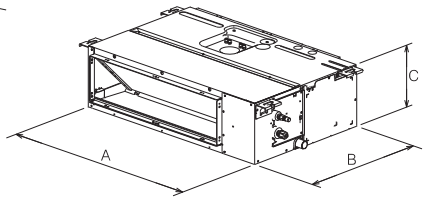
INDOOR UNIT WEIGHTS AND DIMENSIONS



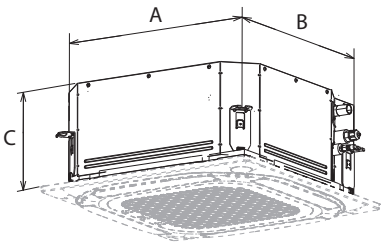
SGE_W



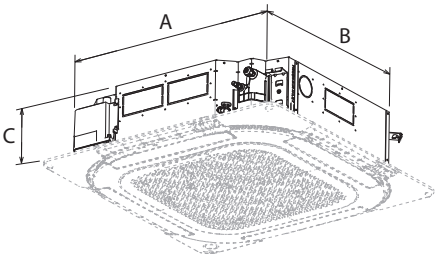
MGE_FS



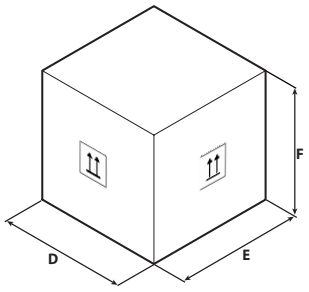
MGE_DH



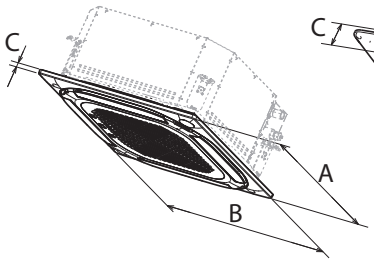
MGE350CS - MGE500CS



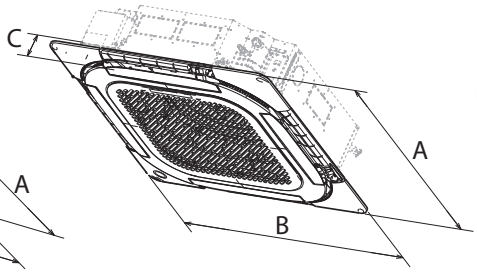
MGE700C



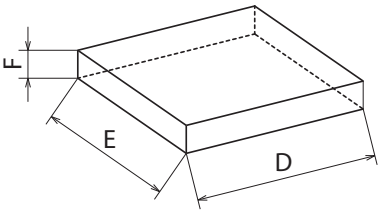
Carton Box Example



GLE10S



GLE10



SGE_W

		SGE200W	SGE250W	SGE350W	SGE500W	SGE700W
Indoor unit						
A	mm	805	805	805	957	1040
B	mm	285	285	285	302	327
C	mm	194	194	194	213	220
D	mm	870	870	870	1035	1120
E	mm	270	270	270	295	405
F	mm	360	365	365	385	315
Net weight	kg	7,9	7,6	7,6	10,0	12,3
Weight for transport	kg	9,7	9,7	9,8	13,0	15,8

MGE_FS

		MGE250FS	MGE350FS	MGE500FS
Indoor unit				
A	mm	794	794	794
B	mm	200	200	200
C	mm	621	621	621
D	mm	865	865	865
E	mm	280	280	280
F	mm	719	719	719
Net weight	kg	14,9	14,9	14,9
Weight for transport	kg	18,8	18,8	18,8

MGE_DH

		MGE250DH	MGE350DH	MGE500DH	MGE700DH
Indoor unit					
A	mm	700	700	700	1000
B	mm	506	506	750	750
C	mm	200	200	245	245
D	mm	860	860	925	1225
E	mm	540	540	850	860
F	mm	285	285	298	304
Net weight	kg	16,6	16,6	24,4	31,8
Weight for transport	kg	19,8	19,8	29,0	37,2

MGE_CS / MGE_C

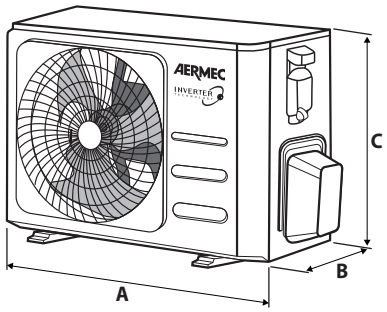
		MGE350CS	MGE500CS	MGE700C
Indoor unit				
A	mm	570	570	856
B	mm	570	570	831
C	mm	245	245	205
D	mm	715	715	910
E	mm	640	640	910
F	mm	295	295	235
Net weight	kg	16,1	16,2	21,6
Weight for transport	kg	18,8	19,0	25,4

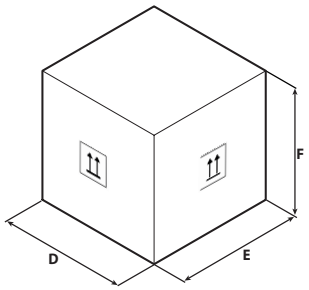
Grids

		GLE10S	GLE10
Indoor unit			
A	mm	620	950
B	mm	620	950
C	mm	50	70
D	mm	697	1042
E	mm	712	1027
F	mm	115	95
Net weight	kg	2,6	6,0
Weight for transport	kg	4,2	9,0

OUTDOOR UNIT WEIGHTS AND DIMENSIONS

MGE





Carton Box Example

		MGE420	MGE520	MGE630	MGE830	MGE840	MGE1040	MGE1250
Outdoor unit								
A	mm	877	877	1003	1003	1034	1034	1034
B	mm	349	349	380	380	432	432	432
C	mm	554	554	673	673	810	810	810
D	mm	915	915	1030	1030	1090	1090	1090
E	mm	370	370	438	438	505	505	505
F	mm	615	615	750	750	845	845	845
Net weight	kg	31,6	35,0	43,3	48,0	62,1	68,8	74,1
Weight for transport	kg	34,7	38,0	47,1	51,8	78,3	86,2	90,1

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www.aermec.com

MGEHW

Multisplit

- **R32 ecological refrigerant gas.**
- **Possibility of DHW storage tank Wi-Fi control.**
- **Possibility of AC indoor units Wi-Fi control via accessory.**
- **Achieve maximum energy savings with the new heat recovery multisplit system for domestic hot water.**

CONTO TERMICO

DESCRIPTION

MGEHW it is a multi-split unit that allows effective heat recovery for DHW production using 3 reverse cycle valves.
The multi-split outdoor units of the series MGEHW are combined with indoor units:

— MGEWT Domestic hot water **storage tank**
— SGE_W unit Wall, for wall installation.
— MGE_C_CS unit Cassette for false ceiling installation.
— MGE_FS unit Console, for wall installation.
— MGE_DH unit Duct, for duct type horizontal installation.

TYPE OF OUTDOOR UNIT

MGEHW Outdoor unit

Multisplit air conditioner.
Reversible air/air heat pump with DC inverter technology.

Types

— Can be combined with 1, 2 or 3 indoor units.
— Can be combined with 1, 2 or 3 indoor units and MGEWT domestic hot water storage tank.

General features

— Compressor and fan with DC inverter technology.
— Fitted with an electronic expansion valve.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

TYPE OF INDOOR UNIT

MGEWT Indoor unit

MGEWT it is a domestic hot water storage tank intended for indoor installation with a room temperature between 5°C and 43°C.

Features

— Unit front panel with LED display and indicator lights and touch screen keyboard.
— Timer for programming switch-off and switch-on.
— WiFi function integrated in the panel.
— Anti-corrosion magnesium anode.
— Supplementary electric resistance for DHW.
— Function quick water heating for a quick heating of domestic hot water
— Auto-restart function.
— When the anti-legionella cycle is activated (it's easily set via the control panel), the whole tank is heated once a week to a temperature (max. 70 °C) that weakens the bacteria responsible for the infection.
— Hybrid function allowing the electric heater and heat pump to work together in heating mode.
— Smart function that records users' hot water usage habits over the last 7 days and switches the heating on in advance based on the user's peak water usage hours.
— SG function (Smart Grid)

Indoor unit SGE_W

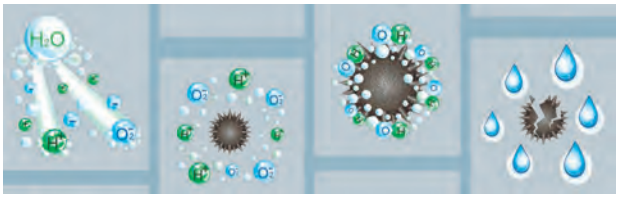
Wall indoor unit designed to be installed on indoor walls.
SGE_W has an elegant and essential design. Its curved lines emphasize a kind of structure with innovative and functional style. The display with working parameters is elegantly integrated in the satin-finish cover and visible only when the unit is on.



Features
- Remote control standard supply with each indoor unit.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- 3-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
- **followMe** function for activating the ambient temperature probe inside the remote control, for improved comfort.

Air Purifiers (Cold Plasma)

Capable of reducing pollutants breaking down their molecules using electric discharges, causing the splitting of the water molecules in the air into positive and negative ions. These ions neutralise the molecules of the gaseous pollutants obtaining products that are normally present in clean air. The device can eliminate 90% of bacteria. The result is clean, ionised air that has no bad odours.



MGE_CS - MGE_C Indoor unit

Indoor unit **Cassette** of dimensions 570x570 mm (MGE350CS - MGE500CS) and 830x830 mm (MGE700C) designed to be installed on suspended ceiling indoors.



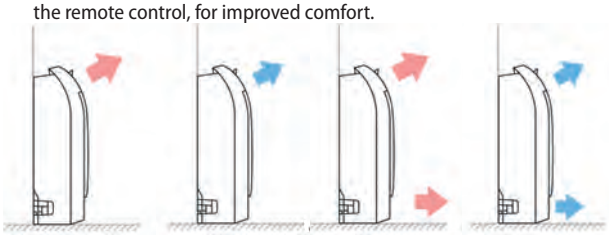
Features
- Remote control standard supply with each indoor unit.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- **4-speed** fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function
- Louver angle memory function.
- **Sleep** night time function well-being program.
- Refrigerant Leak Detection System.
- **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
- **followMe** function for activating the ambient temperature probe inside the remote control, for improved comfort.
- **Dehumidification** function that allows humidity control

MGE_FS Indoor unit

Console indoor unit designed to be installed on indoor floors.



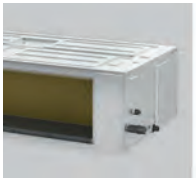
Features
- Remote control standard supply with each indoor unit.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- **4-speed** fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function
- Louver angle memory function.
- **Sleep** night time function well-being program.
- Refrigerant Leak Detection System.
- **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
- **followMe** function for activating the ambient temperature probe inside the remote control, for improved comfort.



Single air delivery Dual air delivery

MGE_DH Indoor unit

Duct indoor unit designed for indoor duct type installation.



Features
- Remote control standard supply with each indoor unit.
- **WRPE10** wired panel standard supply with each indoor unit.
- Fan with DC inverter technology.
- Timer for programming switch-off and switch-on.
- **4-speed** fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function
- **Sleep** night time function well-being program.
- **Anti-freeze** function that allows you to keep an inside minimum temperature of 8 °C in winter.
- **followMe** function for activating the ambient temperature probe inside the remote control, for improved comfort.

General features

- R32 ecological refrigerant gas with low GWP.
- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Systems with multi-line refrigerant connections, where every indoor unit is connected directly to the outdoor unit via dedicated refrigerant lines.
- Easy installation and maintenance.

Low cooling function
cooling operation with outdoor temperatures down to -15 °C
Low heating function
heating with external temperatures up to -15 °C.

Nethome Plus app

The system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.

— The Wi-Fi module is supplied as per standard for the indoor unit MGEWT
— For indoor units SGE_W, MGE_C_CS, MGE_DH, MGE_FS Wi-Fi management can be supported via specific **accessory**.

ACCESSORIES

WIFIKEY: Plug & Play module to be installed in the indoor unit for Wi-Fi control.
WRPE10: Wired panel with liquid crystal display and soft-touch buttons.
WRPE10W: Flush panel with LCD display and Soft-Touch keys. It is equipped with WiFi and Bluetooth® connection for better connection stability.
GLE10S: Air supply and flow grid with dimensions (620x620 mm) for cassette internal unit. Mandatory accessory.
GLE10: Air supply and flow grid with dimensions (950x950 mm) for cassette internal unit. Mandatory accessory.

Accessories compatibility

SGE_W

Accessory	SGE200W	SGE250W	SGE350W	SGE500W	SGE700W
WIFIKEY	•	•	•	•	•

MGE_C / CS

Accessory	MGE350CS	MGE500CS	MGE700C
WIFIKEY	•	•	•

Accessory	MGE350CS	MGE500CS	MGE700C
WRPE10	•	•	•
WRPE10W	•	•	•

Accessory	MGE350CS	MGE500CS	MGE700C
GLE10 (1)			•
GLE10S (1)	•	•	

(1) Mandatory accessory.

MGE_DH

Accessory	MGE250DH	MGE350DH	MGE500DH	MGE700DH
WRPE10W	•	•	•	•

Wired panel WRPE10 standard supply.

MGE_FS

Accessory	MGE250FS	MGE350FS	MGE500FS
WIFIKEY	•	•	•

Accessory	MGE250FS	MGE350FS	MGE500FS
WRPE10	•	•	•
WRPE10W	•	•	•

ALLOWED COMBINATIONS OF INDOOR UNITS

Combinations MGEHW - Direct expansion indoor units

Outdoor unit	Combination	Indoor units	Combinations (x1000 Btu/h)		
			Unit A	Unit B	Unit C
MGEHW840	(1x1)	7	7	-	-
		9	9	-	-
		12	12	-	-
		18	18	-	-
	(1x2)	7+7	7	7	-
		7+9	7	9	-
		7+12	7	12	-
		7+18	7	18	
		9+9	9	9	-
		9+12	9	12	-
		9+18	9	18	-
		12+12	12	12	-
		12+18	12	18	-
	(1x3)	7+7+7	7	7	7
		7+7+9	7	7	9
		7+7+12	7	7	12
		7+7+18	7	7	18
		7+9+9	7	9	9
		7+9+12	7	9	12
		7+9+18	7	9	18
		7+12+12	7	12	12
		7+12+18	7	12	18
		9+9+9	9	9	9
		9+9+12	9	9	12
		9+12+12	9	12	12
		12+12+12	12	12	12

Combinations MGEHW - indoor units + MGEWT

Outdoor unit	Combination	Indoor units	Combinations (x1000 Btu/h)			
			Unit A	Unit B	Unit C	D.H.W.
MGEHW840	(1x1) + MGEWT190	7 + MGEWT190	7	-	-	MGEWT190
		9 + MGEWT190	9	-	-	
		12 + MGEWT190	12	-	-	
		18 + MGEWT190	18	-	-	
		24 + MGEWT190	24	-	-	
	(1x2) + MGEWT190	7+12 + MGEWT190	7	12	-	
		7+18 + MGEWT190	7	18	-	
		7+24 + MGEWT190	7	24		
		9+9 + MGEWT190	9	9	-	
		9+12 + MGEWT190	9	12	-	
		9+18 + MGEWT190	9	18	-	
		12+12 + MGEWT190	12	12	-	
		12+18 + MGEWT190	12	18	-	
	(1x3) + MGEWT190	7+7+7 + MGEWT190	7	7	7	
		7+7+9 + MGEWT190	7	7	9	
		7+7+12 + MGEWT190	7	7	12	
		7+7+18 + MGEWT190	7	7	18	
		7+9+9 + MGEWT190	7	9	9	
		7+9+12 + MGEWT190	7	9	12	
		7+9+18 + MGEWT190	7	9	18	
		7+12+12 + MGEWT190	7	12	12	
		7+12+18 + MGEWT190	7	12	18	
		9+9+9 + MGEWT190	9	9	9	
		9+9+12 + MGEWT190	9	9	12	
		9+9+18 + MGEWT190	9	9	18	
		9+12+12 + MGEWT190	9	12	12	
		9+12+18 + MGEWT190	9	12	18	
		12+12+12 + MGEWT190	12	12	12	

OUTDOOR UNIT PERFORMANCE DATA MGEHW

		MGEHW840
Nominal cooling performances		
Cooling capacity (1)	kW	7,91
Cooling input power (1)	kW	2,45
EER (2)	W/W	3,23
Minimum cooling performances		
Cooling capacity	kW	2,70
Cooling input power	kW	0,25
Maximum cooling performances		
Cooling capacity	kW	8,21
Cooling input power	kW	2,90
Seasonal efficiency		
SEER	W/W	6,30
Efficiency energy class (3)		A++
Annual power consumption	kWh/annum	439
Nominal heating performances		
Heating capacity (4)	kW	8,21
Heating input power (4)	kW	2,21
COP (2)	W/W	3,71
Minimum heating performances		
Heating capacity	kW	2,11
Heating input power	kW	0,35
Maximum heating performances		
Heating capacity	kW	8,79
Heating input power	kW	3,00
Seasonal efficiency (temperate climate)		
SCOP	W/W	4,10
Efficiency energy class (3)		A+
Annual power consumption	kWh/annum	2151

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

MGEHW - MGEWT

Indoor unit		**MGEWT190**
Outdoor unit		**MGEHW840**
Indoor unit quantity		**1**
Outdoor unit quantity		**1**
Storage tank (DHW)		
Water heating power (A 15/12°C, W 15~45°C)	kW	4,0
COP (A 15/12°C, W 15~45°C)	kW/kW	3,90
Heating capacity DHW (1)	kW	3,90
COP DHW (1)	kW/kW	3,40
Setting Temperature for the performance mesaurement (1)	°C	52
Reference hot water temperature (1)	°C	52,6
Water heating energy efficient (1)	%	128
Maximum volume of mixed water at 40°C (1)	L	240
Declared load profile (1)		L
Energy Efficiency Class (1)		A+
Heating time (1)	hh:mm	02:30
Energy input during Heat-up time (1)	kW	2,9
Standby power input (1)	W	50

(1) Data according to EN 16147:2017

OUTDOOR UNIT GENERAL TECHNICAL DATA

		MGEHW840
Electric data		
Rated power input (1)	W	5300
Rated current input (1)	A	23,5
Liquid cooling connections		
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")
Number	no.	4
Gas cooling connections (AC)		
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8") / 12,7 (1/2")
Number	no.	2/1
Gas cooling connections (DHW)		
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")
Number	no.	1
Refrigerant lines		
Total maximum length of the refrigerant lines (AC)	m	80,0
Max. lenght for DHW	m	20,0
Maximum single cooling line length	m	35,0
Maximum height difference between ODU and IDU	m	15,0
Maximum height difference between IDU and ODU	m	10,0
Maximum length of refrigerant lines without addition of refrigerant	m	7,5
Refrigerant to be added	g/m	20
Power supply		
Power supply		220-240V ~ 50Hz
Cross section		
Section of the power cable	mm^2	2,5
Power supply cable		
Magnet circuit breaker	A	25

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

MGEHW - MGEWT

Indoor unit		**MGEWT190**
Outdoor unit		**MGEHW840**
Indoor unit quantity		**1**
Outdoor unit quantity		**1**
Liquid cooling connections		
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")
Number	no.	4
Gas cooling connections (AC)		
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8") / 12,7 (1/2")
Number	no.	2/1
Gas cooling connections (DHW)		
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")
Number	no.	1
Refrigerant lines		
Max. lenght for DHW	m	20,0
Maximum height difference between ODU and WT	m	15,0
Maximum height difference between IDU and WT	m	10,0
Power supply		
Power supply		220-240V ~ 50Hz
Electric heater		
Capacity	kW	2,0
Maximum current	A	9,10
Magnet circuit breaker		
Air Break Switch (electric heater)	A	16
Cross section		
Section of the power cable	mm^2	1,5
Communication wires between the tank and the outdoor unit	mm^2	1

OUTDOOR UNIT TECHNICAL DATA

		MGEHW840
Outdoor unit		
Type of fan	Type	Axial
Air flow rate		
Maximum	m^3/h	4000
Sound power		
Maximum	dB(A)	69,0
Sound pressure		
Maximum	dB(A)	61,0
Compressor		
Type	type	Rotary
Refrigerant	type	R32
Refrigerant charge	kg	1,80
Equivalent CO_2	t	1,22
Outdoor unit		
Condensate discharge diameter	mm	16,0

Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
Sound Power: measured in reverberation room at a distance of 1,5 - in accordance with EN12102.

INDOOR UNIT PERFORMANCE DATA

SGE_W

		SGE200W	SGE250W	SGE350W	SGE500W	SGE700W
Nominal cooling performances						
Cooling capacity (1)	kW	2,05	2,77	3,46	5,27	5,27
Nominal heating performances						
Heating capacity (2)	kW	2,34	2,93	3,57	4,97	4,97
Indoor unit						
Type of fan	Type	Tangential	Tangential	Tangential	Tangential	Tangential
Air flow rate						
Maximum	m^3/h	460	466	540	840	980
Average	m^3/h	360	360	430	680	817
Minimum	m^3/h	325	325	314	540	662
Sound power (3)						
Maximum	dB(A)	54,0	54,0	55,0	56,0	59,0
Sound pressure (1 m) (4)						
Minimum	dB(A)	21,0	25,0	25,0	26,0	36,0
Maximum	dB(A)	40,0	38,5	40,5	42,5	45,0
Average	dB(A)	26,0	32,0	34,5	36,0	40,5
Refrigeration pipework						
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12.7 (1/2")	15,9 (5/8")
Power supply						
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(4) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

MGEWT

		MGEWT190
Storage tank (DHW)		
Nominal volume of the tank	L	190
Rated pressure of the water tank	MPa	1
Material		Vitrified steel
Anode type		Magnesium bar
Electrical resistance type		Electric immersion heater

MGE_CS/MGE_C

		MGE350CS	MGE500CS	MGE700C
Nominal cooling performances				
Cooling capacity	kW	3,52	5,28	7,03
Nominal heating performances				
Heating capacity	kW	3,81	5,57	7,62
Indoor unit				
Type of fan	Type	Tangential	Tangential	Tangential
Air flow rate				
Minimum	m^3/h	330	300	992
Average	m^3/h	520	540	1118
Maximum	m^3/h	620	660	1247
Sound power				
Maximum	dB(A)	55,0	59,0	59,0
Sound pressure				
Minimum	dB(A)	31,5	31,5	37,0
Average	dB(A)	38,5	41,0	42,5
Maximum	dB(A)	42,0	44,0	45,0
Indoor unit				
Condensate discharge diameter	mm	25,0	25,0	25,0
Power supply				
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

- Cooling (EN-14511 and EN-14825) Ambient air temperature 27°C D.B. / 19°C W.B.; Outside air temperature 35°C; Max speed; Length of Refrigerant Lines 5m.
- Heating (EN-14511 and EN-14825) Ambient air temperature 20°C D.B.; Outside air temperature 7°C D.B./6°C W.B.; Max speed; Length of Refrigerant Lines 5m.
- The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN-60335-1 and EN-60335-2-40.
- Sound pressure measured in semi anechoic chamber at a distance of 1,4 m from the source.
- Sound Power: measured in reverberation room at a distance of 1,5 - in accordance with EN12102.

MGE_FS

		MGE250FS	MGE350FS	MGE500FS
Nominal cooling performances				
Cooling capacity	kW	2,64	3,52	4,98
Nominal heating performances				
Heating capacity	kW	2,93	3,81	5,28
Indoor unit				
Type of fan	Type	Tangential	Tangential	Tangential
Air flow rate				
Minimum	m^3/h	400	490	600
Average	m^3/h	510	580	690
Maximum	m^3/h	600	650	780
Sound power				
Maximum	dB(A)	54,0	54,0	55,0
Sound pressure				
Minimum	dB(A)	27,5	27,0	32,0
Average	dB(A)	33,5	34,0	38,0
Maximum	dB(A)	36,5	37,0	41,0
Indoor unit				
Condensate discharge diameter	mm	16,0	16,0	16,0
Power supply				
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

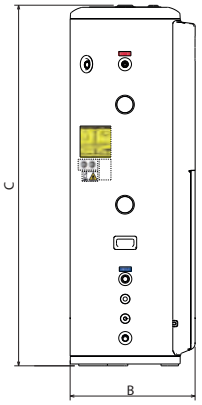
- Cooling (EN-14511 and EN-14825) Ambient air temperature 27°C D.B. / 19°C W.B.; Outside air temperature 35°C; Max speed; Length of Refrigerant Lines 5m.
- Heating (EN-14511 and EN-14825) Ambient air temperature 20°C D.B.; Outside air temperature 7°C D.B./6°C W.B.; Max speed; Length of Refrigerant Lines 5m.
- The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN-60335-1 and EN-60335-2-40.
- Sound pressure: measured in semi anechoic chamber at a distance of 1 m from the source.
- Sound Power: measured in reverberation room at a distance of 1,5 - in accordance with EN12102.

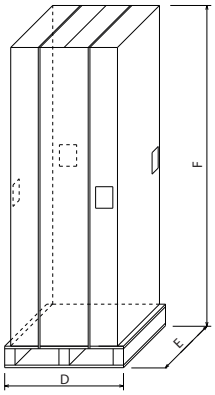
MGE_DH

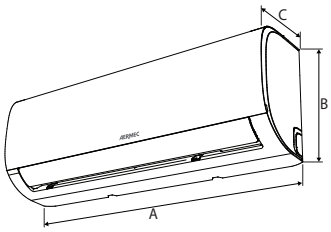
		MGE250DH	MGE350DH	MGE500DH	MGE700DH
Nominal cooling performances					
Cooling capacity	kW	2,64	3,52	5,28	7,03
Nominal heating performances					
Heating capacity	kW	2,93	3,81	5,57	7,62
Electric data					
Rated power input	W	88	91	172	217
Indoor unit					
Type of fan	Type	Tangential	Tangential	Tangential	Tangential
Air flow rate					
Minimum	m^3/h	450	470	650	700
Average	m^3/h	540	570	780	1000
Maximum	m^3/h	620	660	900	1200
Sound power					
Maximum	dB(A)	54,0	52,0	53,0	56,0
Sound pressure					
Minimum	dB(A)	31,0	31,0	31,0	31,0
Average	dB(A)	33,0	33,0	34,0	32,5
Maximum	dB(A)	35,0	35,0	36,5	33,5
Indoor unit					
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0
Useful static pressure					
Range of static pressure	Pa	0 ÷ 80	0 ÷ 100	0 ÷ 160	0 ÷ 160
Nominal	Pa	25	25	25	25
Power supply					
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

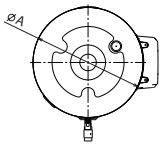
- Cooling (EN-14511 and EN-14825) Ambient air temperature 27°C D.B. / 19°C W.B.; Outside air temperature 35°C; Max speed; Length of Refrigerant Lines 5m.
- Heating (EN-14511 and EN-14825) Ambient air temperature 20°C D.B.; Outside air temperature 7°C D.B./6°C W.B.; Max speed; Length of Refrigerant Lines 5m.
- The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN-60335-1 and EN-60335-2-40.
- Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.
- Sound Power: measured in reverberation room at a distance of 1,5 - in accordance with EN12102.

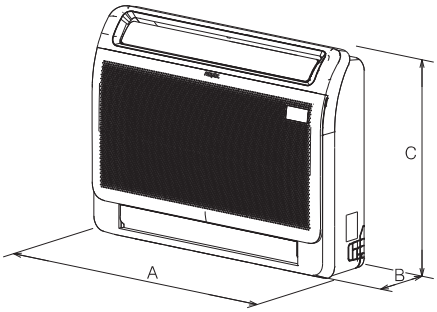
INDOOR UNIT WEIGHTS AND DIMENSIONS



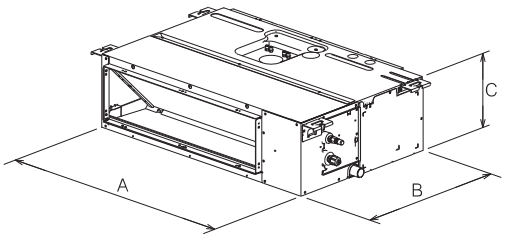




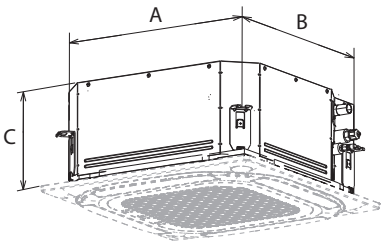




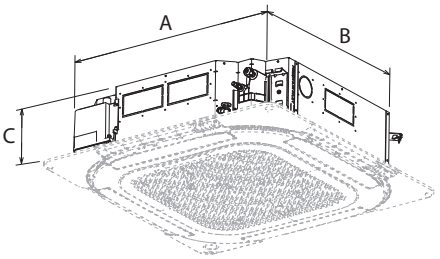
MGE_FS



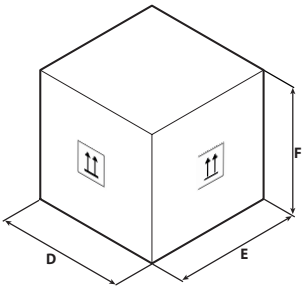
MGE_DH



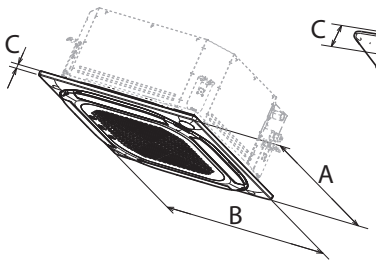
MGE350CS - MGE500CS



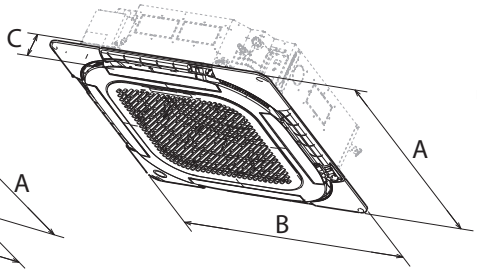
MGE700C



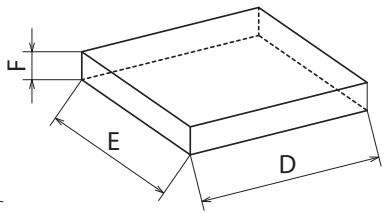
Carton Box Example



GLE10S



GLE10



MGEWT190

		MGEWT190
Indoor unit		
A	mm	504
B	mm	574
C	mm	1660
D	mm	690
E	mm	690
F	mm	1860
Net weight	kg	70,0
Weight for transport	kg	92,0

SGE_W

		SGE200W	SGE250W	SGE350W	SGE500W	SGE700W
Indoor unit						
A	mm	805	805	805	957	1040
B	mm	285	285	285	302	327
C	mm	194	194	194	213	220
D	mm	870	870	870	1035	1120
E	mm	270	270	270	295	405
F	mm	360	365	365	385	315
Net weight	kg	7,9	7,6	7,6	10,0	12,3
Weight for transport	kg	9,7	9,7	9,8	13,0	15,8

MGE_FS

		MGE250FS	MGE350FS	MGE500FS
Indoor unit				
A	mm	794	794	794
B	mm	200	200	200
C	mm	621	621	621
D	mm	865	865	865
E	mm	280	280	280
F	mm	719	719	719
Net weight	kg	14,9	14,9	14,9
Weight for transport	kg	18,8	18,8	18,8

MGE_DH

		MGE250DH	MGE350DH	MGE500DH	MGE700DH
Indoor unit					
A	mm	700	700	700	1000
B	mm	506	506	750	750
C	mm	200	200	245	245
D	mm	860	860	925	1225
E	mm	540	540	850	860
F	mm	285	285	298	304
Net weight	kg	16,6	16,6	24,4	31,8
Weight for transport	kg	19,8	19,8	29,0	37,2

MGE_CS / MGE_C

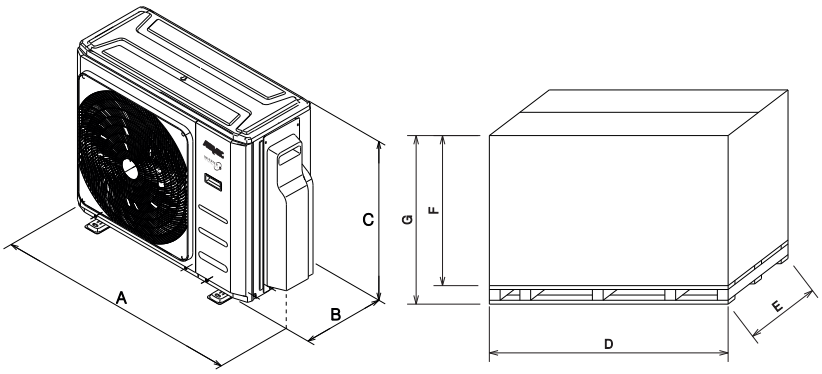
		MGE350CS	MGE500CS	MGE700C
Indoor unit				
A	mm	570	570	856
B	mm	570	570	831
C	mm	245	245	205
D	mm	715	715	910
E	mm	640	640	910
F	mm	295	295	235
Net weight	kg	16,1	16,2	21,6
Weight for transport	kg	18,8	19,0	25,4

Grids

		GLE10	GLE10S
Indoor unit			
A	mm	950	620
B	mm	950	620
C	mm	70	50
D	mm	1042	697
E	mm	1027	712
F	mm	95	115
Net weight	kg	6,0	2,6
Weight for transport	kg	9,0	4,2

OUTDOOR UNIT WEIGHTS AND DIMENSIONS

MGEHW



		MGEHW840
Outdoor unit		
A	mm	1050
B	mm	433
C	mm	810
D	mm	1090
E	mm	500
F	mm	845
G	mm	935
Net weight	kg	64,3
Weight for transport	kg	79,1

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italy
Tel. 0442633111 - Telefax 044293577
www.aermec.com

VRF SYSTEM

The VRFs are the direct expansion systems, with variable refrigerant flow.
Unlike the Multisplits, which are characterised by a set flow of refrigerant, these systems allow users to adjust the amount of refrigerant in circulation, according to the actual load required by the indoor units in use.
They range of 12kW to 276 kW thanks to their modular configuration, and are available in a heat pump version with heat recovery and domestic hot water production.
These systems guarantee excellent energy efficiency, avoiding wasting energy pointlessly, and are amazingly quiet during operation.

VRF SYSTEM

			Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
new	**MVBM - MVAS - MVBHR**	Direct expansion variable refrigerant flow system VRF	-	12,1-246,0	14,0-276,0	994

MVBM - MVAS - MVBHR

Direct expansion variable refrigerant flow system VRF

Cooling capacity 12,1 ÷ 246,0 kW
Heating capacity 14,0 ÷ 276,0 kW

- **Units prepared for installations with two or three pipes.**
- **The correct balance between cost, efficiency and space.**
- **Wide choice of indoor units available.**
- **Up to 80 connectible indoor units.**

DESCRIPTION

The MV air conditioners from the MVBM, MVAS and MVBHR range are combined with indoor units:

— MVA_WL - **Wall.**
— MVA_D - **Horizontal duct.**
— MVA_DH - **Horizontal duct, high head.**
— MVA_DV - **Vertical duct.**
— MVA_CS, MVA_C - **8-way cassette .**
— MVA_C1 - **1-way cassette .**
— MVA_F - **Floor ceiling.**
— MVA_FS - **Console.**
— MVA_V - **Column.**
— MVA_ERV - **Heat recovery unit.**

TYPE OF INDOOR UNIT

MVA_WL

Wall indoor unit designed to be installed on indoor walls.
— Modern design to blend with all furnishing styles.
— Distributed air jet: air outlet louvers with horizontal and vertical adjustment facility.
— Anti-freeze function that allows a minimum temperature of 8 °C to be maintained in the environment during the winter period.

MVA_D

Duct indoor unit designed for indoor duct type installation.
MVA_D - Horizontal duct.
— Wired panel standard supply.
— Low noise levels.
— Easy installation in small assembly spaces, thanks to the limited dimensions.
— Useful static pressure up to 80 Pa.

MVA_DH

Duct indoor unit designed for indoor duct type installation.
MVA_DH - Horizontal duct, high head.
— Wired panel standard supply.
— Unit without cover, designed for duct type horizontal installation.
— Useful static pressure up to 200 Pa.

MVA_DV

Duct indoor unit designed for indoor vertical installation.
MVA_DV - Vertical duct.
— Wired panel standard supply.
— Unit without cover, designed for installation in wall recesses.
— Useful static pressure up to 60 Pa.

MVA_CS / MVA_C

8-way cassette indoor unit designed to be installed on false ceilings indoors.
MVA_CS - Cassette 570x570.
Mandatory accessory GLG40S.
MVA_C - Cassette 840x840.
Mandatory accessory GLG40.
— Wired panel standard supply.
— Condensate discharge pump as standard.
— Guarantees even air distribution, for optimum comfort.

MVA_C1

1-way cassette indoor unit designed to be installed on false ceilings indoors.

MVA_C1 - Cassette 987x385.
Mandatory accessory GLC1.

— Wired panel standard supply.
— Condensate discharge pump as standard.
— Compact size and minimum dimensions.

MVA_F

Floor ceiling indoor unit to be installed on walls or ceiling.

— Low noise levels.
— Anti-freeze function.
— Flexible installation for any environment.

MVA_FS

Console indoor unit designed to be installed on the floor.

— Anti-freeze function.
— 5-speed fan, to meet every possible need.
— Two delivery vents for optimal control of the air flow.

MVA_V

Column indoor unit designed to be installed in large sized rooms.

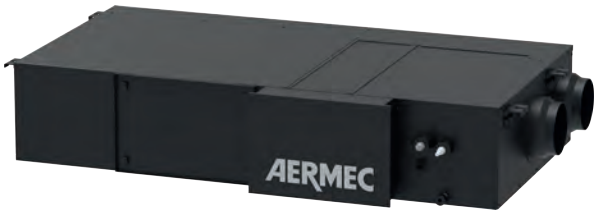
— Easy installation and maintenance.
— Speed in reaching the defined set point in the shortest time possible.
— Ideal for installations in the service sector: hotels, restaurants, offices.

General features

— Operating mode: cooling, heating, dehumidification, automatic and fan only.
— Total capacity connected to the outdoor units between 50% and 135% of the rated capacity of the selected configuration.
— Indoor unit fitted standard with an electronic expansion valve.
— WRC wired panel standard supply with each indoor unit.
— Every indoor unit comes with a remote control and a remote control holder.
— Automatic unit adjustment function.
— Particularly quiet operation.
— Microproccessor control.
— Auto-restart function.
— Self-diagnosis function.
— Easy installation and maintenance.

TYPE OF INDOOR UNIT - HEAT RECOVERY

MVA_ERV



Heat recovery units designed for duct-type horizontal installation indoors. Fitted with a cross-flow enthalpic heat recovery unit with recovery efficiency higher than 70%. The heat exchanger allows energy to be transferred from the exhaust air to the fresh air, avoiding any direct mixing of the air flows.
This range of heat recovery units ensures constantly clean and filtered fresh air, a constant air flow rate, and rooms with comfortable temperature and humidity levels, ensuring reduced energy consumption in every application. The device is also equipped with a direct expansion coil to allow the air flow delivered into the room to give off or absorb heat. This means that the unit not only guarantees correct air renewal, but also helps cool or heat the rooms and avoid air currents with a marked temperature difference in relation to the room temperature, to ensure optimum comfort for the occupants.

Operating mode

Every indoor unit comes with a wired panel. The wired panel can be used to set the standard cooling, heating, dehumidification and ventilation-only modes, plus the following operating modes.

— **Bypass with free cooling and night-time free cooling operation**: night-time free cooling operation reduces the thermal load in the rooms, taking advantage merely of the outside temperature difference and therefore boosting energy savings for the following day thanks to free night-time cooling.
— **Control of different inlet and outlet air flow rates**: known as "positive pressure operating mode" when the inlet air flow rate is higher than the recovery one, or "negative pressure operating mode" in the opposite situation.

Mixed connection indoor units + MVA_ERV

In case of mixed systems, i.e. consisting of indoor units of the VRF and units, MVA_ERV to guarantee the proper operation of the system, the nominal cooling powers of the indoor units is between 50% and 100% of the nominal cooling power of the system of external units and that the sum of the installed nominal power of the MVA_ERV units does not exceed 30% of the power of the external units system.
The MVA_ERV units are compatible with MVBHR systems.

Connections with MVA_ERV units only

In case of systems made up only by units, MVA_ERV to guarantee the proper operation of the system, check that the sum of the nominal cooling powers of the indoor units is between 50% and 100% of the nominal cooling power of the external units system.

General features

— Wired panel standard supply with each indoor unit.
— Particularly quiet operation.
— Centrifugal fans with 5-speed brushless DC motor.
— Units fitted with an electronic expansion valve as standard.
— Filters with G4 efficiency level on inlet and outlet air.
— Alarm signal for filter cleaning.
— Timer for programming unit switch-on and switch-off.
— Incorporated electrical panel with electronic card to control the ventilation and free cooling functions.
— Easy installation and maintenance.

TYPE OF OUTDOOR UNIT

MVAS

Standard multisplit VRF air conditioners.
Reversible air/air heat pump with DC inverter technology.

— From 1 to 16 connectible indoor units.
— Total maximum length of the refrigerant lines up to 300 m.
— The sizes MVAS 1201S - MVAS 1401S - MVAS 1601S e MVAS 1201T - MVAS 1401T - MVAS 1601T, are fitted with a base electric resistor to avoid possible formation of ice and encourage the disposal of the condensate during the heating operation.
— Compressor and fan with DC inverter technology.
— Fitted with an electronic expansion valve.

MVBM

Module multisplit VRF ambient air conditioner for 2-pipe systems.
Reversible air/air heat pump with DC inverter technology.

— From 1 to 80 connectible indoor units.
— Total maximum length of the refrigerant lines up to 1000 m.
— Modular system with base modules that can be combined together, up to a maximum of 4, for a total of 33 recommended combinations.
— Compressor and fan with DC inverter technology.
— Fitted with an electronic expansion valve.
— Optimised management of the compressor operating time with partial loads.
— Emergency operation, in the event of problems with the compressors or fans, allows operation of the system with a reduced number of compressors and/or fans for a limited time.
— Channelled air delivery from 0 Pa (default) to 110 Pa of effective static head set via dip switches.
— **For cooling line connections, refer to refnet joints in the accessories section.**

MVBHR

Module multisplit VRF ambient air conditioner for 3-pipe systems.
Reversible air/air heat pump with DC inverter technology.

— From 1 to 80 connectible indoor units.
— Total maximum length of the refrigerant lines up to 1000 m.
— Modular system with base modules that can be combined together, up to a maximum of 4, for a total of 33 recommended combinations.
— Compressor and fan with DC inverter technology.
— Fitted with an electronic expansion valve.
— Channelled air delivery from 0 Pa (default) to 110 Pa of effective static head set via dip switches.
— A system that permits managing the heating and cooling modes in an independent and simultaneous manner.
— Possibility of managing hot or cold modes independently and simultaneously.
— MVBHR 3-pipe outdoor units must be interfaced with two dual pipe MVA_Indoor units using the exchange module (MEB) available with one, two, four or eight branches.

MEB: mandatory accessory for 3-pipe systems.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

General features

— Operating mode: cooling, heating, dehumidification, automatic and fan only.
— Refrigerant connections with braze welded Y and F joints (mandatory accessories).
— Compressor and fan with DC inverter technology.
— Particularly quiet operation.
— Microproccessor control.
— Auto-restart function.
— Self-diagnosis function.
— Easy installation and maintenance.
— Serial communication in CanBus protocol.

ACCESSORIES

CC2: Centralised control with 7" touchscreen display for managing several indoor units within a number of multisplit systems. The centralised control has an integrated external contact. For more information, refer to the specific documentation. *

MVASZC: Simplified centralised control (4,3" touch screen display), which can be used to manage up to 32 Indoor Units distributed across a maximum of 16 Systems.

WLRC: Remote control with liquid crystal display and soft-touch buttons.

WRC: Wired panel with liquid crystal display and soft-touch buttons.

WRC1: Simplified wired panel with liquid crystal display and soft-touch buttons with built-in external contact. This panel is particularly suitable for hotel applications.

*** The CC2 centralised control can manage up to 255 indoor units distributed over a maximum of 16 VRF systems.**

For more information about the accessories and their functions (such as the auto-restart function), refer to the specific documentation of the single accessory.

AHUKIT: Kit comprised of a box that contains the thermal expansion valve(s) complete with wiring and their control module, with pre-wired probes, a wall-mounted control panel with external contact. The kit is intended to be combined with the direct expansion cooling and/or heating coil (using R410A) of an air treatment unit. The latter is not supplied as an MV_ component, but is functionally connected to an MV_ system and is suitably sized. AHUKIT, and the and the air treatment unit connected to it, treat the recirculated and/or fresh air that falls within the operating limits, regulating the recirculation/expulsion air temperature.

MINIMODBUS10: Thanks to its smaller size, this accessory can be easily installed in the outdoor unit. It allows you to manage up to 16 MV systems (with a maximum of 255 indoor units), with a ModBus RTU serial on RSA485 for supervision with an external BMS.

MVAGW: This accessory allows you to manage up to 16 MV systems (with a maximum of 255 total indoor units), making available a serial in ModBus RTU protocol on RS485, ModBus TCP or BACnet / IP for supervision with an external BMS.

USBDC / USBDC1: The kit includes a converter (from CanBus to ModBus) and the VRF debugger software. IT is designed to meet the requirements of after sales services and qualified technicians who need to carry out control and debugging procedures on the MV_ ranges.

DTAC: Diagnostic tool for indoor and outdoor units of the entire series (tool reserved for service centres or installers).

Accessories mandatory

Air delivery and recovery grille for indoor **Cassette** type units.

Grille model	Indoor unit model			8 WAY	4 WAY	1 WAY	Dimensions LxHxW (mm)	Weight Kg
	MVA_CS	MVA_C	MVA_C1					
GLG40S	•	-	-	•	-	-	620x620x47,5	3,0
GLG40	-	•	-	•	-	-	950x950x52	6,0
GL40B	-	-	-	-	•	-	1040x1040x65	8,0
GLC1	-	-	•	-	-	•	1200x460x55	4,2

Joints refnet

Connection between modular outdoor units.

The modules are easy to install and link together from the cooling point of view, thanks to the connections with dedicated refnet joints. Modularity is the fundamental characteristic of these systems as it also allows high-capacity systems to be created in a quick, simple way.

Y-joints for cooling connection between 2 Outdoor Units in Modular Systems. **A modular system made up of n. base modules requires n-1 RNYMHR.-joints.**

Mandatory accessory for modular systems.

MVBM 2-pipe system.	MVBHR 3-pipe system	MVBM 2-pipe system.	MVBHR 3-pipe system
Outdoor unit	Outdoor unit	Indoor units	Indoor units
RNYM01	RNYMHR10	RNY11	RNY11
	RNYMHR20		
AHUKIT	Outdoor units - MEB	RNY12	RNY12
RNYAHU	RNYHR10	RNY21	
RNYAHU20	RNYHR20	RNY31	
	RNYHR30	RNY41	
	RNYHR40	RNF14	
	RNYHR50	RNF18	
	RNYHR60	RNF18B	
	RNYHR70		

MVBM 2-pipe system

RNYM01

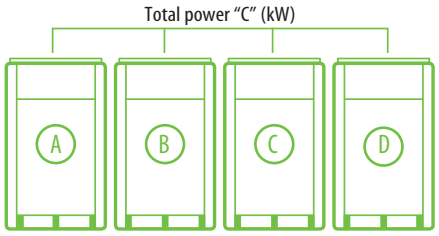
Accessory comprising 2 Y-joints, one for the liquid line and one for the discharge line.

MVBHR 3-pipe system

RNYMHR

Accessory comprising 3 Y-joints - one for the liquid line and two for the gas lines (one high pressure and the other low pressure).

Code	Type
RNYMHR10	Y
RNYMHR20	Y



Connection between modular outdoor units and MEB - Exchange module

RNYHR

Accessory for connecting outdoor units with the MEB exchange module. Comprises three Y-joints one for the liquid line and two for the gas lines (one high pressure and the other low pressure).

Code	Type
RNYHR10	Y
RNYHR20	Y
RNYHR30	Y
RNYHR40	Y
RNYHR50	Y
RNYHR60	Y
RNYHR70	Y

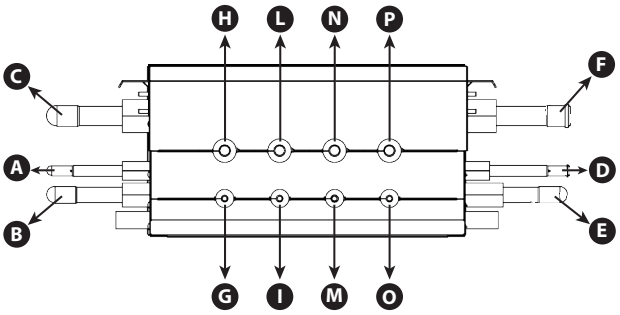
MEB

Exchange module with one, two, four or eight branches (each single branch can manage heating or cooling mode independently of the others, but simultaneously) for interfacing MVBHR 3-pipe outdoor units with the MV 2-pipe indoor units.

Code	Branches	Maximum manageable cooling capacity (per single branch)	Total power managed by the MEB	Connectible indoor units (per single branch)
	No.	(kW)	(kW)	No.
MEB12	1	16,00	≤ 16,00	8
MEB22	2	16,00	≤ 28,00	8
MEB42	4	16,00	≤ 45,00	8
MEB82	8	16,00	≤ 85,00	8

In order to connect indoor units with a capacity higher than 16kW, two branches must be used that are joined into one using suitable DIP-switch settings on the distribution box.

MEB exchange module



Refrigerant connection	Description
A	Liquid (left side)
B	Gas high pressure (left side)
C	Gas low pressure (left side)
D	Liquid (right side)
E	Gas high pressure (right side)
F	Gas low pressure (right side)
G	Liquid (branch 1)
H	Gas (branch 1)
I	Liquid (branch 2)
L	Gas (branch 2)
M	Liquid (branch 3)
N	Gas (branch 3)
O	Liquid (branch 4)
P	Gas (branch 4)

Connection between indoor units

RNY

Accessory comprising 2 Y-joints, one for the liquid line and one for the discharge line.

RNF

Accessory made up of two F-joints, one for the liquid line and one for the discharge line.

Code	System type		Type of joint	Maximum 1-way connectible power	Connectible indoor units
	2-pipe	3-pipe		(kW)	No.
RNY11	•	•	Y	-	-
RNY12	•	•	Y	-	-
RNY21	•		Y	-	-
RNY31	•		Y	-	-
RNY41	•		Y	-	-
RNF14	•		F	16,00	from 2 to 4
RNF18	•		F	16,00	from 4 to 8
RNF18B	•		F	16,00	from 4 to 8

ADVANTAGES FOR VRF SYSTEMS: MVAS - MVBM - MVBHR

Compact design

Thanks to the reduced dimensions and compact design of these units, they are easy to move at the job site. All the models can in fact be transported easily right up to the roof, even using a lift.

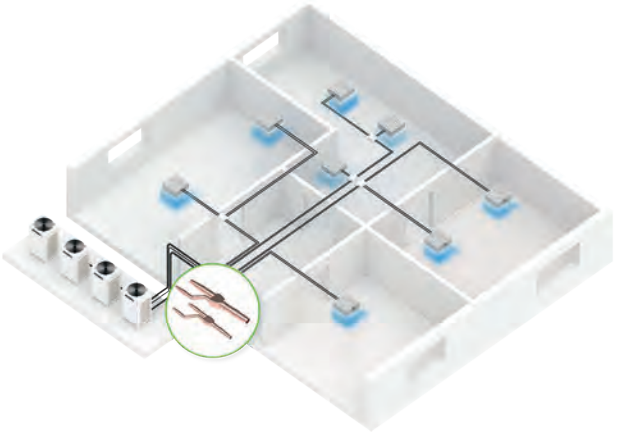
VRF systems - 2-pipe heat pump

Customise your VRF system

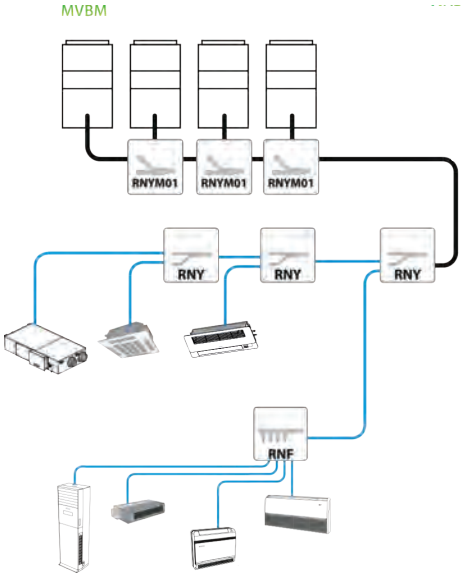
To guarantee greater seasonal efficiency and maximum comfort with the variable refrigerant function.

Continuous comfort

Continuous heating or cooling of the rooms is what makes the VRF system a valid alternative to hydronic systems.



Example of a 2-pipe system



When dimensioning the cooling lines, exclusively refer to the technical manual.

A modular system made up of n base modules requires n-1 Y-joints.

MVAS - MVBM

— 2-pipe system.
— Cooling or heating mode. (The image shows an example of a system in cooling mode)
— Total maximum length of the refrigerant lines: MVAS: 300 m, MVBM: 1000 m

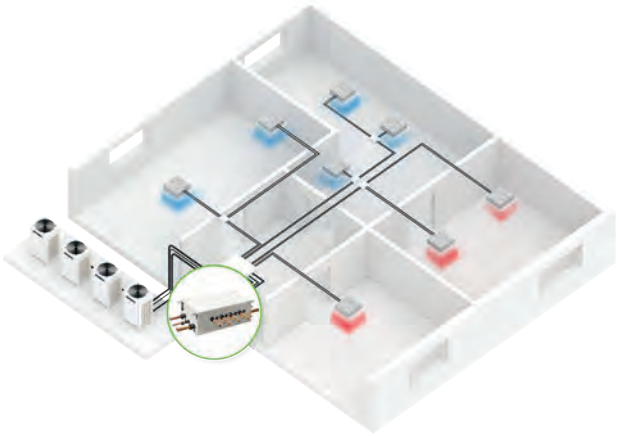
VRF systems - 3-pipe heat pump

The VRF MVBHR heat recovery system heats and cools at the same time with one single circuit.

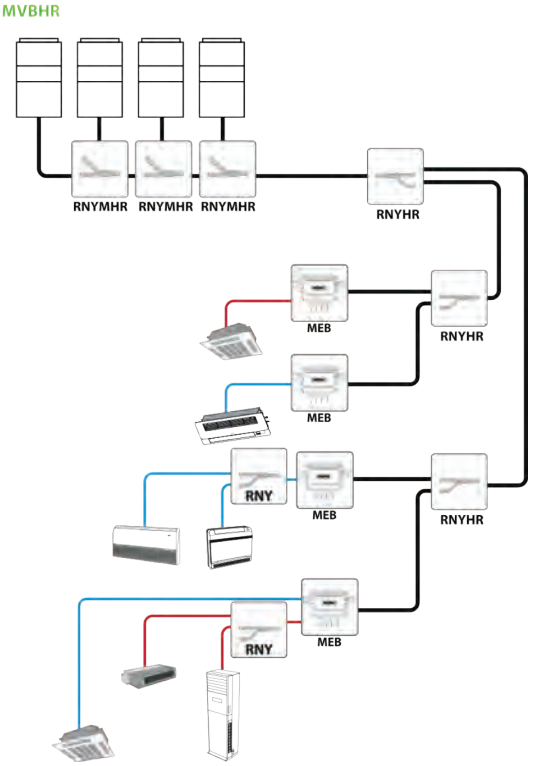
MVBHR recovers the heat produced during cooling and uses it to heat certain rooms cost-free, maximising energy efficiency and reducing energy costs.

Continuous comfort

Simultaneous heating and cooling of the rooms is what makes the VRF system a valid alternative to hydronic systems.



Example of a 3-pipe system



When dimensioning the cooling lines, exclusively refer to the technical manual.

A modular system made up of n base modules requires n-1 Y-joints.

MVBHR

— 3-pipe system.
— Simultaneous cold and hot operation.
— Total maximum length of the refrigerant lines: MVBHR: 1000 m

CONFIGURATIONS

MVAS combinations

MVAS connectable units

MVAS	Nominal cooling capacity (kW)	Min. no. of indoor units	Max. no. of indoor units
1201S	12,10	2	7
1401S	14,00	2	8
1601S	16,00	2	9
1201T	12,10	2	7
1401T	14,00	2	8
1601T	16,00	2	9
2242T	22,40	1	13
2803T	28,00	1	17
3352T	33,50	2	20

MVAS outdoor unit with single duct type indoor unit

MVAS	Nominal cooling capacity (kW)	No. indoor units	Compatible indoor unit
2242T	22,40	1	MVA2240DH
2803T	28,00	1	MVA2800DH

MVBM recommended configurations

	Nominal cooling capacity	MVBM combination				Connectible indoor units	
		Module				Number	
	(kW)	(A)	(B)	(C)	(D)	MINIMUM (1)	MAXIMUM (2)
Base Module	22,40	2240T	-	-	-	1	13
	28,00	2800T	-	-	-	1	16
	33,50	3350T	-	-	-	1	19
	40,00	4000T	-	-	-	1	23
	45,00	4500T	-	-	-	1	26
	50,40	5040T	-	-	-	1	29
	56,00	5600T	-	-	-	1	33
	61,50	6150T	-	-	-	2	36
Combinations	68,00	2800T	4000T	-	-	2	39
	73,00	2800T	4500T	-	-	2	43
	78,40	2800T	5040T	-	-	2	46
	84,00	2800T	5600T	-	-	2	50
	89,50	2800T	6150T	-	-	2	53
	95,00	3350T	6150T	-	-	2	56
	101,50	4000T	6150T	-	-	2	59
	106,50	4500T	6150T	-	-	2	63
	111,90	5040T	6150T	-	-	3	64
	117,50	5600T	6150T	-	-	3	64
	123,00	6150T	6150T	-	-	3	64
	129,00	2800T	4500T	5600T	-	3	64
	134,50	2800T	4500T	6150T	-	3	64
	140,00	3350T	4500T	6150T	-	3	66
	145,50	2800T	5600T	6150T	-	3	69
	151,00	2800T	6150T	6150T	-	3	71
	156,50	3350T	6150T	6150T	-	3	74
	163,00	4000T	6150T	6150T	-	3	77
	168,00	4500T	6150T	6150T	-	4	80
	173,40	5040T	6150T	6150T	-	4	80
	179,00	5600T	6150T	6150T	-	4	80
	184,50	6150T	6150T	6150T	-	4	80
	190,50	2800T	4500T	5600T	6150T	4	80
	195,90	2800T	5040T	5600T	6150T	4	80
	201,50	2800T	5600T	5600T	6150T	4	80
	207,00	2800T	5600T	6150T	6150T	4	80
	212,50	2800T	6150T	6150T	6150T	4	80
	218,00	3350T	6150T	6150T	6150T	4	80
	224,50	4000T	6150T	6150T	6150T	5	80
	229,50	4500T	6150T	6150T	6150T	5	80
	234,90	5040T	6150T	6150T	6150T	5	80
	240,50	5600T	6150T	6150T	6150T	5	80
	246,00	6150T	6150T	6150T	6150T	5	80

MVBHR recommended configurations

	Nominal cooling capacity	MVBHR combination				Connectible indoor units	
		Module				Number	
	(kW)	(A)	(B)	(C)	(D)	MINIMUM (1)	MAXIMUM (2)
Base Module	22,40	2240T	-	-	-	1	13
	28,00	2800T	-	-	-	1	16
	33,50	3350T	-	-	-	1	19
	40,00	4000T	-	-	-	1	23
	45,00	4500T	-	-	-	1	26
	50,40	5040T	-	-	-	1	29
	56,00	5600T	-	-	-	1	33
	61,50	6150T	-	-	-	2	36
Combinations	68,00	2800T	4000T	-	-	2	39
	73,00	2800T	4500T	-	-	2	43
	78,40	2800T	5040T	-	-	2	46
	84,00	2800T	5600T	-	-	2	50
	89,50	2800T	6150T	-	-	2	53
	95,00	3350T	6150T	-	-	2	56
	101,50	4000T	6150T	-	-	2	59
	106,50	4500T	6150T	-	-	2	63
	111,90	5040T	6150T	-	-	3	64
	117,50	5600T	6150T	-	-	3	64
	123,00	6150T	6150T	-	-	3	64
	129,00	2800T	4500T	5600T	-	3	64
	134,50	2800T	4500T	6150T	-	3	64
	140,00	3350T	4500T	6150T	-	3	66
	145,50	2800T	5600T	6150T	-	3	69
	151,00	2800T	6150T	6150T	-	3	71
	156,50	3350T	6150T	6150T	-	3	74
	163,00	4000T	6150T	6150T	-	3	77
	168,00	4500T	6150T	6150T	-	4	80
	173,40	5040T	6150T	6150T	-	4	80
	179,00	5600T	6150T	6150T	-	4	80
	184,50	6150T	6150T	6150T	-	4	80
	190,50	2800T	4500T	5600T	6150T	4	80
	195,90	2800T	5040T	5600T	6150T	4	80
	201,50	2800T	5600T	5600T	6150T	4	80
	207,00	2800T	5600T	6150T	6150T	4	80
	212,50	2800T	6150T	6150T	6150T	4	80
	218,00	3350T	6150T	6150T	6150T	4	80
	224,50	4000T	6150T	6150T	6150T	5	80
	229,50	4500T	6150T	6150T	6150T	5	80
	234,90	5040T	6150T	6150T	6150T	5	80
	240,50	5600T	6150T	6150T	6150T	5	80
	246,00	6150T	6150T	6150T	6150T	5	80

INDOOR UNIT PERFORMANCE DATA

MVA_WL

		MVA220WL	MVA280WL	MVA360WL	MVA450WL	MVA500WL	MVA560WL	MVA630WL	MVA710WL
Nominal cooling performances									
Cooling capacity (1)	kW	2,20	2,80	3,60	4,50	5,00	5,60	6,30	7,10
Nominal heating performances									
Heating capacity (2)	kW	2,50	3,20	4,00	5,00	5,60	6,30	7,10	7,50
Electric data									
Rated power input (3)	W	20	20	25	35	35	50	50	65
Fan									
Type	type	Inverter tangential	Inverter tangential	Inverter tangential	Inverter tangential	Inverter tangential	Inverter tangential	Inverter tangential	Inverter tangential
Air flow rate									
Minimum	m^3/h	300	300	320	500	501	650	650	650
Average	m^3/h	440	440	460	580	580	850	850	850
Maximum	m^3/h	500	500	630	850	850	1100	1100	1200
Sound power (4)									
Minimum	dB(A)	40,0	41,0	41,0	47,0	47,0	47,0	48,0	47,0
Average	dB(A)	43,0	43,0	45,0	50,0	50,0	51,0	51,0	51,0
Maximum	dB(A)	45,0	45,0	48,0	53,0	53,0	53,0	53,0	54,0
Sound pressure (5)									
Minimum	dB(A)	30,0	30,0	31,0	37,0	37,0	37,0	37,0	37,0
Average	dB(A)	33,0	33,0	35,0	40,0	40,0	41,0	41,0	41,0
Maximum	dB(A)	35,0	35,0	38,0	43,0	43,0	43,0	43,0	44,0
Refrigeration pipework									
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power supply									
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit									
Condensate discharge diameter	mm	20,0	20,0	20,0	20,0	20,0	20,0	20,0	20,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_D

		MVA222D	MVA252D	MVA282D	MVA322D	MVA362D	MVA402D
Nominal cooling performances							
Cooling capacity (1)	kW	2,20	2,50	2,80	3,20	3,60	4,00
Nominal heating performances							
Heating capacity (2)	kW	2,50	2,80	3,20	3,60	4,00	4,50
Electric data							
Rated power input (3)	W	78	78	78	78	78	78
Refrigeration pipework							
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")					
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")				12,7 (1/2")	
Power supply							
Indoor unit power supply		220-240V ~ 50Hz					
Power supply 60Hz							
Indoor unit power supply		208-230V ~ 60Hz					
Indoor unit							
Condensate discharge diameter	mm	25,0 x 2	25,0 x 2	25,0 x 2	25,0 x 2	25,0 x 2	25,0 x 2
Fan							
Type	type	Inverter centrifugal					
Air flow rate							
Minimum	m^3/h	200	200	200	300	300	400
Average	m^3/h	350	350	350	400	400	550
Maximum	m^3/h	450	450	450	550	550	750
Sound power							
Minimum	dB(A)	34,0	34,0	34,0	37,0	37,0	39,0
Average	dB(A)	37,0	37,0	37,0	39,0	39,0	41,0
Maximum	dB(A)	42,0	42,0	42,0	43,0	43,0	45,0
Sound pressure							
Minimum	dB(A)	22,0	22,0	22,0	25,0	25,0	27,0
Average	dB(A)	25,0	25,0	25,0	27,0	27,0	29,0
Maximum	dB(A)	30,0	30,0	30,0	31,0	31,0	33,0
Useful static pressure							
Nominal	Pa	15	15	15	15	15	15
Range of static pressure	Pa	0~30					

		MVA452D	MVA502D	MVA562D	MVA632D	MVA712D	MVA802D
Nominal cooling performances							
Cooling capacity (1)	kW	4,50	5,00	5,60	6,30	7,10	8,00
Nominal heating performances							
Heating capacity (2)	kW	5,00	5,60	6,30	7,10	8,00	9,00
Electric data							
Rated power input (3)	W	78	78	117	117	154	154
Refrigeration pipework							
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")				9,52 (3/8")	
Diameter of refrigerant gas connections	mm (inch)	12,7 (1/2")				15,9 (5/8")	
Power supply							
Indoor unit power supply		220-240V ~ 50Hz					
Power supply 60Hz							
Indoor unit power supply		208-230V ~ 60Hz					
Indoor unit							
Condensate discharge diameter	mm	25,0 x 2	25,0 x 2	25,0 x 2	25,0 x 2	25,0 x 2	25,0 x 2
Fan							
Type	type	Inverter centrifugal					
Air flow rate							
Minimum	m^3/h	400	400	550	550	650	700
Average	m^3/h	550	550	700	700	850	950
Maximum	m^3/h	750	750	850	850	1100	1200
Sound power							
Minimum	dB(A)	39,0	39,0	41,0	41,0	42,0	43,0
Average	dB(A)	41,0	41,0	43,0	43,0	44,0	47,0
Maximum	dB(A)	45,0	45,0	47,0	47,0	49,0	52,0
Sound pressure							
Minimum	dB(A)	27,0	27,0	29,0	29,0	30,0	31,0
Average	dB(A)	29,0	29,0	31,0	31,0	32,0	35,0
Maximum	dB(A)	33,0	33,0	35,0	35,0	37,0	40,0
Useful static pressure							
Nominal	Pa	15	15	15	15	15	15
Range of static pressure	Pa	0~30					0-30

(1) Cooling (EN-14511 and EN-14825) Ambient air temperature 27°C D.B. / 19°C W.B.; Outside air temperature 35°C; Max speed; Length of Refrigerant Lines 5m.
(2) Heating (EN-14511 and EN-14825) Ambient air temperature 20°C D.B.; Outside air temperature 7°C D.B./6°C W.B.; Max speed; Length of Refrigerant Lines 5m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
Sound power measured in anechoic chamber at a distance of 1,0m from the source, according to EN 12102.
Sound pressure measured in semi anechoic chamber at a distance of 1,0m from the source, according to EN 12102.

		MVA901D	MVA1001D	MVA1121D	MVA1251D	MVA1401D
Nominal cooling performances						
Cooling capacity (1)	kW	9,00	10,00	11,20	12,50	14,00
Nominal heating performances						
Heating capacity (2)	kW	10,00	11,20	12,50	14,00	16,00
Electric data						
Rated power input (3)	W	130	130	130	170	170
Fan						
Type	type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate						
Minimum	m^3/h	900	1000	1100	1400	1400
Average	m^3/h	1250	1350	1500	1700	1700
Maximum	m^3/h	1500	1500	1700	2000	2000
High static pressure						
Nominal	Pa	50	50	50	50	50
Minimum	Pa	0	0	0	0	0
Maximum	Pa	80	80	80	80	80
Sound power (4)						
Minimum	dB(A)	47,0	47,0	47,0	52,0	52,0
Average	dB(A)	51,0	51,0	51,0	55,0	55,0
Maximum	dB(A)	55,0	55,0	55,0	57,0	57,0
Sound pressure (5)						
Minimum	dB(A)	32,0	32,0	32,0	37,0	37,0
Average	dB(A)	36,0	36,0	36,0	40,0	40,0
Maximum	dB(A)	40,0	40,0	40,0	42,0	42,0
Refrigeration pipework						
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power supply						
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit						
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_DH

		MVA222DH	MVA252DH	MVA282DH	MVA322DH	MVA362DH	MVA402DH	MVA452DH	MVA502DH	MVA562DH
Nominal cooling performances										
Cooling capacity (1)	kW	2,20	2,50	2,80	3,20	3,60	4,00	4,50	5,00	5,60
Nominal heating performances										
Heating capacity (2)	kW	2,50	2,80	3,20	3,60	4,00	4,50	5,00	5,60	6,30
Electric data										
Rated power input (3)	W	50	50	50	50	50	100	100	100	105
Refrigeration pipework										
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")								9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")					12,7 (1/2")			15,9 (5/8")
Power supply										
Indoor unit power supply		220-240V ~ 50Hz								
Power supply 60Hz										
Indoor unit power supply		208-230V ~ 60Hz								
Indoor unit										
Condensate discharge diameter	mm	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5
Fan										
Type	type	Inverter centrifugal								
Air flow rate										
Minimum	m^3/h	400	400	400	420	420	600	600	600	700
Average	m^3/h	480	480	480	500	500	700	700	700	800
Maximum	m^3/h	550	550	550	600	600	850	850	850	1000
Sound power										
Minimum	dB(A)	39,0	39,0	39,0	40,0	40,0	42,0	42,0	42,0	42,0
Average	dB(A)	41,0	41,0	41,0	43,0	43,0	46,0	46,0	46,0	46,0
Maximum	dB(A)	45,0	45,0	45,0	46,0	46,0	50,0	50,0	50,0	50,0
Sound pressure										
Minimum	dB(A)	29,0	29,0	29,0	30,0	30,0	32,0	32,0	32,0	32,0
Average	dB(A)	31,0	31,0	31,0	33,0	33,0	36,0	36,0	36,0	36,0
Maximum	dB(A)	35,0	35,0	35,0	36,0	36,0	40,0	40,0	40,0	40,0
Useful static pressure										
Nominal	Pa	50	50	50	50	50	50	50	50	90
Range of static pressure	Pa	0~80								0~200

		MVA632DH	MVA712DH	MVA802DH	MVA902DH	MVA1002DH	MVA1122DH	MVA1252DH	MVA1402DH	MVA1602DH
Nominal cooling performances										
Cooling capacity (1)	kW	6,30	7,10	8,00	9,00	10,00	11,20	12,50	14,00	16,00
Nominal heating performances										
Heating capacity (2)	kW	7,10	8,00	9,00	10,00	11,20	12,50	14,00	16,00	18,00
Electric data										
Rated power input (3)	W	105	110	110	170	170	170	170	240	240
Refrigeration pipework										
Diameter of liquid refrigerant connections	mm (inch)					9,52 (3/8")				
Diameter of refrigerant gas connections	mm (inch)					15,9 (5/8")				19,05 (3/4")
Power supply										
Indoor unit power supply						220-240V ~ 50Hz				
Power supply 60Hz										
Indoor unit power supply						208-230V ~ 60Hz				
Indoor unit										
Condensate discharge diameter	mm	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5
Fan										
Type	type					Inverter centrifugal				
Air flow rate										
Minimum	m^3/h	700	950	950	1250	1250	1400	1400	1650	1650
Average	m^3/h	800	1050	1050	1450	1450	1600	1600	1900	1900
Maximum	m^3/h	1000	1250	1250	1800	1800	2000	2000	2350	2350
Sound power										
Minimum	dB(A)	42,0	42,0	42,0	44,0	44,0	46,0	47,0	48,0	50,0
Average	dB(A)	46,0	46,0	46,0	48,0	48,0	49,0	50,0	51,0	53,0
Maximum	dB(A)	50,0	50,0	50,0	52,0	52,0	53,0	54,0	54,0	55,0
Sound pressure										
Minimum	dB(A)	32,0	32,0	32,0	34,0	34,0	34,0	37,0	38,0	40,0
Average	dB(A)	36,0	36,0	36,0	38,0	38,0	38,0	40,0	41,0	43,0
Maximum	dB(A)	40,0	40,0	40,0	42,0	42,0	43,0	44,0	44,0	45,0
Useful static pressure										
Nominal	Pa	90	90	90	90	90	90	90	90	90
Range of static pressure	Pa		0~200		0-200			0~200		

(1) Cooling (EN-14511 and EN-14825) Ambient air temperature 27°C D.B. / 19°C W.B.; Outside air temperature 35°C; Max speed; Length of Refrigerant Lines 5m.
(2) Heating (EN-14511 and EN-14825) Ambient air temperature 20°C D.B.; Outside air temperature 7°C D.B./6°C W.B.; Max speed; Length of Refrigerant Lines 5m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
Sound power measured in anechoic chamber at a distance of 1,0m from the source, according to EN 12102.
Sound pressure measured in semi anechoic chamber at a distance of 1,0m from the source, according to EN 12102.

		MVA 2240 DH	MVA 2800 DH
Nominal cooling performances			
Cooling capacity (1)	kW	22,40	28,00
Nominal heating performances			
Heating capacity (2)	kW	24,00	30,00
Electric data			
Rated power input (3)	W	960	1250
Air flow rate			
Minimum	m^3/h	-	-
Average	m^3/h	-	-
Maximum	m^3/h	4000	4400
High static pressure			
Nominal	Pa	150	150
Minimum	Pa	-	-
Maximum	Pa	-	-
Sound power (4)			
Minimum	dB(A)	59,0	60,0
Average	dB(A)	62,0	62,0
Maximum	dB(A)	64,0	65,0
Sound pressure (5)			
Minimum	dB(A)	49,0	50,0
Average	dB(A)	52,0	52,0
Maximum	dB(A)	54,0	55,0
Refrigeration pipework			
Diameter of liquid refrigerant connections	mm (inch)	19,05 (3/4")	22,2 (7/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")
Power supply			
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit			
Condensate discharge diameter	mm	30,0	30,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_DV

		MVA220DV	MVA280DV	MVA360DV	MVA450DV	MVA560DV	MVA630DV	MVA710DV
Nominal cooling performances								
Cooling capacity (1)	kW	2,20	2,80	3,60	4,50	5,60	6,30	7,10
Nominal heating performances								
Heating capacity (2)	kW	2,50	3,20	4,00	5,00	6,30	7,10	8,00
Electric data								
Rated power input (3)	W	35	35	43	45	80	80	90
Fan								
Type	type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate								
Minimum	m^3/h	250	250	350	400	600	600	700
Average	m^3/h	350	350	450	500	750	750	900
Maximum	m^3/h	450	450	550	650	900	900	1100
High static pressure								
Nominal	Pa	10	10	10	15	15	15	15
Minimum	Pa	0	0	0	0	0	0	0
Maximum	Pa	40	40	40	60	60	60	60
Sound power (4)								
Minimum	dB(A)	35,0	35,0	38,0	38,0	40,0	40,0	43,0
Average	dB(A)	38,0	38,0	41,0	41,0	43,0	43,0	45,0
Maximum	dB(A)	40,0	40,0	43,0	43,0	45,0	45,0	47,0
Sound pressure (5)								
Minimum	dB(A)	25,0	25,0	28,0	28,0	30,0	30,0	33,0
Average	dB(A)	28,0	28,0	31,0	31,0	33,0	33,0	35,0
Maximum	dB(A)	30,0	30,0	33,0	33,0	35,0	35,0	37,0
Refrigeration pipework								
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power supply								
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit								
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_CS

		MVA151CS	MVA181CS	MVA221CS	MVA281CS	MVA361CS	MVA451CS	MVA501CS	MVA561CS
Nominal cooling performances									
Cooling capacity (1)	kW	1,50	1,80	2,20	2,80	3,60	4,50	5,00	5,60
Nominal heating performances									
Heating capacity (2)	kW	1,80	2,20	2,50	3,20	4,00	5,00	5,60	6,30
Electric data									
Rated power input (3)	W	30	30	30	30	30	45	45	45
Fan									
Type	type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate									
Minimum	m^3/h	370	370	370	420	480	560	560	560
Average	m^3/h	420	420	460	480	550	650	650	650
Maximum	m^3/h	460	460	500	570	620	730	730	730
Sound power (4)									
Minimum	dB(A)	39,0	39,0	39,0	42,0	45,0	53,0	43,0	53,0
Average	dB(A)	44,0	44,0	45,0	47,0	49,0	55,0	55,0	55,0
Maximum	dB(A)	47,0	47,0	50,0	50,0	52,0	57,0	57,0	57,0
Sound pressure (5)									
Minimum	dB(A)	25,0	25,0	25,0	28,0	31,0	39,0	39,0	39,0
Average	dB(A)	30,0	30,0	31,0	33,0	35,0	41,0	41,0	41,0
Maximum	dB(A)	33,0	33,0	36,0	36,0	38,0	43,0	43,0	43,0
Refrigeration pipework									
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")
Power supply									
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit									
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_C

		MVA221C	MVA281C	MVA361C	MVA451C	MVA501C	MVA561C	MVA631C
Nominal cooling performances								
Cooling capacity (1)	kW	2,20	2,80	3,60	4,50	5,00	5,60	6,30
Nominal heating performances								
Heating capacity (2)	kW	2,50	3,20	4,00	5,00	5,60	6,30	7,10
Electric data								
Rated power input (3)	W	26	26	26	26	28	35	60
Fan								
Type	type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate								
Minimum	m^3/h	600	600	600	600	700	750	850
Average	m^3/h	700	700	700	700	800	850	950
Maximum	m^3/h	800	800	800	800	900	950	1150
Sound power (4)								
Minimum	dB(A)	42,0	42,0	42,0	42,0	43,0	44,0	45,0
Average	dB(A)	44,0	44,0	44,0	44,0	46,0	47,0	48,0
Maximum	dB(A)	47,0	47,0	47,0	48,0	49,0	51,0	51,0
Sound pressure (5)								
Minimum	dB(A)	28,0	28,0	28,0	28,0	29,0	30,0	31,0
Average	dB(A)	30,0	30,0	30,0	30,0	32,0	33,0	34,0
Maximum	dB(A)	33,0	33,0	33,0	34,0	35,0	37,0	37,0
Refrigeration pipework								
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")
Power supply								
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit								
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

		MVA711C	MVA801C	MVA901C	MVA1001C	MVA1121C	MVA1251C	MVA1401C	MVA1601C
Nominal cooling performances									
Cooling capacity (1)	kW	7,10	8,00	9,00	10,00	11,20	12,50	14,00	16,00
Nominal heating performances									
Heating capacity (2)	kW	8,00	9,00	10,00	11,20	12,50	14,00	16,00	18,00
Electric data									
Rated power input (3)	W	60	85	85	85	115	115	115	170
Fan									
Type	type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate									
Minimum	m^3/h	850	900	900	900	1100	1100	1100	1430
Average	m^3/h	950	1000	1000	1000	1300	1300	1300	1800
Maximum	m^3/h	1150	1250	1250	1250	1650	1650	1650	2000
Sound power (4)									
Minimum	dB(A)	45,0	48,0	48,0	48,0	53,0	53,0	53,0	54,0
Average	dB(A)	48,0	51,0	51,0	51,0	55,0	55,0	55,0	60,0
Maximum	dB(A)	51,0	53,0	53,0	53,0	57,0	57,0	57,0	63,0
Sound pressure (5)									
Minimum	dB(A)	31,0	34,0	34,0	34,0	39,0	39,0	39,0	42,0
Average	dB(A)	34,0	37,0	37,0	37,0	41,0	41,0	41,0	48,0
Maximum	dB(A)	37,0	39,0	39,0	39,0	43,0	43,0	43,0	51,0
Refrigeration pipework									
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	19,05 (3/4")
Power supply									
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit									
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_C1

		MVA220C1	MVA280C1	MVA360C1	MVA450C1	MVA500C1
Nominal cooling performances						
Cooling capacity (1)	kW	2,20	2,80	3,60	4,50	5,00
Nominal heating performances						
Heating capacity (2)	kW	2,50	3,20	4,00	5,00	5,60
Electric data						
Rated power input (3)	W	30	30	30	30	30
Fan						
Type	type	Inverter tangential	Inverter tangential	Inverter tangential	Inverter tangential	Inverter tangential
Air flow rate						
Minimum	m^3/h	450	450	450	500	500
Average	m^3/h	500	500	500	600	600
Maximum	m^3/h	600	600	600	830	830
Sound power (4)						
Minimum	dB(A)	38,0	38,0	38,0	40,0	40,0
Average	dB(A)	42,0	42,0	42,0	45,0	45,0
Maximum	dB(A)	46,0	46,0	46,0	50,0	50,0
Sound pressure (5)						
Minimum	dB(A)	28,0	28,0	28,0	30,0	30,0
Average	dB(A)	32,0	32,0	32,0	35,0	35,0
Maximum	dB(A)	36,0	36,0	36,0	40,0	40,0
Refrigeration pipework						
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")
Power supply						
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit						
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_F

		MVA281F	MVA361F	MVA501F	MVA561F	MVA631F	MVA711F	MVA901F	MVA1121F	MVA1251F	MVA1401F	MVA1601F
Nominal cooling performances												
Cooling capacity (1)	kW	2,80	3,60	5,00	5,60	6,30	7,10	9,00	11,20	12,50	14,00	16,00
Nominal heating performances												
Heating capacity (2)	kW	3,20	4,00	5,60	6,30	7,10	8,00	10,00	12,50	14,00	16,00	18,00
Electric data												
Rated power input (3)	W	35	35	55	55	80	80	120	120	120	150	175
Fan												
Type	type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate												
Minimum	m^3/h	450	450	600	600	1050	1050	1250	1400	1400	1600	1650
Average	m^3/h	500	500	650	650	1200	1200	1400	1600	1600	1750	1850
Maximum	m^3/h	600	600	750	750	1350	1350	1550	1800	1800	2000	2150
Sound power (4)												
Minimum	dB(A)	45,0	45,0	48,0	48,0	54,0	54,0	54,0	54,0	54,0	55,0	57,0
Average	dB(A)	48,0	48,0	51,0	51,0	57,0	57,0	56,0	56,0	56,0	57,0	60,0
Maximum	dB(A)	52,0	52,0	54,0	54,0	60,0	60,0	59,0	59,0	59,0	61,0	64,0
Sound pressure (5)												
Minimum	dB(A)	29,0	29,0	36,0	36,0	38,0	38,0	41,0	42,0	42,0	43,0	45,0
Average	dB(A)	32,0	32,0	39,0	39,0	41,0	41,0	44,0	44,0	44,0	45,0	48,0
Maximum	dB(A)	36,0	36,0	42,0	42,0	44,0	44,0	47,0	47,0	47,0	49,0	52,0
Refrigeration pipework												
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	19,05 (3/4")
Power supply												
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit												
Condensate discharge diameter	mm	17,0	17,0	17,0	17,0	17,0	17,0	17,0	17,0	17,0	17,0	17,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_FS

		MVA220FS	MVA280FS	MVA360FS	MVA450FS	MVA500FS
Nominal cooling performances						
Cooling capacity (1)	kW	2,20	2,80	3,60	4,50	5,00
Nominal heating performances						
Heating capacity (2)	kW	2,50	3,20	4,00	5,00	5,50
Electric data						
Rated power input (3)	W	15	15	20	40	40
Fan						
Type	type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate						
Minimum	m^3/h	270	270	310	500	500
Average	m^3/h	320	320	400	600	600
Maximum	m^3/h	400	400	480	680	680
Sound power (4)						
Minimum	dB(A)	37,0	37,0	42,0	49,0	49,0
Average	dB(A)	43,0	43,0	47,0	53,0	53,0
Maximum	dB(A)	48,0	48,0	50,0	56,0	56,0
Sound pressure (5)						
Minimum	dB(A)	27,0	27,0	32,0	39,0	39,0
Average	dB(A)	33,0	33,0	37,0	43,0	43,0
Maximum	dB(A)	38,0	38,0	40,0	46,0	46,0
Refrigeration pipework						
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")
Power supply						
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit						
Condensate discharge diameter	mm	17,2	17,2	17,2	17,2	17,2

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_V

		MVA1000V	MVA1400V
Nominal cooling performances			
Cooling capacity (1)	kW	10,00	14,00
Nominal heating performances			
Heating capacity (2)	kW	11,00	15,00
Electric data			
Rated power input (3)	W	200	200
Fan			
Type	type	Inverter centrifugal	Inverter centrifugal
Air flow rate			
Minimum	m^3/h	1400	1400
Average	m^3/h	1600	1600
Maximum	m^3/h	1850	1850
Sound power (4)			
Minimum	dB(A)	56,0	56,0
Average	dB(A)	58,0	58,0
Maximum	dB(A)	60,0	60,0
Sound pressure (5)			
Minimum	dB(A)	46,0	46,0
Average	dB(A)	48,0	48,0
Maximum	dB(A)	50,0	50,0
Refrigeration pipework			
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	15,9 (5/8")	15,9 (5/8")
Power supply			
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit			
Condensate discharge diameter	mm	31,0	31,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_ERV

		MVA500ERV	MVA800ERV	MVA1000ERV
Nominal cooling performances				
Cooling capacity (1)	kW	8,50	12,00	14,50
Cooling capacity of finned pack heat exchanger (2)	kW	3,60	6,30	8,00
Nominal heating performances				
Heating capacity (3)	kW	4,00	10,60	12,00
Heating capacity of finned pack heat exchanger	kW	2,00	8,04	8,40
Heat recovery unit				
Unit type		UVNR	UVNR	UVNR
Thermal efficiency (4)	%	73	74	73
Fans				
Commissioning	type	Speed variator	Speed variator	Speed variator
SFP int	W/(m^3/s)	1099,57	1118,00	1059,20
Nominal external pressure Δp (5)	Pa	150	150	150
Type of fan	Type	Centrifugal	Centrifugal	Centrifugal
Nominal air flow rate	m^3/h	500	800	1000
Sound data				
Sound power level	dB(A)	55,0	59,0	62,0
General data				
Rated power input	W	270	440	640
Diameter of liquid refrigerant connections	mm (inch)	7,89 (5/16")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")
Condensate discharge diameter	mm	26,0	26,0	26,0
Heat recovery unit				
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

(1) Cooling: room air temperature 27 °C d.b. / 19.5 °C w.b.; outside air temperature 35 °C; turbo speed; cooling line length 5 m; indoor and outdoor units at the same height.
(2) Use the finned pack heat exchanger power (cooling) to make the calculation and select the unit.
(3) Heating: room air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; cooling line length 5 m; indoor and outdoor units at the same height.
(4) Thermal efficiency complying with European regulation EU 1253/2014.
(5) Performances referring to clean filters.
The air flow rate is calculated on the basis of the nominal high static pressure at high fan speed. It may vary according to the real installation conditions.
The nominal static pressure is the effective pressure value declared for a standard unit when it leaves the factory. The use of other filters may alter the unit performance values.

2-PIPE SYSTEM OUTDOOR UNIT PERFORMANCE DATA

		MVAS 1201S	MVAS 1201T	MVAS 1401S	MVAS 1401T	MVAS 1601S	MVAS 1601T
Nominal cooling performances							
Cooling capacity (1)	kW	12,10	12,10	14,00	14,00	16,00	16,00
Cooling input power (1)	kW	3,03	3,03	3,59	3,59	4,75	4,75
Nominal heating performances							
Heating capacity (2)	kW	14,00	14,00	16,50	16,50	18,00	18,00
Heating input power (2)	kW	3,27	3,27	3,95	3,95	4,65	4,65
Fan							
Type	type	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial
Number	no.	2	2	2	2	2	2
Air flow rate							
Nominal	m^3/h	6000	6000	6300	6300	6600	6600
Sound pressure (3)							
Nominal	dB(A)	57,0	57,0	58,0	58,0	58,0	58,0
Compressor							
Type	type	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter
Number	no.	1	1	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge	kg	3,3	3,3	3,3	3,3	3,3	3,3
Electric data							
Rated current input (4)	A	30,4	11,1	33,7	12,0	36,3	12,5
Refrigeration pipework							
Maximum refrigerant tube length	m	300	300	300	300	300	300
Power supply							
Outdoor unit power supply		220-245V ~ 50Hz	380-415V ~ 3N 50Hz	220-245V ~ 50Hz	380-415V ~ 3N 50Hz	220-245V ~ 50Hz	380-415V ~ 3N 50Hz

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.
(4) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		MVAS 2242T	MVAS 2803T	MVAS 3352T
Nominal cooling performances				
Cooling capacity (1)	kW	22,40	28,00	33,50
Cooling input power (1)	kW	6,12	13,02	12,88
Nominal heating performances				
Heating capacity (2)	kW	22,40	28,00	33,50
Heating input power (2)	kW	4,90	8,00	10,47
Fan				
Type	type	Inverter axial	Inverter axial	Inverter axial
Number	no.	2	2	2
Air flow rate				
Nominal	m^3/h	8000	11000	11000
Sound data calculated in cooling mode				
Maximum sound pressure level	dB(A)	58,0	62,0	62,0
Maximum sound power level	dB(A)	78,0	80,0	80,0
Sound data calculated in heating mode				
Maximum sound pressure level	dB(A)	58,0	64,0	64,0
Maximum sound power level	dB(A)	79,0	82,0	82,0
Compressor				
Type	type	Rotary	Rotary	Rotary
Number	no.	1	1	1
Refrigerant	type	R410A	R410A	R410A
Refrigerant charge	kg	5,5	7,1	8,5
Electric data				
Rated current input (3)	A	17,2	22,5	24,5
Refrigeration pipework				
Maximum refrigerant tube length	m	300	300	300
Power supply				
Outdoor unit power supply		380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		MVBM 2240T	MVBM 2800T	MVBM 3350T	MVBM 4000T	MVBM 4500T	MVBM 5040T	MVBM 5600T	MVBM 6150T
Nominal cooling performances									
Cooling capacity (1)	kW	22,40 (2)	28,00 (2)	33,50 (2)	40,00 (2)	45,00 (2)	50,40 (2)	52,00 (2)	52,00 (2)
Maximum cooling performances									
Cooling capacity	kW	22,40	28,00	33,50	40,00	45,00	50,40	56,00	61,50
Nominal heating performances									
Heating capacity (3)	kW	22,40 (2)	28,00 (2)	33,50 (2)	40,00 (2)	45,00 (2)	50,40 (2)	56,00 (2)	56,00 (2)
Maximum heating performances									
Heating capacity	kW	25,00	31,50	37,50	45,00	50,00	56,50	63,00	69,00
Fan									
Type	type	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial
Number	no.	1	1	1	2	2	2	2	2
Air flow rate									
Nominal	m^3/h	9750	10500	11100	13500	15400	16000	16500	16500
Sound pressure (4)									
Nominal	dB(A)	56,0	57,0	59,0	59,0	60,0	61,0	62,0	63,0
Compressor									
Type	type	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter
Number	no.	1	1	1	1	1	2	2	2
Refrigerant	type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge	kg	5,5	5,5	7,5	7,5	7,5	8,3	8,3	8,3
Electric data									
Rated current input (5)	A	23,0	23,5	24,1	37,5	39,3	47,0	48,0	49,0
Refrigeration pipework									
Type refrigerant connections	Type	To be soldered	To be soldered	To be soldered	To be soldered	To be soldered	To be soldered	To be soldered	To be soldered
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Diameter of refrigerant gas connections	mm (inch)	19,05 (3/4")	22,2 (7/8")	25,4 (1")	25,4 (1")	28,6 (1"1/8)	28,6 (1"1/8)	28,6 (1"1/8)	28,6 (1"1/8)
Maximum refrigerant tube length	m	1000	1000	1000	1000	1000	1000	1000	1000
Power supply									
Outdoor unit power supply		380-415V~3N 50Hz	380-415V~3N 50Hz	380-415V~3N 50Hz	380-415V~3N 50Hz	380-415V~3N 50Hz	380-415V~3N 50Hz	380-415V~3N 50Hz	380-415V~3N 50Hz

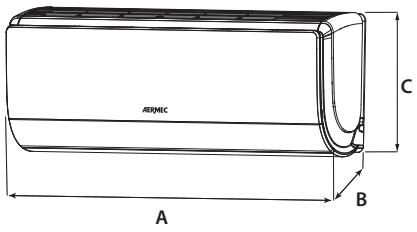
(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) the cooling capacity of the system actually selected may be different from the value shown in the table; to determine the cooling performance data of each MVBM system refer to the selection software
(3) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(4) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.
(5) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

3-PIPE SYSTEM OUTDOOR UNIT PERFORMANCE DATA

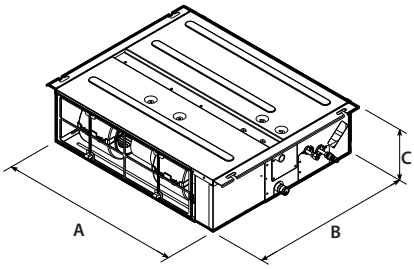
		MVBHR2240T	MVBHR2800T	MVBHR3350T	MVBHR4000T	MVBHR4500T	MVBHR5040T	MVBHR5600T	MVBHR6150T
Nominal cooling performances									
Cooling capacity (1)	kW	22,40	28,00	33,50	40,00	45,00	50,40	52,00	52,00
Maximum cooling performances									
Cooling capacity	kW	22,40	28,00	33,50	40,00	45,00	50,40	56,00	61,50
Nominal heating performances									
Heating capacity (2)	kW	22,40	28,00	33,50	40,00	45,00	50,40	56,00	56,00
Maximum heating performances									
Heating capacity	kW	25,00	31,50	37,50	45,00	50,00	56,50	63,00	69,00
Fan									
Type	type	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial
Number	no.	1	1	1	2	2	2	2	2
Air flow rate									
Maximum	m^3/h	9750	10500	11100	13500	15400	16000	16500	16500
Compressor									
Type	type	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter
Number	no.	1	1	1	1	1	2	2	2
Refrigerant charge	kg	8,2	8,5	9,6	11,1	11,6	12,8	12,8	13,3
Electric data									
Rated current input (3)	A	23,0	23,5	24,1	37,5	39,3	47,0	48,0	49,0
Refrigeration pipework									
Type refrigerant connections	Type	To be soldered	To be soldered	To be soldered	To be soldered	To be soldered	To be soldered	To be soldered	To be soldered
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Diameter of low pressure refrigerant gas connections	mm (inch)	19,05 (3/4")	22,2 (7/8")	25,4 (1")	25,4 (1")	28,6 (1 1/8")	28,6 (1 1/8")	28,6 (1 1/8")	28,6 (1 1/8")
Diameter of high pressure refrigerant gas connections	mm (inch)	15,9 (5/8")	19,05 (3/4")	19,05 (3/4")	22,2 (7/8")	22,2 (7/8")	25,4 (1")	25,4 (1")	25,4 (1")
Maximum refrigerant tube length	m	1000	1000	1000	1000	1000	1000	1000	1000
Power supply									
Outdoor unit power supply		380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

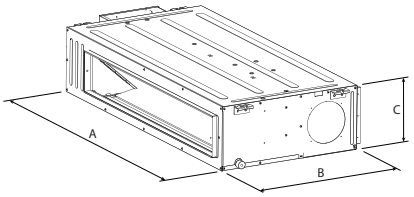
INDOOR UNIT WEIGHTS AND DIMENSIONS



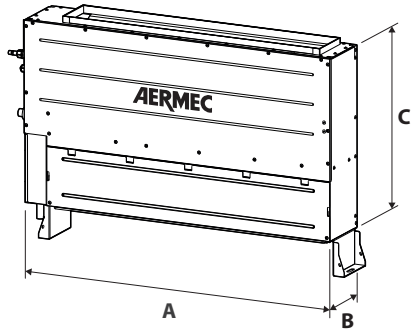
MVA_WL



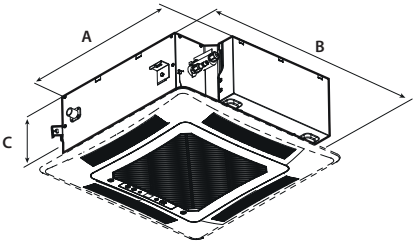
MVA_D



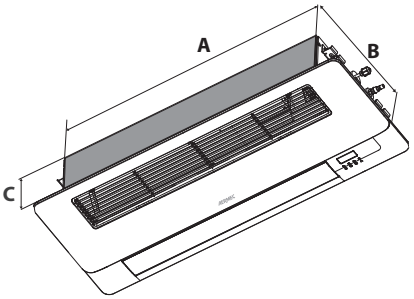
MVA_DH



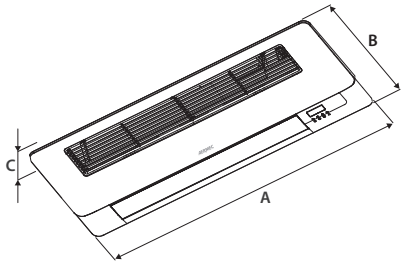
MVA_DV



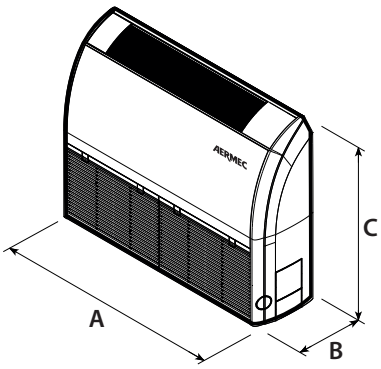
MVA_C / MVA_CS



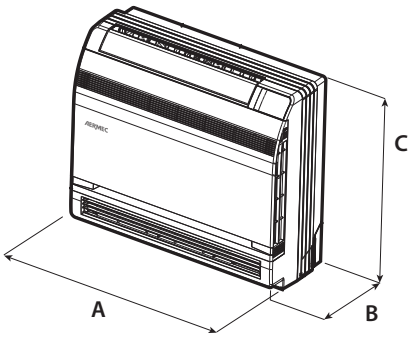
MVA_C1



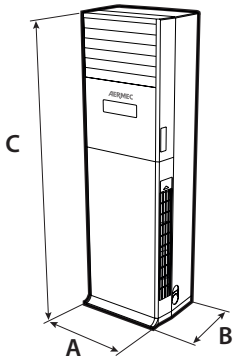
GLC1



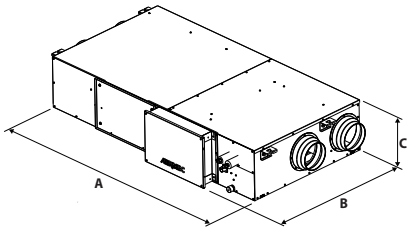
MVA_F



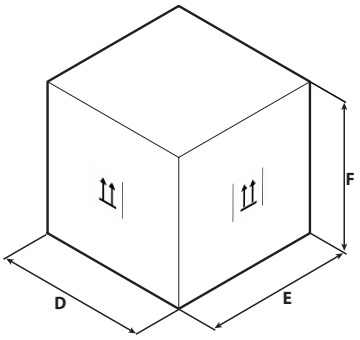
MVA_FS



MVA_V



MVA_ERV



Carton Box Example

MVA_WL

		MVA220WL	MVA280WL	MVA360WL	MVA450WL	MVA500WL	MVA560WL	MVA630WL	MVA710WL
Indoor unit									
A	mm	845	845	845	970	970	1078	1078	1078
B	mm	209	209	209	224	224	246	246	246
C	mm	289	289	289	300	300	325	325	325
D	mm	976	976	976	1096	1096	1203	1203	1203
E	mm	281	281	281	320	320	350	350	350
F	mm	379	379	379	383	383	413	413	413
Net weight	kg	11,0	11,0	11,0	13,0	13,0	16,0	16,0	16,0
Weight for transport	kg	13,0	13,0	13,0	16,0	16,0	19,0	19,0	19,0

MVA_D

		MVA222D	MVA252D	MVA282D	MVA322D	MVA362D	MVA402D
Indoor unit							
A	mm	710	710	710	710	710	1010
B	mm	462	462	462	462	462	462
C	mm	200	200	200	200	200	200
D	mm	1008	1008	1008	1008	1008	1308
E	mm	568	568	568	568	568	568
F	mm	275	275	275	275	275	275
Net weight	kg	18,5	18,5	18,5	19,0	19,0	24,0
Weight for transport	kg	23,5	23,5	23,5	24,0	24,0	30,0

		MVA452D	MVA502D	MVA562D	MVA632D	MVA712D	MVA802D
Indoor unit							
A	mm	1010	1010	1010	1010	1310	1310
B	mm	462	462	462	462	462	462
C	mm	200	200	200	200	200	200
D	mm	1308	1308	1308	1308	1608	1608
E	mm	568	568	568	568	568	568
F	mm	275	275	275	275	275	275
Net weight	kg	24,0	24,0	25,0	25,0	31,0	31,0
Weight for transport	kg	30,0	30,0	31,0	31,0	37,5	37,5

		MVA901D	MVA1001D	MVA1121D	MVA1251D	MVA1401D
Indoor unit						
A	mm	1340	1340	1340	1340	1340
B	mm	655	655	655	655	655
C	mm	260	260	260	260	260
D	mm	1588	1588	1588	1588	1588
E	mm	858	858	858	858	858
F	mm	315	315	315	315	315
Net weight	kg	46,0	46,0	46,0	47,0	47,0
Weight for transport	kg	55,0	55,0	55,0	56,0	56,0

MVA_DV

		MVA220DV	MVA280DV	MVA360DV	MVA450DV	MVA560DV	MVA630DV	MVA710DV
Indoor unit								
A	mm	700	700	700	900	1100	1100	1100
B	mm	200	200	200	200	200	200	200
C	mm	615	615	615	615	615	615	615
D	mm	893	893	893	1123	1323	1323	1323
E	mm	305	305	305	305	305	305	305
F	mm	743	743	743	743	743	743	743
Net weight	kg	23,0	23,0	23,0	27,0	32,0	32,0	32,0
Weight for transport	kg	30,0	30,0	30,0	36,0	41,0	41,0	41,0

MVA_DH

		MVA222DH	MVA252DH	MVA282DH	MVA322DH	MVA362DH	MVA402DH	MVA452DH	MVA502DH	MVA562DH
Indoor unit										
A	mm	700	700	700	700	700	700	700	700	1000
B	mm	700	700	700	700	700	700	700	700	700
C	mm	300	300	300	300	300	300	300	300	300
D	mm	897	897	897	897	897	897	897	897	1205
E	mm	808	808	808	808	808	808	808	808	813
F	mm	360	360	360	360	360	360	360	360	360
Net weight	kg	30,5	30,5	30,5	30,5	30,5	31,5	31,5	31,5	40,5
Weight for transport	kg	36,0	36,0	36,0	36,0	36,0	37,0	37,0	37,0	46,5

		MVA632DH	MVA712DH	MVA802DH	MVA902DH	MVA1002DH	MVA1122DH	MVA1252DH	MVA1402DH	MVA1602DH
Indoor unit										
A	mm	1000	1000	1000	1400	1400	1400	1400	1400	1400
B	mm	700	700	700	700	700	700	700	700	700
C	mm	300	300	300	300	300	300	300	300	300
D	mm	1205	1205	1205	1600	1600	1600	1600	1600	1600
E	mm	813	813	813	813	813	813	813	813	813
F	mm	360	360	360	365	365	365	365	365	365
Net weight	kg	40,5	41,0	41,0	54,0	54,0	54,0	54,0	54,5	54,5
Weight for transport	kg	46,5	47,0	47,0	61,0	61,0	61,0	61,0	61,5	61,5

		MVA2240DH	MVA2800DH
Indoor unit			
A	mm	1483	1686
B	mm	791	870
C	mm	385	450
D	mm	1758	1788
E	mm	883	988
F	mm	470	580
Net weight	kg	82,0	105,0
Weight for transport	kg	104,0	140,0

MVA_CS

		MVA151CS	MVA181CS	MVA221CS	MVA281CS	MVA361CS	MVA451CS	MVA501CS	MVA561CS
Indoor unit									
A	mm	570	570	570	570	570	570	570	570
B	mm	570	570	570	570	570	570	570	570
C	mm	265	265	265	265	265	265	265	265
D	mm	698	698	698	698	698	698	698	698
E	mm	653	653	653	653	653	653	653	653
F	mm	295	295	295	295	295	295	295	295
Net weight	kg	18,0	18,0	18,0	18,0	18,0	18,0	18,0	18,0
Weight for transport	kg	23,0	23,0	23,0	23,0	23,0	23,0	23,0	23,0

MVA_C

		MVA221C	MVA281C	MVA361C	MVA451C	MVA501C	MVA561C	MVA631C	MVA711C
Indoor unit									
A	mm	840	840	840	840	840	840	840	840
B	mm	840	840	840	840	840	840	840	840
C	mm	240	240	240	240	240	240	240	240
D	mm	963	963	963	963	963	963	963	963
E	mm	963	963	963	963	963	963	963	963
F	mm	325	325	325	325	325	325	325	325
Net weight	kg	27,0	27,0	27,0	27,0	28,0	28,0	28,0	28,0
Weight for transport	kg	35,0	35,0	35,0	35,0	36,0	36,0	36,0	36,0

		MVA801C	MVA901C	MVA1001C	MVA1121C	MVA1251C	MVA1401C	MVA1601C
Indoor unit								
A	mm	840	840	840	840	840	840	840
B	mm	840	840	840	840	840	840	840
C	mm	240	240	240	290	290	290	290
D	mm	963	963	963	963	963	963	963
E	mm	963	963	963	963	963	963	963
F	mm	325	325	325	375	375	375	375
Net weight	kg	29,0	29,0	29,0	33,0	33,0	33,0	36,0
Weight for transport	kg	37,0	37,0	37,0	42,0	42,0	42,0	44,0

MVA_C1

		MVA220C1	MVA280C1	MVA360C1	MVA450C1	MVA500C1
Indoor unit						
A	mm	987	987	987	987	987
B	mm	385	385	385	385	385
C	mm	178	178	178	178	178
D	mm	1307	1307	1307	1307	1307
E	mm	501	501	501	501	501
F	mm	310	310	310	310	310
Net weight	kg	20,0	20,0	20,0	21,0	21,0
Weight for transport	kg	27,0	27,0	27,0	29,0	29,0

MVA_F

		MVA280F	MVA281F	MVA360F	MVA361F	MVA500F	MVA501F	MVA561F	MVA630F	MVA631F	MVA710F
Indoor unit											
A	mm	1220	870	1220	870	1220	870	870	1420	1200	1420
B	mm	225	235	225	235	225	235	235	245	235	245
C	mm	700	665	700	665	700	665	665	700	665	700
D	mm	1343	973	1343	973	1343	973	973	1548	1303	1548
E	mm	315	300	315	300	315	300	300	345	300	345
F	mm	823	770	823	770	823	770	770	828	770	828
Net weight	kg	40,0	24,0	40,0	24,0	40,0	25,0	25,0	50,0	32,0	50,0
Weight for transport	kg	49,0	29,0	49,0	29,0	49,0	30,0	30,0	58,0	38,0	58,0

		MVA711F	MVA900F	MVA901F	MVA1120F	MVA1121F	MVA1250F	MVA1251F	MVA1400F	MVA1401F	MVA1601F
Indoor unit											
A	mm	1200	1420	1200	1700	1570	1700	1570	1700	1570	1570
B	mm	235	245	235	245	235	245	235	245	235	235
C	mm	665	700	665	700	665	700	665	700	665	665
D	mm	1303	1548	1303	1828	1669	1828	1669	1828	1669	1669
E	mm	300	345	300	345	300	345	300	345	300	300
F	mm	770	828	770	828	770	828	770	828	770	770
Net weight	kg	32,0	50,0	33,0	60,0	41,0	60,0	41,0	60,0	43,0	43,0
Weight for transport	kg	38,0	58,0	39,0	68,0	48,0	68,0	48,0	68,0	50,0	50,0

MVA_FS

		MVA220FS	MVA280FS	MVA360FS	MVA450FS	MVA500FS
Indoor unit						
A	mm	700	700	700	700	700
B	mm	215	215	215	215	215
C	mm	600	600	600	600	600
D	mm	780	780	780	780	780
E	mm	285	285	285	285	285
F	mm	682	682	682	682	682
Net weight	kg	16,0	16,0	16,0	16,0	16,0
Weight for transport	kg	19,0	19,0	19,0	19,0	19,0

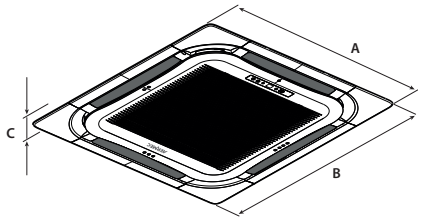
MVA_V

		MVA1000V	MVA1400V
Indoor unit			
A	mm	580	580
B	mm	400	400
C	mm	1870	1870
D	mm	738	738
E	mm	545	545
F	mm	2083	2083
Net weight	kg	54,0	57,0
Weight for transport	kg	74,0	77,0

MVA_ERV

		MVA500ERV	MVA800ERV	MVA1000ERV
Dimensions and weights				
A	mm	1700	1800	1800
B	mm	880	1185	1185
C	mm	340	390	390
D	mm	1988	2110	2110
E	mm	1138	1440	1440
F	mm	535	567	567
Net weight	kg	120,0	158,0	158,0
Weight for transport	kg	175,0	225,0	225,0

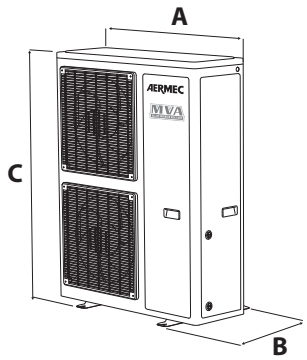
GLC1 / GL40B / GLG40S / GLG40



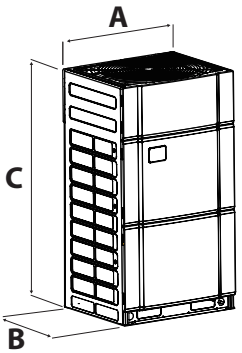
GLG40S / GLG40 / GL40B

		GLC1	GL40B	GLG40S	GLG40
Indoor unit					
A	mm	1200	1040	620	950
B	mm	460	1040	620	950
C	mm	55	65	48	52
D	mm	1265	1137	701	1033
E	mm	536	1137	701	1038
F	mm	118	140	125	112
Net weight	kg	4,0	8,0	3,0	6,0
Weight for transport	kg	6,0	12,0	5,0	10,0

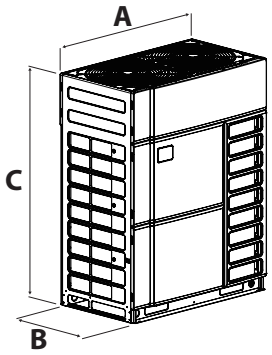
OUTDOOR UNIT WEIGHTS AND DIMENSIONS



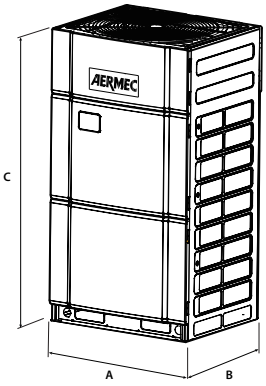
MVAS



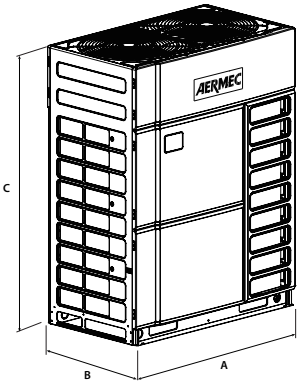
MVBM2240T-2800T-3350T



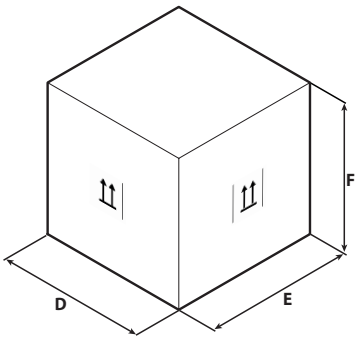
MVBM4000T-4500T
5040T-5600T-6150T



MVBHR2240T-2800T-3350T



MVBHR4000T-4500T-5040T-5600T-6150T



Carton Box Example

MVAS

		MVAS 1201S	MVAS 1201T	MVAS 1401S	MVAS 1401T	MVAS 1601S	MVAS 1601T	MVAS 2242T	MVAS 2803T	MVAS 3352T
Outdoor unit										
A	mm	900	900	900	900	900	900	940	940	940
B	mm	340	340	340	340	340	340	320	460	460
C	mm	1345	1345	1345	1345	1345	1345	1430	1615	1615
D	mm	1408	1048	1408	1048	1408	1048	1038	1038	1038
E	mm	458	458	458	458	458	458	438	578	578
F	mm	1507	1507	1507	1507	1507	1507	1580	1765	1765
Net weight	kg	110,0	120,0	110,0	120,0	110,0	120,0	133,0	163,0	174,0
Weight for transport	kg	123,0	133,0	123,0	133,0	123,0	133,0	144,0	175,0	187,0

MVBM

		MVBM 2240T	MVBM 2800T	MVBM 3350T	MVBM 4000T	MVBM 4500T	MVBM 5040T	MVBM 5600T	MVBM 6150T
Outdoor unit									
A	mm	930	930	930	1340	1340	1340	1340	1340
B	mm	775	775	775	775	775	775	775	775
C	mm	1690	1690	1690	1690	1690	1690	1690	1690
D	mm	1000	1000	1000	1400	1400	1400	1400	1400
E	mm	830	830	830	830	830	830	830	830
F	mm	1855	1855	1855	1855	1855	1855	1855	1855
Net weight	kg	220,0	220,0	240,0	300,0	300,0	350,0	350,0	355,0
Weight for transport	kg	230,0	230,0	250,0	315,0	315,0	365,0	365,0	370,0

MVBHR

		MVBHR2240T	MVBHR2800T	MVBHR3350T	MVBHR4000T	MVBHR4500T	MVBHR5040T	MVBHR5600T	MVBHR6150T
Outdoor unit									
A	mm	930	930	930	1340	1340	1340	1340	1340
B	mm	775	775	775	775	775	775	775	775
C	mm	1690	1690	1690	1690	1690	1690	1690	1690
D	mm	1000	1000	1000	1400	1400	1400	1400	1400
E	mm	830	830	830	830	830	830	830	830
F	mm	1855	1855	1855	1855	1855	1855	1855	1855
Net weight	kg	243,0	243,0	256,0	325,0	325,0	385,0	385,0	385,0
Weight for transport	kg	253,0	253,0	266,0	340,0	340,0	400,0	400,0	400,0

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COMPLEMENTARY PRODUCTS

Aermec also offers a range of specific solutions that meet a whole host of air conditioning requirements, as well as those relating to installation under particular structural conditions.

COMPLEMENTARY PRODUCTS

			Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	DHW Systems and solar kits					
	GSA - KSA - CXS	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds				1022
	Thermal Buffers tank					
	SAF	Thermal Buffer tank kit with instantaneous Domestic Hot Water production	-	-	-	1026
	SAP	Buffer tank with capacity from 75 to 3500 litres	-	-	-	1028
	Plug&Play hydronic kit					
	WST	Hydronic kit plug & play	-	80-1500	-	1031
	Cooling towers					
	TRA	Cooling towers	-	-	-	1034
	Remote condensers - Dry coolers					
new	**Remote condensers - Dry Cooler**		-	8-2200	-	1037
	Water cooled condensing unit					
	FW-R	Water-cooled air conditioner	-	2,9-4,0	4,3-5,2	1043
	CWX-CWXM	Water motocondensing unit	-	2,7-7,1	-	1045
	Dehumidifier					
	DMT	Dehumidifier	-	-	-	1048
	DMH -DMV	Dehumidifier	-	-	-	1052

DHW SYSTEMS AND SOLAR KITS

DHW systems, solar kits with high efficiency panels and vacuum solar manifolds

- **Solar systems complete with storage tank for combination with a heat pump**
- **Solar kits without storage tank for combination with third-party storage tanks**
- **Ultra-high efficiency vacuum solar manifolds**
- **Optional anti-stagnation shading device**

DESCRIPTION

The Aermec GSA °-E series solar systems for domestic hot water are designed for easy interaction with heat pump systems and contain vacuum solar manifolds, a solar station equipped with a high efficiency electronic circulator, solar control unit and double coil storage tank.
The additional coil for the supplementary source is dimensioned with a larger exchange surface and is suitable for combination with heat pumps.
The Aermec GSA °-E series solar systems include ultra-high efficiency vacuum manifolds, which can be equipped with an optional anti-stagnation shading system. The solar manifolds are dimensioned based on the capacities of the storage tanks (300 litres or 500 litres) in order to guarantee a high share of renewable energy for the production of DHW and to optimise the system from an economic point of view.
Solar kits with the same dimensions of the complete systems but in a version without a storage tank are also available in order to combine them with third-party storage tanks (the suitability of the storage tanks must be checked by the designer in this case).
The complete systems and the kits without a storage tank must be completed with the necessary roof manifold clampings, which are available as accessories for the various types of roofs (pitched roof with shingles, with tiles, universal with screw connection and flat roof).

VERSIONS

The vacuum solar manifolds are also available individually, in two sizes with 15 pipes and 21 pipes. Each size is available in the standard ° version and in the E version with the anti-stagnation shading device.

GSA complete solar system

The GSA °-E complete solar systems are available in two sizes - 300 litres combined with a 21-pipe solar manifold and 500 litres combined with two solar manifolds, each with 15 pipes. Each size is available in the ° version (standard) and in the E version (with the anti-stagnation shading system).

Field	Description
1,2,3	**GSA**
4,5,6	**Size** 300, 500
7	**Version**
°	Vacuum solar manifolds
E	Complete solar system with vacuum collector with anti-stagnation

Solar kits without storage tank

The KSA solar kits are available in two sizes (size with a single 21-pipe manifold and size with two manifolds, each with 15 pipes). Each size is available in the standard ° version and in the E version with the anti-stagnation shading device.

Field	Description
1,2,3	**KSA**
4,5	**Size** 21, 30
6	**Version**
°	Solar kit with vacuum collector
E	Complete solar kit with vacuum collector with anti-stagnation darkening device

Vacuum solar manifolds

The vacuum solar manifolds are also available individually, in two sizes with 15 pipes and 21 pipes. Each size is available in the standard ° version and in the E version with the anti-stagnation shading device.

Field	Description
1,2,3	**CXS**
4,5	**Size** 15, 21
6	**Version**
°	Vacuum solar manifolds
E	Complete vacuum solar collector with anti-stagnation shading device

ACCESSORIES

CSB: Basic set + cover.
CSP: Basic set + cover.
KSB: Basic set (for panel string termination; already included in the systems and kits).
KSP: Plus set (for panel connection; already included in the systems and kits).
MIX10: 10 liter tank of pre-mixed antifreeze solution for topping up and/or filling solar systems with vacuum collectors
MIX20: 20 liter tank of pre-mixed antifreeze solution for topping up and/or filling solar systems with vacuum collectors
STC (x1): Clamping for vacuum manifold (with or without Eclypse) on a pitched roof with tiles.
STC21: Clamping for 1 vacuum manifold with 21 pipes (with or without Eclypse) on a pitched roof with tiles.
STC30: Clamping for 2 vacuum manifold with 15 pipes each (with or without Eclypse) on a pitched roof with tiles.
STP (x1): Clamping for vacuum manifold (with or without Eclypse) on a flat roof.
STP21: Clamping for 1 vacuum manifold with 21 pipes (with or without Eclypse) on a flat roof.
STP30: Clamping for 2 vacuum manifold with 15 pipes (with or without Eclypse) on a flat roof.
STT (x1): Clamping for vacuum manifold (with or without Eclypse) on a pitched roof with shingles.
STT21: Clamping for 1 vacuum manifold with 21 pipes (with or without Eclypse) on a pitched roof with shingles.
STT30: Clamping for 12 vacuum manifolds with 15 pipes each (with or without Eclypse) on a pitched roof with shingles.
STV15: Clamping for 1 vacuum manifold with 15 pipes (with or without Eclypse) on a pitched roof with screw connection.
STV21: Clamping for 1 vacuum manifold with 21 pipes (with or without Eclypse) on a pitched roof with screw connection.
STV30: Clamping for vacuum manifold (with or without Eclypse) on a pitched roof with screw connection.

ACCESSORIES COMPATIBILITY

Clamping for a manifold on a pitched roof with shingles

Accessory	GSA300E	GSA300°	GSA500E	GSA500°
STT (x1)	•	•		
STT (x2)			•	•

Accessory	KSA21E	KSA21°	KSA30E	KSA30°
STT (x1)	•	•		
STT (x2)			•	•

Clamping for a manifold on a pitched roof with tiles

Accessory	GSA300E	GSA300°	GSA500E	GSA500°
STC (x1)	•	•		
STC (x2)			•	•

Accessory	KSA21E	KSA21°	KSA30E	KSA30°
STC (x1)	•	•		
STC (x2)			•	•

Clamping for a manifold on a pitched roof with screw connection

Accessory	GSA300E	GSA300°	GSA500E	GSA500°
STV (x1)	•	•		
STV (x2)			•	•

Accessory	KSA21E	KSA21°	KSA30E	KSA30°
STV (x1)	•	•		
STV (x2)			•	•

Clamping for a manifold on a flat roof

Accessory	GSA300E	GSA300°	GSA500E	GSA500°
STP (x1)	•	•		
STP (x2)			•	•

Accessory	KSA21E	KSA21°	KSA30E	KSA30°
STP (x1)	•	•		
STP (x2)			•	•

Basic set (for panel string termination) and plus set (for the connection of two solar panels)

Accessory	CXS15E	CXS15°	CXS21E	CXS21°
CSB	•	•	•	•
CSP	•	•	•	•
KSB	•	•	•	•
KSP	•	•	•	•

The accessories are compatible with the solar manifolds, but are not compatible with the GSA solar systems or with the KSA solar kits because they are already included.

PERFORMANCE SPECIFICATIONS

GSA complete solar system

		GSA300°	GSA300E	GSA500°	GSA500E
Technical features					
Solar manifolds	no./type	1 x CXS21°	1 x CXS21E	2 x CXS15°	2 x CXS15E
Gross surface	m^2	4,45	4,45	6,36	6,36
Opening surface	m^2	4,02	4,02	5,74	5,74
Input current surface	m^2	5,39	5,39	7,70	7,70
Hydraulic components					
Storage tank (DHW)	l	300	300	500	500
Expansion vessel number	no.	1	1	1	1
Expansion vessel capacity	l	24	24	40	40
Recommended dimension based on the number of people	no.	3-5	3-5	5-7	5-7

KSA solar system

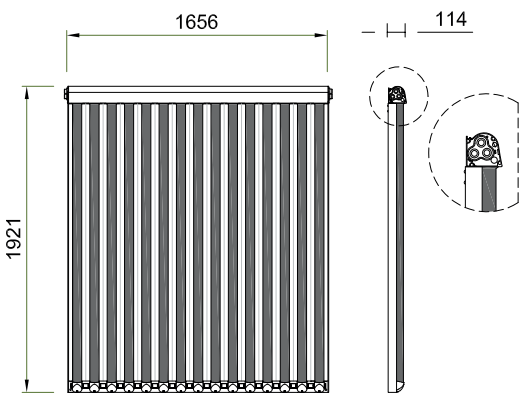
		KSA21°	KSA21E	KSA30°	KSA30E
Technical features					
Solar manifolds	no./type	1 x CXS21°	1 x CXS21E	2 x CXS15°	2 x CXS15E
Gross surface	m^2	4,45	4,45	6,36	6,36
Opening surface	m^2	4,02	4,02	5,74	5,74
Input current surface	m^2	5,39	5,39	7,70	7,70
Hydraulic components					
Expansion vessel number	no.	1	1	1	1
Expansion vessel capacity	l	24	24	40	40

Only the solar panel

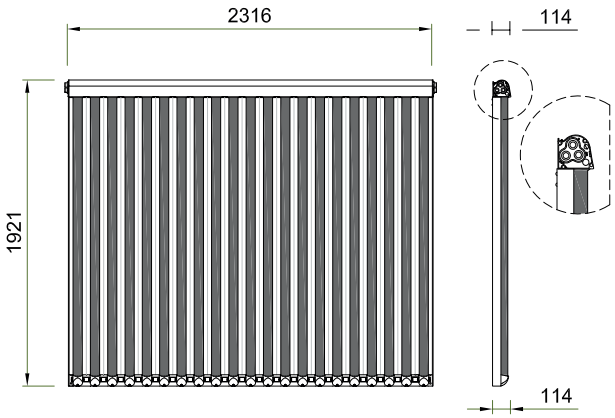
		CXS15°	CXS15E	CXS21°	CXS21E
Technical features					
Vacuum pipes	no.	15	15	21	21
Maximum number of coil manifolds	no.	6	6	6	6
Connections	no.	6	6	6	6
Connection dimensions	Ø inch	3/4"M	3/4"M	3/4"M	3/4"M
Opening surface	m^2	2,87	2,87	4,02	4,02
Input current surface	m^2	3,85	3,85	5,39	5,39
Gross surface	m^2	3,18	3,18	4,45	4,45
Head insulation thickness, aluminised glass wool covering	mm	47	47	30	30
Diameter - Vacuum pipe length	mm	58/47 - 1800	58/47 - 1800	58/47 - 1800	58/47 - 1800
Recommended tilt	°	15 - 75°	15 - 75°	15 - 75°	15 - 75°
Conductor radiator fluid content	l	3,28	3,28	3,75	3,75
Performances					
η0 rendimento ottico (riferimento area lorda)		0,615	0,615	0,609	0,609
K1 transmission coefficient (gross area reference)	W/m^2K	0,850	0,850	0,690	0,690
K2 transmission coefficient (gross area reference)	W/m^2K	0,009	0,009	0,005	0,005
Nominal Power	W	1956	1956	2710	2710
Angle of incidence correction factor	K50°	1.14T/0.9L	1.14T/0.9L	1.14T/0.9L	1.14T/0.9L
Heating capacity (opening ref.)	kJ/m^2K	50,9	50,9	34,0	34,0
Energy produced annually ISO 9806:2013 – Wurzburg – Temperature 50°C	kWh	2371	2371	2884	2884
Energy produced annually ISO 9806:2013 – Wurzburg – Temperature 75°C	kWh	1929	1929	2499	2499
Test Report ISO 9806:2013		Kiwa	Kiwa	Kiwa	Kiwa
DIN CERTCO Registration number		16083 Rev.0	16083 Rev.0	16082 Rev.0	16082 Rev.0
Flow Rate	l/h	127	127	200	200
Stagnation temperature	°C	279	279	176	176
Maximum pressure	bar	10	10	10	10

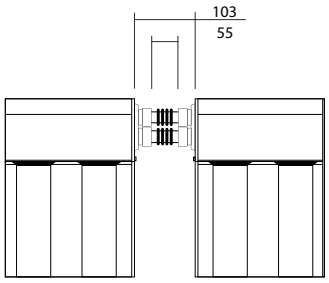
DIMENSIONS

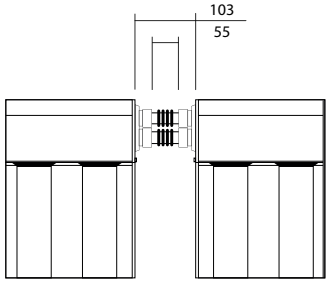
CXS15° - CXS15E



CXS21° - CXS21E







		CXS15°	CXS15E	CXS21°	CXS21E
Dimensions and weights					
A	mm	1656	1656	2316	2316
B	mm	1921	1921	1921	1921
C	mm	114	114	114	114
Empty weight	kg	72	72	80	80

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SAF

Thermal Buffer tank kit with instantaneous Domestic Hot Water production

- **Various versions that make optimum use of the different energy sources**
- **Ease of installation, even in confined spaces**
- **Installing the indoor unit**

DESCRIPTION

SAF are the new thermo-buffer for the instantaneous production of domestic hot water (DHW). They integrate both the energy storage element and the heat exchanger, along with the control functions, into a single unit.
The hot water is taken from the water main and heated instantaneously by means of a plate heat exchanger in stainless steel: the separation between the drinking water circuit and the water contained in the accumulator ensures maximum hygiene.
In this way, the benefits of instant production are combined with those associated with buffer production.
These devices are specifically designed and manufactured to be combined with heat pumps but also with traditional or biomass boilers, solar thermal systems and other renewable sources.

VERSIONS

° Standard
S With supplementary energy source management
T Set up for use with supplementary energy source
In addition to these versions, an supplementary heater (accessory) is also provided to respond to increased heating requirements.

FEATURES

— The SAF system is available with a range of thermo-accumulators with different capacities, (200-300-500l), in order to meet a whole host of different DHW requirements;
— The high-efficiency insulation prevents energy losses, to the advantage of the heat exchanger, allowing for significant reductions in running costs;
— The compactness and the new elegant and attractive design mean that it can be installed in restricted spaces, in indoor environments.

ACCESSORIES

KRX-SAF: Supplementary electric heater with thermostat control from 1200W 230V/1/50Hz with connexion of 1" 1/2.
VT: Anti-vibration supports.

Accessories compatibility

Heat pump	Sizes	Version		Accessories mandatory				Recommended	
				SAF	MOD485K	MODU485-BL*	VMF-E5	VTV160	KRX-SAF
ANL	021-203	H°-HP		•	•	•	•	•	•
ANLI	101	H°-HP-HX	(1)	•	-	-	-	•	•
ANK	020-150	H°-HP		•	•	•	•	•	•
NRK	090-0150	00-P1-P3		•	•	•	•	•	•
CL	025-200	H°-HP		•	•	•	•	•	•
ANKI	020-080	H°-HX	(1)	•	-	-	-	•	•
WRL	026-161	H°	(1)	•	-	-	-	•	•

* To be installed on board of the heat pump.
(1) Units designed for the management domestic hot water: MOD485K and VMF-E5 accessories not required.
It is recommended not to combine the SAF with units with storage tank.

CONFIGURATOR

Field	Description
1,2,3	**SAF**
4,5,6	**Size** 200, 300, 500
7	**Version**
°	Standard
S	With supplementary energy source management (1)
T	Set up for use with supplementary energy source (1)
8	**Field for future development**
°	...

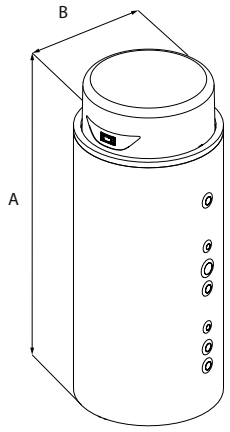
(1) Version "S-T" not available for size 200

PERFORMANCE SPECIFICATIONS

		SAF200	SAF300	SAF300T	SAF300S	SAF500	SAF500T	SAF500S
Power supply								
Power supply					230V~50Hz			
Accumulation inertial								
Storage tank capacity	l	199	290	279		480	465	
Drinking water content	l	0,85	0,85	0,85	0,85	0,85	0,85	0,85
Coil water content	l	-	-	10	10	-	13	13
Maximum operating pressure	bar	6	6	6	6	6	6	6
Losses through dispersion	W	59		68			80	
Energy efficiency class (1)	type				B			
DHW minimum flow rate	l/min	2	2	2	2	2	2	2
DHW maximum flow rate	l/min	35	35	35	35	35	35	35
Maximum operating temperature	°C	95	95	95	95	95	95	95
Electric data								
Minimum input power	W	25	25	25	27	25	25	27
Maximum input power	W	75	75	75	127	75	75	127
Minimum input current (2)	A	0,14	0,14	0,14	0,18	0,14	0,14	0,18
Maximum input current	A	0,53	0,53	0,53	1,05	0,53	0,53	1,05

(1) In accordance with Standard UNI EN 16147:2011 and in accordance with Delegated Regulation 812/2013 and 814/2013
(2) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

DIMENSIONS



		SAF200	SAF300	SAF300T	SAF300S	SAF500	SAF500T	SAF500S
Dimensions and weights								
A	mm	1315	1690	1690	1690	1740	1740	1740
B	mm	710	710	710	710	850	850	850
Empty weight	kg	75	89	96	101	116	131	136
Weight functioning	kg	275	389	396	401	616	631	636

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SAP

Storage tank

- **Accumulation unit from 75 to 3500 litres**

DESCRIPTION

Accumulation unit - completely assembled pump to be used with a refrigerating unit with hydraulic connections to be made on site by the installer.

FEATURES

— The base the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
— Pumps
— Pressure relief valve
— Completely insulated hydraulic circuit
— Pump magnet circuit-breaker protection

Pumps

SAP 0075 - 0150:
5 pump models with water capacity up to 18000 l/h and with prevalence up to 140 kPa are available (max. 2 internally installed pumps).

SAP 0300 - 0500 - 0501 - 0750 - 1000:
8 pump models with water capacity up to 60000 l/h and with prevalence up to 200 kPa are available.
Pumping units with a reserve pump can also be included in these units.
SAP 1500 - 2000 - 3000:
10 pump models with water capacity up to 200000 l/h and with prevalence up to 300 kPa are available.
Pumping units with a reserve pump can also be included in these units.

ACCESSORIES

VT: Anti-vibration supports.
AVX: Spring anti-vibration supports.
RX: 500 W armoured resistance, with thermostat and inserted in a dedicated fitting, it can be installed only at the factory.
RXV: 3kW armoured resistance, with thermostat and inserted in a dedicated fitting, it can be installed only at the factory.

Accessories compatibility

Antivibration

Accessory	SAP0075	SAP0150	SAP0300	SAP0500	SAP0501	SAP0750	SAP1000
VT2			•	•	•	•	•
VT8	•	•					

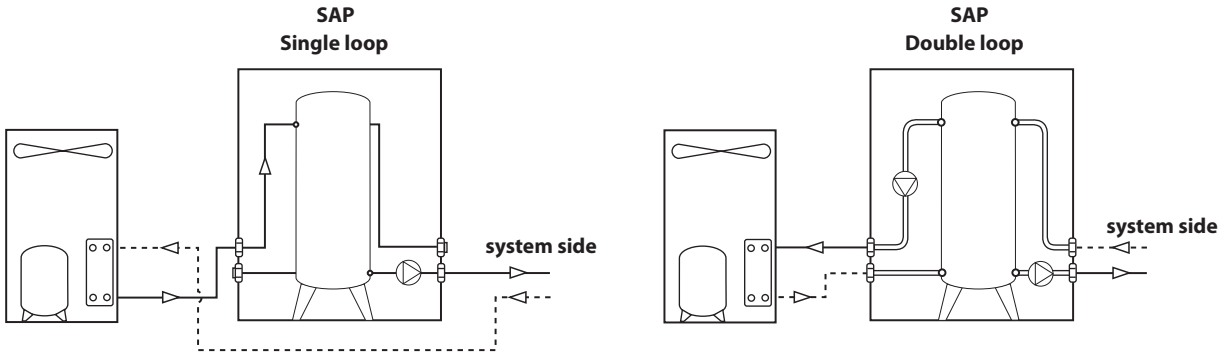
Antivibration

Ver	1500	2500	3500
IS, JS, KS	AVX206	AVX210	AVX214
IZ, JZ, KZ	AVX203	AVX208	AVX212
RS, WZ	AVX202	AVX208	AVX212
RZ, TZ	AVX201	AVX207	AVX211
TS	AVX204	AVX208	AVX212
US	AVX204	AVX208	AVX213
UZ, VZ, ZZ	AVX201	AVX207	AVX212
VS	AVX204	AVX209	AVX213
WS, XS, YS	AVX205	AVX209	AVX213
XZ, YZ	AVX202	AVX207	AVX212

Resistance

Accessory	SAP0075	SAP0150	SAP0300	SAP0500	SAP0501	SAP0750	SAP1000	SAP1500	SAP2500	SAP3500
RX	•	•	•	•	•	•	•			
RXV								•	•	•

EXAMPLE OF A HYDRAULIC CONNECTION



TECHNICAL DATA

		SAP0075	SAP0150	SAP0300	SAP0500	SAP0501	SAP0750	SAP1000	SAP1500	SAP2500	SAP3500
Accumulation inertial											
Storage tank capacity	l	75	150	300	500	500	750	1000	1500	2500	3500
Pressure relief valve	n°/bar	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Expansion vessel											
Expansion vessel capacity	l	8	12	18	24	24	18	18	24	24	24
Expansion vessel number	no.	1	1	1	1	1	2	2	2	3	3
Hydraulic connections											
Connections (in/out)	Type	F	F	F	F	F	F	F	-	-	-
Sizes (in/out)	Ø	1"1/4	1"1/2	2"	2"1/2	2"1/2	3"	3"	-	-	-

SAP pumps flanges diameter 1500 - 2500 - 3500

			Pump									
SAP	**Flange**		**R**	**T**	**U**	**V**	**X**	**Y**	**W**	**K**	**J**	**I**
1500	PN16UNI2278	Ø	125	125	150	150	150	150	200	200	200	200
2500	PN16UNI2279	Ø	125	125	150	150	150	150	200	200	200	200
3500	PN16UNI2280	Ø	125	125	150	150	150	150	200	200	200	200

PUMP ELECTRIC DATA

		Pump										
		A	**B**	**C**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**
Max absorbed power	W	275	330	614	895	1070	1550	2050	22000	17500	14500	3100
Max absorbed current	A	0,5	0,7	1,1	1,6	1,9	2,8	3,6	43,0	36,4	30,0	5,6
		M	N	P	Q	R	T	U	V	W	X	Y
Max absorbed power	W	4100	1470	2600	5200	4000	5200	5800	8000	11500	9000	11000
Max absorbed current	A	7,2	2,6	4,4	8,8	8,5	11,5	15,5	15,5	22,5	22,5	22,5

PUMP COMBINATIONS

	Pump combinations											
SAP0075	AZ	AE	AF	AZ	BC	BE	BF	BZ	ZC	ZE	ZF	ZZ
SAP0150	AC	AE	AF	AZ	BC	BE	BF	BZ	CC	EC	CF	CZ
	AE	EE	EF	EZ	BF	FE	FF	FZ	ZC	ZE	ZF	ZZ
SAP0300						CS	CZ	ES	EZ	FS	FZ	ZZ
SAP0500				FS	FZ	GS	GZ	HS	HZ	PS	PZ	ZZ
SAP0501				FS	FZ	GS	GZ	HS	HZ	PS	PZ	ZZ
SAP0750				FS	FZ	GS	GZ	HS	HZ	LS	LZ	MS
					MZ	NS	NZ	PS	PZ	QS	QZ	ZZ
SAP1000				LS	LZ	MS	MZ	NS	NZ	QS	QZ	ZZ
SAP1500		IS	IZ	JS	JZ	KS	KZ	RS	RZ	TS	TZ	US
			UZ	VS	VZ	WS	WZ	XS	XZ	YS	YZ	ZZ
SAP2500		IS	IZ	JS	JZ	KS	KZ	RS	RZ	TS	TZ	US
			UZ	VS	VZ	WS	WZ	XS	XZ	YS	YZ	ZZ
SAP3500		IS	IZ	JS	JZ	KS	KZ	RS	RZ	TS	TZ	US
			UZ	VS	VZ	WS	WZ	XS	XZ	YS	YZ	ZZ

The indicated combinations are the only ones foreseen, many capacity/prevalence combinations are available, we invite you to refer to the technical documentation.

A - B: Multi-speed circulators.

L - M - Q: Twin pumping unit.

S: Pumping unit with reserve pump.

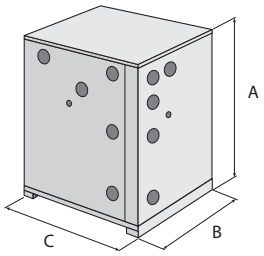
Z: Pump not present.

The first letter of the combination indicates the pump on the primary circuit.

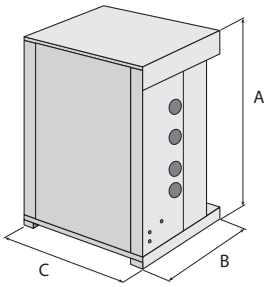
The second letter of the combination indicates the pump on the secondary circuit.

DIMENSIONS

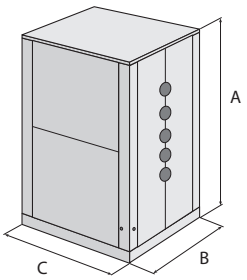
SAP 0075 - 0150



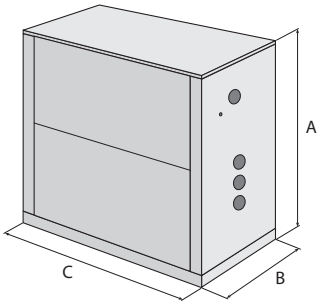
SAP 0300 - 0500



SAP 0501 - 0750



SAP 1000 - 1500 - 2500 - 3500



		SAP0075	SAP0150	SAP0300	SAP0500	SAP0501	SAP0750	SAP1000	SAP1500	SAP2500	SAP3500
Dimensions and weights											
A	mm	1000	1000	1650	1650	1968	1968	2049	2049	2049	2049
B	mm	1000	1000	1100	1100	1000	1000	1000	1750	2000	2300
C	mm	700	700	1100	1100	1550	1550	2200	2200	2200	2200
Empty weight	kg	120	135	190	230	310	400	445	510	655	730

The weight of the unit without ZZ pumps.

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WST evo

Plug & play hydronic kit

Cooling capacity 80 ÷ 1500 kW
Water flow rate 17000 ÷ 260000 l/h

- **Hydronic kit containing the main hydraulic components**
- **Easy installation**
- **ideal for industrial systems or data centres, where chilled water is required even during the winter**
- **Partial and total free cooling operation**

DESCRIPTION

Plug & play hydronic kit that includes the main hydronic and regulation components of a hydraulic system.
The WST are designed to facilitate installation in systems where chilled water production is required throughout the year, in combination with a water/water chiller and a dry cooler.
Thanks to Aermec's 20-year experience in critical processes and the special software purposely developed, these units can manage all the components that make up the system:

— The water-cooled chiller;
— The pumps (including the reserve ones, if installed) for both the system side and the source side;
— The speed of the dry cooler fans (in both mechanical operation and free cooling mode);
— The modulating valve for controlling the chiller condensation.

OPERATION

Air-water chiller

When the outside air temperature is higher than the temperature of the system return water, the cooling capacity is provided by the chiller. The WST manages the dry cooler by modulating its fans on the basis of the chiller condensation pressure.

Free-cooling

When the outside air temperature is lower on the other hand, the WST commands free cooling mode which can be mixed (chiller + free cooling) or free cooling only (switching off the chiller) to exploit the water from the dry cooler to cool the system water in the dedicated heat exchanger.

HYDRAULIC COMPONENTS OF THE DRY COOLER SIDE

— Water filter;
— Flow switches;
— Shut-off valve;
— Mixer valves;
— Bypass valve;
— Pumps;
— Butterfly valves (free cooling enabling);
— High-efficiency plate heat exchanger (free cooling);
— Water temperature probes.

HYDRAULIC COMPONENTS OF THE CHILLER SIDE

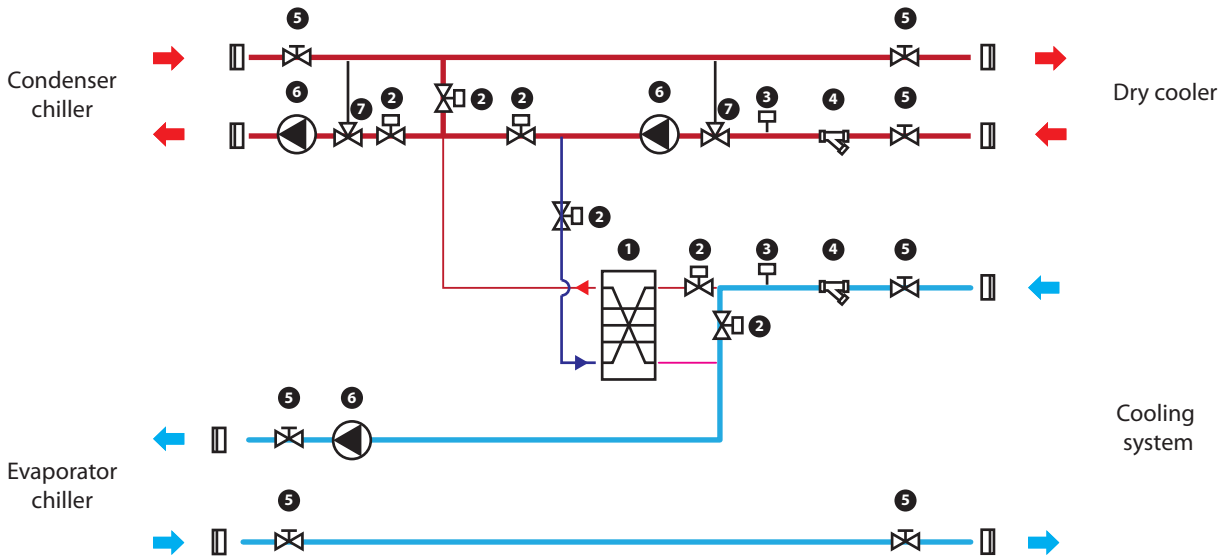
— Water filter;
— Flow switches;
— Shut-off valve;
— Pumps;
— Water temperature probes.

REGULATION

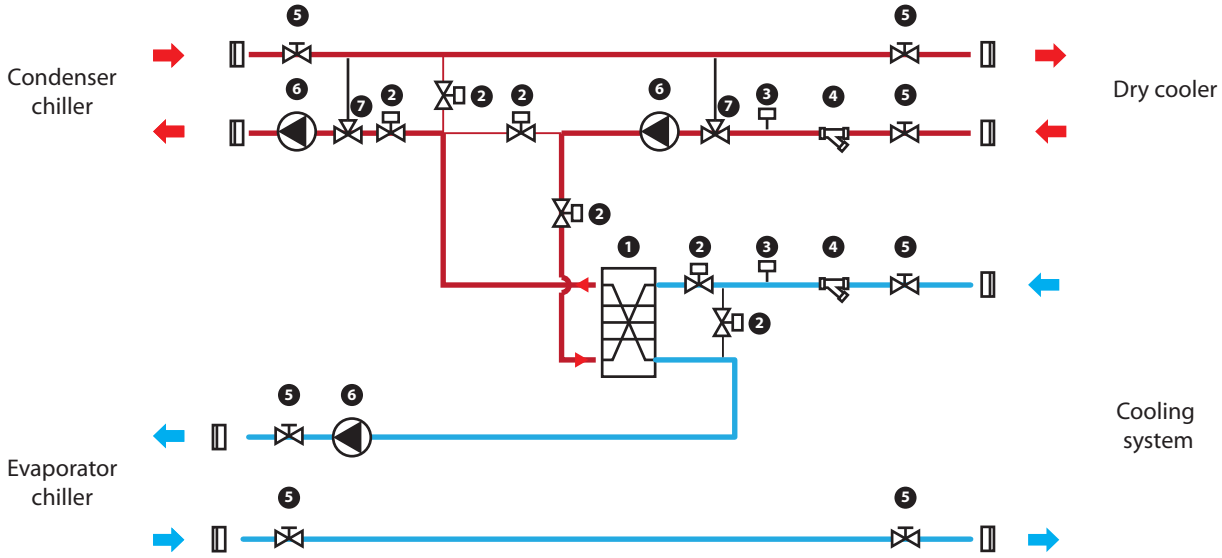
— Electronic microprocessor regulation with MODBUS protocol communication;
— **The AER485P1 accessory is supplied as standard with the WST. This accessory must necessarily be fitted in the chiller, so the units can communicate with each other;**
— Advanced electronics characterised by the continuous monitoring of various working and environmental parameters, so the operating mode (chiller/free cooling) can be switched as and when necessary. This limits the operating costs and ensures greater energy efficiency;
— Dry cooler fan management, to control the condensation pressure (chiller mode) or the recovered output (free cooling mode);
— Management of cold start-up via dry cooler fan modulation and the mixer valve;
— Structure and base in hot-dip galvanised sheet metal coated in epoxy powders RAL 9003.

OPERATING MODE

Mechanical operation (chiller)



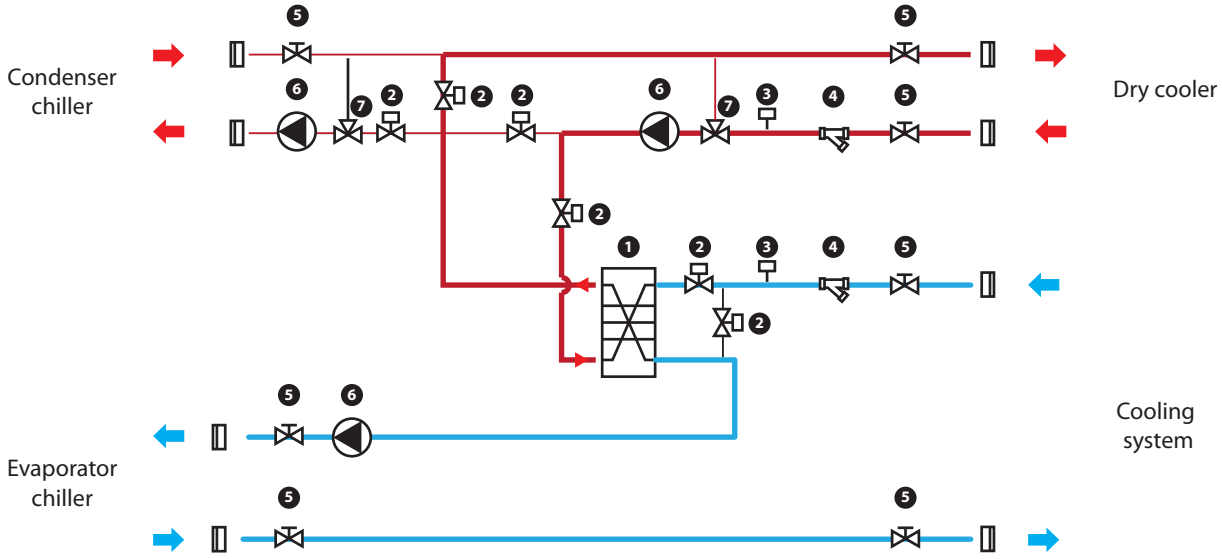
Mixed operation (chiller + free cooling)



Key:

1 Plate heat exchanger
2 2-way butterfly valve
3 Flow switch
4 Water filter
5 Shut-off valve
6 Pump
7 Mixing valve

Operation in free-cooling only



Key:

1 Plate heat exchanger
2 2-way butterfly valve
3 Flow switch
4 Water filter
5 Shut-off valve
6 Pump
7 Mixing valve

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TRA

Cooling towers

Capacity from 49,53 up to 1084,88 kW

FEATURES

— Available in **17 different sizes**;
— Entirely built of fibre-glass reinforced resin to avoid corrosion problems with surface treatment to withstand ultraviolet rays, heat changes and scuffing caused by bad weather;
— Limited to the three largest sizes (TRA850, TRA850L, TRA950, TRA950L, TRA1100, TRA1100L) the bearing structure is made of hot galvanised steel with 22 mm thick fibreglass reinforced resin sandwich panels, with support foam material inside. In this way, as well achieving good mechanical strength the sound of the water flowing is muffled. Surface treatment to withstand ultraviolet rays, heat changes and scuffing caused by bad weather;
— Self-bearing structure;
— **Exchange pack and drip separator** made of self-extinguishing PVC;
— PVC **water distribution pipes** with polypropylene nozzles;
— **Hydrometer**: when there is not water flow rate measuring device, this instrument makes possible to have an approximate indication of the flow rate of the water in circulation based on the nozzle load drop;
— Plastic **bleed tap**;
— **Axial high efficiency fan** with several blades;
— **Water drip pan**, waterproof and water resistant made of fibreglass reinforced polyester resin with multi layer glass material;
— **Personal protection grill** made of AISI 304 on the fan outlet.

PERFORMANCE SPECIFICATIONS

		TRA50	TRA70	TRA90	TRA110	TRA130	TRA170	TRA200	TRA240	TRA300	TRA400
Cooling towers performances (1)											
Capacity	kW	49,53	69,06	88,60	107,44	125,58	168,14	197,67	242,09	302,33	405,32
Air flow rate	m^3/h	4500	4500	8100	8100	8100	12600	12600	18100	18100	28350
Water flow rate	l/h	7100	9900	12700	15400	18000	24100	28330	34700	43300	58100
Pressure drop	kPa	42	32	52	32	42	28	35	23	40	28

		TRA500	TRA550	TRA600	TRA750	TRA850	TRA850L	TRA950	TRA950L	TRA1100	TRA1100L
Cooling towers performances (1)											
Capacity	kW	488,37	574,19	604,88	767,44	856,74	856,74	941,86	941,86	1084,88	1084,88
Air flow rate	m^3/h	28350	36000	45350	45350	58000	58000	58000	58000	67000	67000
Water flow rate	l/h	70000	82300	86700	110000	122800	122800	135000	135000	155500	155500
Pressure drop	kPa	40	55	30	48	49	49	25	25	32	32

(1) Inlet air temperature 23,5 °C b.u., Inlet water temperature 35 °C, Outlet water temperature 29 °C

GENERAL DATA

		TRA50	TRA70	TRA90	TRA110	TRA130	TRA170	TRA200	TRA240	TRA300	TRA400
General data											
Motor power	kW	0,55	0,75	0,75	0,75	1,10	1,10	1,50	1,50	2,20	2,20
Motor poles	no.	4	4	4	4	6	6	6	6	6	6
Motor poles (double polarity)	no.	4/8	4/8	4/8	4/8	6/12	6/12	6/8	6/8	6/8	6/8
Nozzles	no.	1	1	1	1	1	1	1	4	4	4
Fans											
Number	no.	1	1	1	1	1	1	1	1	1	1

		TRA500	TRA550	TRA600	TRA750	TRA850	TRA850L	TRA950	TRA950L	TRA1100	TRA1100L
General data											
Motor power	kW	4,00	5,50	4,00	5,50	5,50	5,50	5,50	5,50	7,50	7,50
Motor poles	no.	6	6	6	6	8	8	8	8	8	8
Motor poles (double polarity)	no.	6/12	6/12	6/12	8/16	8/16	8/16	8/16	8/16	8/16	8/16
Nozzles	no.	4	4	9	9	16	16	16	16	16	16
Fans											
Number	no.	1	1	1	1	1	1	1	1	1	1

SOUND DATA

		TRA50	TRA70	TRA90	TRA110	TRA130	TRA170	TRA200	TRA240	TRA300	TRA400
Sound data (1)											
Sound pressure	dB(A)	52	52	54	54	54	54	54	55	55	57

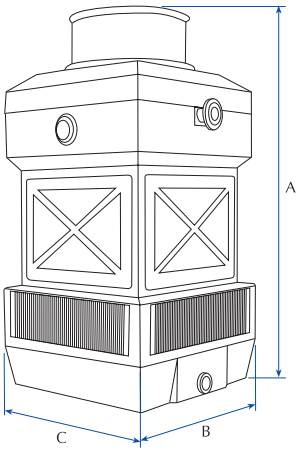
		TRA500	TRA550	TRA600	TRA750	TRA850	TRA850L	TRA950	TRA950L	TRA1100	TRA1100L
Sound data (1)											
Sound pressure	dB(A)	57	58	61	61	62	56	62	56	64	57

(1) Sound pressure: Values refer to measurements in accordance with ISO 3744 standard, performed in free field and in absence of background noise, with average hydraulic load. Sound pressure level at a distance of 15 m from the tower, measured at 1.5 meters above the ground. Tolerance on values +/-2 dbA.

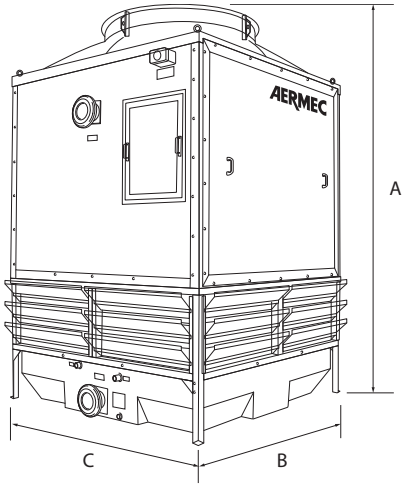
The size up 50 to 750 are only available in the silenced versions.

■ *Power supply: 230V ~ 3 50Hz, 400V ~ 3N 50Hz.*

DIMENSIONS



TRA 50-750



TRA 850-1100
TRA 850L-1100L

		TRA50	TRA70	TRA90	TRA110	TRA130	TRA170	TRA200	TRA240	TRA300	TRA400
Dimensions and weights											
A	mm	2110	2110	2595	2595	2595	2800	2800	2860	2860	3140
B	mm	800	800	1000	1000	1000	1200	1200	1400	1400	1740
C	mm	800	800	1000	1000	1000	1200	1200	1400	1400	1740
Empty weight	kg	75	75	85	95	95	170	170	210	210	410

		TRA500	TRA550	TRA600	TRA750	TRA850	TRA850L	TRA950	TRA950L	TRA1100	TRA1100L
Dimensions and weights											
A	mm	3140	3380	3450	3450	3650	3900	3650	3900	3650	3900
B	mm	1740	1900	2100	2100	2030	2030	2030	2030	2360	2360
C	mm	1740	2100	2300	2300	2360	2360	2360	2360	2360	2360
Empty weight	kg	410	500	555	580	850	850	815	815	915	915

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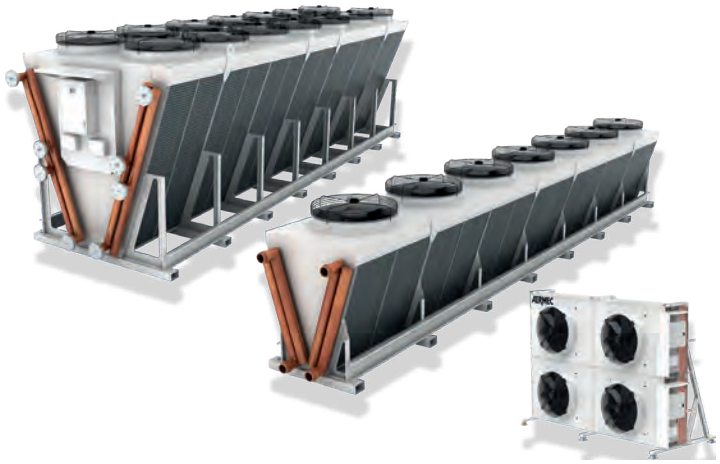
Remote condensers - Dry Cooler

Cooling capacity 8 ÷ 2200 kW

- **Simple to use and install**
- **Wide range of powers**
- **Easy to handle and transport**
- **Can be installed both horizontally and vertically**



DESCRIPTION

DryCoolers and Condensers are air-cooled units used in air conditioning, refrigeration and industrial applications. The are typically installed outdoors, in a remote location, e.g. on roofs, squares, etc. These units consist of one or more heat exchangers installed on two types of structures:

— **Type V**: generally consisting of two heat exchangers installed in a 'V' shape and fans positioned above them.
— **Table type**: generally consisting of a horizontally or vertically positioned heat exchanger and fans with a vertical axis of rotation relative to the finned pack.

The use of these units, in most cases, is necessary to control the temperature of the outlet fluid or to keep the condensing pressure of the refrigerant used under control. These units are generally equipped with air flow regulation systems, which allow the heat exchange to be adapted to changing environmental conditions (day, night, summer, winter, etc.).

Since the units are installed outdoors, they are subject to all environmental characteristics. There are several regulations that classify outdoor environments. The main categories are:

— Rural area
— Urban area
— Coastal area
— Industrial area
— Coastal-industrial area

These areas, in turn, can be further divided, as they can create specific micro-environments, which are the sum of one or more of the above-mentioned categories.

In addition to these classifications, there are also further severe situations due to the significant presence of pollutants such as, for example, sulphur oxides typical of climatic zones with intense acid rain (e.g. northern Europe) or areas near volcanoes, etc. All these pollutants can significantly change the pH of the environment, making deposits on the units extremely corrosive.

Another factor to consider is TOW (time of wetness), which is the amount of time that there is a constant presence of humidity above 80% with a temperature above 0 °C. These are just a few examples of environmental situations that require a thorough analysis of the installation before making a technical choice.

In addition, instructions on maintenance and cleaning methods should also be considered in the following cases:

— after a shipment of units by sea
— when operating the unit in particularly dirty places

The correct definition of the corrosive environment has a direct impact on the choice of heat exchanger materials, structure and fans to be used. Aermec it is able to offer specific technical solutions for each of these cases and to test new construction solutions in cases not previously mentioned.

We recommend using the Aercooler selection programme available on the website www.aermec.com.

EVERY DETAIL IS DESIGNED TO ENSURE THE BEST PERFORMANCE

LIFTING EYES
Aermec has designed the lifting eyes to ensure a correct and easy handling of the dry cooler in compliance with safety standards.

CROSS AND LONGITUDINAL SECTIONS OF EACH PART
Each fan module is separated from the other thanks to panels in order to avoid air by-pass and to optimize the e˜cienc y of the heat exchanger. In this way the correct and proportional functioning of each module is granted.

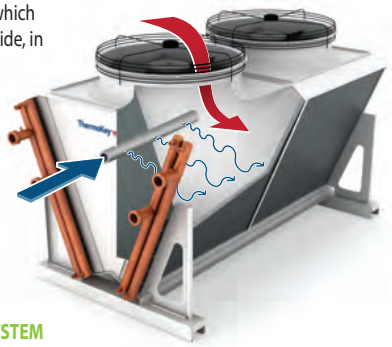
PAINTED CASING
Standard painted casing with C4 protection-class,designed in galvanized steel which is oven painted with polyurethanic resins to guarantee a perfect durability over time.

COVERS ON HEADERS AND RETURN BEND SIDES
A protection cover on the headers side and a closing cover on the return bend side of the coil avoid any damage even to the most fragile parts.

NITROGEN FILLING WITH FLANGE AND COUNTERFLANGE
In order to verify the correct pressure of the circuit, the unit is supplied with a nitrogen charge, which can be checked on the manometer mounted in factory.

OPTIONS

(Optional)
SPRAY J CLEANING SYSTEM
On V-type units Aermec has designed a Cleaning System with internal nozzles which sprays water from the inside to the outside, in order to clean the heat exchanger.



(Optional)
SELF-DRAINING AND DRAINABLE SYSTEM
automatic drain system designed to prevent the risk of **freezing of the ÿnned coil during the winter.**

(Optional)
STAINLESS STEEL TUBES, FINS AND CASING
AERMEC can also produce **heat exchangers completely in 304 or 316L** stainless steel for special applications (particularly aggressive environments) or °uids ..

(Optional)
ADIABATIC COOLING SYSTEMS: HIGH EFFICIENCY TO MEET THE MOST DEMANDING CONDITIONS

AFS - AIR FRESH SYSTEM
adiabatic cooling system equipped with special high-pressure nozzles which allows to compensate for the peaks of power to be dissipated, with minimum water consumption for maximum of 500 hours per year.

WFS - WET FIN SYSTEM
hybrid cooling system which allows a complete °e xibility of operation, working at low pressure (2-3 bars) and for a very high number of hours per year (up to 1000).

EPS - EVAPORATIVE PANEL SYSTEM
The evaporative panel system completes Aermec o˛ er for adiabatic cooling. Thanks to an homogeneous and adjustable distribution of water on the panels this system allows to reach a high saturation level and therefore an e˜cien t capacity increase with low water consumption (hours per year 8000).

DRY COOLERS RANGE

WTE

Performance range: **Capacity from 8 to 890 kW**
(ethylene glycol 35%, Tw1=40°C, Tw2=35°C, T1=25°C)

Fans Diameter Ø 500, 630, 800, 900, 1000 mm, AC or EC motor

Beneÿts
- High e˜cie ncy geometry
- Modular design, 1-10 fans
- 8 sound levels
- Piping in copper or stainless steel AISI 304 or AISI 316L
- Finned pack available in a wide range of materials
- Complete range of accessories
- Casing in galvanized steel, powder painted

WTE

Performance range: **Capacity from 45 to 1123 kW**
(ethylene glycol 35%, Tw1=40°C, Tw2=35°C, T1=25°C)

Fans Diameter Ø 500, 630, 800, 900, 1000 mm, AC or EC motor

Beneÿts
- High e˜cie ncy geometry
- Modular design, 2-16 fans
- 8 sound levels
- Piping in copper or stainless steel AISI 304 or AISI 316L
- Finned pack available in a wide range of materials
- Complete range of accessories
- Casing in galvanized steel, powder painted

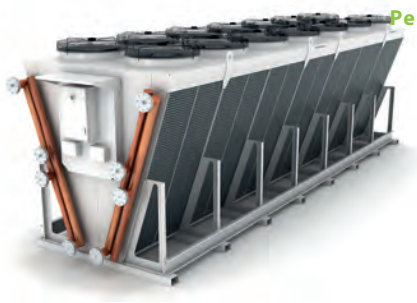
WTR

Performance range: **Capacity from 45 to 1123 kW**
(ethylene glycol 35%, Tw1=40°C, Tw2=35°C, T1=25°C)

Fans Diameter Ø 500, 630, 800, 900, 1000 mm, AC or EC motor

Beneÿts
- High e˜cie ncy geometry
- Modular design, 2-16 fans
- 8 sound levels
- Piping in copper or stainless steel AISI 304 or AISI 316L
- Finned pack available in a wide range of materials
- Complete range of accessories
- Casing in galvanized steel, powder painted

WDR



Performance range: **Capacity from 70 to 961 kW**
(ethylene glycol 35%, Tw1=40°C, Tw2=35°C, T1=25°C)

Fans Diameter Ø 500, 630, 800, 900, 1000 mm, AC or EC motor

Beneÿts
- High e˜cie ncy geometry
- Modular design, 2-16 fans
- 8 sound levels
- Piping in copper or stainless steel AISI 304 or AISI 316L
- Finned pack available in a wide range of materials
- Complete range of accessories
- Casing in galvanized steel, powder painted

WGA

Performance range: **Capacity from 290 to 2219 kW**

Fans Diameter Ø 800, 900, 1000 mm, AC or EC motor

Beneÿts
- **EPS (Evaporative Panel System)**
- Maximum performance, minimum footprint
- High e˜cie ncy geometry
- Modular design, 8-20 fans
- 8 sound levels
- Piping in copper or stainless steel AISI 304 or AISI 316L
- Finned pack available in a wide range of materials
- Complete range of accessories

REMOTE CONDENSERS

CSE

Performance range: **Capacity from 10 to 1200 kW**
(ethylene glycol 35%, Tw1=40°C, Tw2=35°C, T1=25°C)

Fans Diameter Ø 500, 630, 800 mm, AC or EC motor

Beneÿts
- High e˜cie ncy geometry
- Modular design, 1-16 fans
- 8 sound levels
- Piping in copper or stainless steel AISI 304
- Finned pack available in a wide range of materials
- Complete range of accessories
- Casing in galvanized steel, powder painted

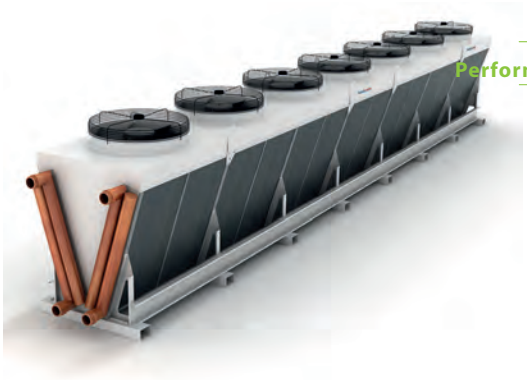
CSE

Performance range: **Capacity from 45 to 1123 kW**
(ethylene glycol 35%, Tw1=40°C, Tw2=35°C, T1=25°C)

Fans Diameter Ø 500, 630, 800, 900, 1000 mm, AC or EC motor

Benefits
- High efficiency geometry
- Modular design, 2-16 fans
- 8 sound levels
- Piping in copper or stainless steel AISI 304 or AISI 316L
- Finned pack available in a wide range of materials
- Complete range of accessories
- Casing in galvanized steel, powder painted

CVR



Performance range: **Capacity from 70 to 961 kW**
(ethylene glycol 35%, Tw1=40°C, Tw2=35°C, T1=25°C)

Fans Diameter Ø 500, 630, 800, 900, 1000 mm, AC or EC motor

Benefits
- High efficiency geometry
- Modular design, 2-16 fans
- 8 sound levels
- Piping in copper or stainless steel AISI 304 or AISI 316L
- Finned pack available in a wide range of materials
- Complete range of accessories
- Casing in galvanized steel, powder painted

CDR

Performance range: **Capacity from 100 to 19515 kW**
(ethylene glycol 35%, Tw1=40°C, Tw2=35°C, T1=25°C)

Fans Diameter Ø 900 AC or EC motor

Benefits
- High efficiency geometry
- Modular design, 2-16 fans
- 8 sound levels
- Piping in copper or stainless steel AISI 304 or AISI 316L
- Finned pack available in a wide range of materials
- AFS (Air Fresh System), WFS (Wet Fin System) e EPS (Evaporative Panel System) disponibili su richiesta
- Casing in galvanized steel, powder painted

CGA

Performance range: **Capacity from 290 to 2219 kW**

Fans Diameter Ø 800, 900, 1000 mm, AC or EC motor

Beneÿts

- **EPS (Evaporative Panel System)**
- Maximum performance, minimum footprint
- High e˜cie ncy geometry
- Modular design, 8-20 fans
- 8 sound levels
- Piping in copper or stainless steel AISI 304 or AISI 316L
- Finned pack available in a wide range of materials
- Complete range of accessories

MODULAR MICROCHANNEL

Performance range: **Capacity for each module up to 120 kW**

Fans Diameter Ø 800 mm, AC or EC motor

Modules From 1 module on

Beneÿts

- Compactness (maximum length of 2245 mm)
- Low installation costs
- Regulation or partialisation of the whole unit
- Lower enviromental impact
- Less weight
- Less ˜ uid use
- Easy-to-clean microchannel core
- Core coating possibility in case of aggressive ambient

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FW-R

Water-cooled air conditioners

Cooling capacity 2,9 kW
Heating capacity 4,3 kW

- **Silent operation**
- **Reduced water consumption**
- **Low electrical power consumption**

DESCRIPTION

FW-R series integrated system air conditioners are independent appliances designed and built to create and maintain optimum room comfort conditions.
Discreetly and elegantly styled, these remarkably quiet units are ideal for installation in the home or commercial premises.
Equipped with a water-cooled condenser, the unit appliances perform all typical cooling, dehumidification, ventilation and air filtration functions while offering particular benefits in terms of ease of application and installation.
Suitable also for winter operation when equipped with an electric heater or hot water coil; console air conditioners are able to provide different microclimates within the same room because each appliance can be adjusted independently; low running costs are assured by fast arrival at the required room temperature because of the low thermal inertia of the system; quiet operation and thermal efficiency are also promoted by the heat and sound insulation of the compressor bay.
All appliances are factory assembled and individually tested.
Installation requires mandatory coupling with the TL3 Remote Control Kit accessory; the IR receiver can be installed either on-board or recessed in the wall.

FEATURES

— High efficiency rotary compressor
— Reduced dimensions
— Automatic temperature adjustment
— Reduced water consumption

1 IR on board receiver
2 IR wall-mounted receiver
3 TL3: Kit Mandatory accessory

ACCESSORIES

TL3: Mandatory accessory, remote control, essential for unit operation. The kit consists of a remote control, an I.R. signal receiver, the 8-metre long connection cable, a rectangular recessed Modulo 503 box (of which only one is engaged by the receiver, the other 2 modules are also available for other uses) and a white-coloured cover plate. The IR receiver can be installed: on board the unit (the IR receiver is housed under the grid, invisible from the outside); recessed in the wall and connected to the unit (with the dedicated 8-metre cable).
BR26: Armoured electric coil with safety thermostat.
BVR1: Single row hot water heat exchanger.

ACCESSORIES COMPATIBILITY

Remote controller (mandatory accessory)

Accessory	FW130R	FW160R
TL3	•	•

Electric coil

Accessory	FW130R	FW160R
BR26	•	•

Hot water coil

Accessory	FW130R	FW160R
BVR1	•	•

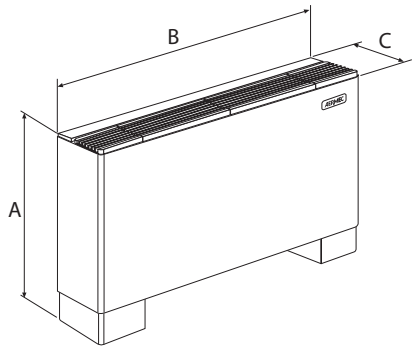
PERFORMANCE SPECIFICATIONS

		FW130R	FW160R
Cooling (room air temperature 27 °C D.B. ; 19 °C W.B., water temperature (in/out) 30°C / 35 °C, maximum speed)			
Cooling capacity	W (max.)	2900	4000
Energy Efficiency Class		A	A
EER		4,08	4,65
Moisture removed	l/h	1,78	1,78
Total input electric power	W	710	860
Input current	A	3,55	4,02
Heating - BVR1 (room air temperature 20 °C, Entering water temperature 70°C, maximum speed)			
Heating capacity with water coil (BVR1)	W	4350	5200
Heating capacity with water coil (BVR1)	l/h	600	600
Pressure drops (BVR1)	kPa	12,6	12,6
Heating capacity electric coil (BR26)	W	1200	1200
Fans data			
Number of fans	n.	2	2
Air flow rate	m3/h (max.)	470	690
	m3/h (med.)	390	525
	m3/h (min.)	270	375
Fans speed	g/m (max.)	800	1140
	g/m (med.)	660	885
	g/m (min.)	500	665
General technical data			
Sound pressure	dB(A)	44,0	47,5
Water consumption at 30-35°C	l/h	586	804
Condenser pressure drops	kPa	22	40
Refrigerant gas	Type/GWP	R410A / 2088kgCO_2eq	
Refrigerant gas charge	g	750	830
Nominal electric power *	W	1120	1500
Nominal input current *	A	4,97	6,65
Peak current	A	18	32
Hydraulic connections	ø	1/2"F	1/2"F

Power supply = 230V ~ 50Hz
Sound pressure measured in an 85 m3 semi-reverberant test chamber with reverberation time Tr = 0.5s

* In accordance with EN-60335
Data declared in accordance with EN-14511

DIMENSIONS



		FW130R	FW160R
Dimensions and weights			
A	mm	723	723
B	mm	1121	1121
C	mm	242	242
Empty weight	kg	63	67

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CWX-CWXM

Water motocondensing unit

Cooling capacity 2,7 ÷ 7,1 kW

- **Functioning only in cooling mode**
- **Internal installation**

VERSIONS

CWX: condensing unit for cooling only MONOSPLIT
CWXM: condensing unit cold only DUALSPLIT

DESCRIPTION

CWX power module

— Available in 4 versions with different potentiality
— The versions are realised using R410A refrigerant gas
— Only cold operation with water condensation
— Outdoor unit with rotary compressor
— Refrigerant lines with flared connections
— Refrigerant lines up to 15m

CWXM power module

— Available in 2 versions with different potentiality
— The versions are realised using R410A refrigerant gas
— Only cold operation with water condensation
— Outdoor unit with rotary compressor
— Refrigerant lines with flared connections
— Refrigerant lines up to 10m

Indoor unit CWX_W

— Wall indoor unit for wall installation with infrared ray remote control supplied;
— Air flow louvers adjustable horizontally and motorised deflecting louvers, which can be activated by remote control to direct the outlet air flow vertically, with fixed (LV) or floating (SW) positions
— Particularly quiet operation
— Microprocessor control
— Programmable switch-on/off timer
— Air filter that can be easily removed and regenerated
— Night time well-being (SLEEP) function
— Operating mode: cooling, dehumidification and fan only
— Autorestart function after interruption of electricity
— Tangential fan with 3 directly selectable speeds
— Energy saving (ECONO) and fast cooling (TURBO) mode
— Display on front panel showing the functioning modes and the temperature

PERFORMANCE SPECIFICATIONS

Indoor units			**CWX250W**	**CWX350W**	**CWX500W**	**CWX700W**	**CWX350W+ CWX350W**	**CWX500W+ CWX500W**
Power module			**CWX250**	**CWX350**	**CWX500**	**CWX700**	**CWXM520**	**CWXM720**
Cooling capacity		W	2750	3400	5200	6700	4826	7100
Total input power		W	637	778	1330	1860	1279	1780
Total input current		A	2,86	3,56	6,02	9,28	5,80	9,00
EER		W/W	4,32	4,37	3,91	3,60	3,77	3,99
Water flow rate at (in/out) 30°C/35°C		l/h	572	705	1091	1446	1066	1510
Water pressure drop		kPa	21	32	74	125	68	127
Water flow rate at (in) 15°C		l/h	102	122	225	308	190	255
Refrigerant gas		Type/GWP	R410A / 2087,5 kgCO_2eq					
Refrigerant gas charge		kg	0,65	0,75	0,85	0,97	0,90	1,10
Rated power input	(1)	W	1500	1500	2300	2650	2300	2650
Moisture removed		l/h	1,08	1,18	1,96	2,38	1,00	1,30
Air flow rate	max	m3/h	445,00	537	882	1010	537	882
	average	m3/h	428,00	501	828	935	501	828
	min	m3/h	404,00	467	776	842	467	776
Sound power (indoor unit)	max	dB(A)	51,0	51,0	56,0	58,0	51,0	56,0
	average	dB(A)	50,0	50,0	55,0	56,0	50,0	55,0
	min	dB(A)	49,0	48,0	53,0	54,0	48,0	53,0

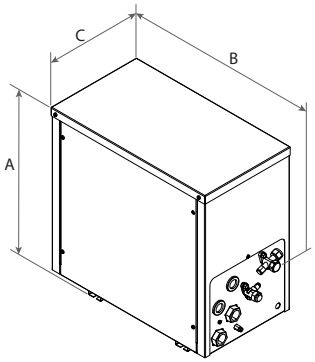
Power module			**CWX250**	**CWX350**	**CWX500**	**CWX700**	**CWXM520**	**CWXM720**
Sound power		dB(A)	52,0	56,0	59,0	59,0	59,0	59,0
Compressor		type	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
Refrigerant connections	Φ liquid	inch	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	Φ gas	inch	3/8"	1/2"	1/2"	5/8"	1/2"	1/2"
Refrigerant lines	Φ liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	Φ gas	mm (inch)	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	12,7 (1/2")	12,7 (1/2")
	Max pipe length	m	15	15	15	15	10 + 10	10 + 10
	Max level difference	m	7	7	7	7	5	5
Hydraulic connections		F	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Power supply		V ~ Hz	220-240V ~ 50Hz					

(1) The rated power input, is the maximum input electrical power from the system, in accordance with the Standards EN-60335-1 and EN-60335-2-40.

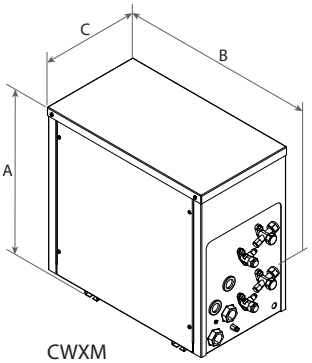
Rated conditions (Cooling EN-14511):

- room air temperature 27 °C D.B. ; 19 °C W.B.
- water temperature (in/out) 30°C / 35 °C
- maximum speed
- pipe length 5m

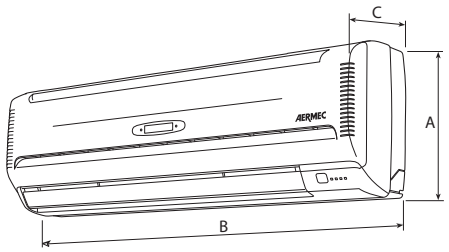
DIMENSIONS



CWX



CWXM



CWX_W

CWX

Dimensions and weights		CWX250	CWX350	CWX500	CWX700
A	mm	450	450	450	570
B	mm	470	470	470	470
C	mm	260	260	260	260
Weight	kg	32	35	38	49

CWXM

Dimensions and weights		CWXM520	CWXM720
A	mm	585	585
B	mm	470	470
C	mm	260	260
Weight	kg	41	52

CWX_W

Dimensions and weights		CWX250W	CWX350W	CWX500W	CWX700W
A	mm	298	305	360	360
B	mm	880	990	1172	1172
C	mm	205	210	220	220
Weight	kg	11	12	18	20

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DMT

Dehumidifier portable

Dehumidifying capacity 0,40 l/h ÷ 1,00 l/h

- **New R290 natural refrigerant gas.**
- **Compact, manoeuvrable and silent.**
- **Modern design to blend with all furnishing styles.**
- **Removes up to 24 litres of humidity in 24 hours.**

DESCRIPTION

The portable dehumidifiers of the DMT range are ideal for dehumidifying domestic rooms, cellars, and places where clothes are hung out to dry, reducing the humidity to optimum levels to avoid any risk of physical discomfort and damage to the building due to the formation of mould.
They fit in with any type of furnishings thanks to their compact, elegant design, and even have wheels so they can easily be moved from one room to another and installed where needed (plug & play).
Equipped with a specific tray for collecting the humidity removed from the room during operation.
The on-board control panel with led display and indicator lights, allows you to set the required temperature set-point easily and accurately.

FEATURES

Operation

The dehumidifier takes in the excess humidity via the recovery grille and releases humidity-free air, thereby ensuring a healthier, more comfortable environment.
In addition, its functions enable easy control of the humidity level, keeping it constant over time.

Smart APP Ewpe

DMT160 model is equipped with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the dehumidifier can be directly controlled from a distance on your smartphone or tablet and is possible via Cloud, using a wireless router connected to the Internet.

Special blue fin coil

Unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.

DMT160

— New R290 natural refrigerant gas.
— On-board control panel with led display and indicator lights.
— Visual display of the humidity setting and that read in the room.
— Particularly quiet operation.
— Regenerable air filter easy to remove and clean.
— Alarm signal for filter cleaning.
— Alarm signal for condensate discharge tray full or badly positioned.
— Possibility to continuously drain off the condensate without using the tray supplied.
— Auto switch-off function: the unit stops operating when the condensate discharge tray is full or badly positioned, or when it has reached the defined work set-point.
— Auto-restart function.
— Timer for programming switch-off and switch-on.
— WiFi function

DMT240

— New R290 natural refrigerant gas.
— On-board control panel with led display and indicator lights.
— Visual display of the humidity setting and that read in the room.
— Particularly quiet operation.
— Regenerable air filter easy to remove and clean.
— Alarm signal for filter cleaning.
— Alarm signal for condensate discharge tray full or badly positioned.
— Possibility to continuously drain off the condensate without using the tray supplied.
— Auto switch-off function: the unit stops operating when the condensate discharge tray is full or badly positioned, or when it has reached the defined work set-point.
— Auto-restart function.
— Timer for programming switch-off and switch-on.
— Auto function: automatic drying mode. The unit automatically sets the most comfortable humidity.

ACCESSORIES AS STANDARD

DMT160-240

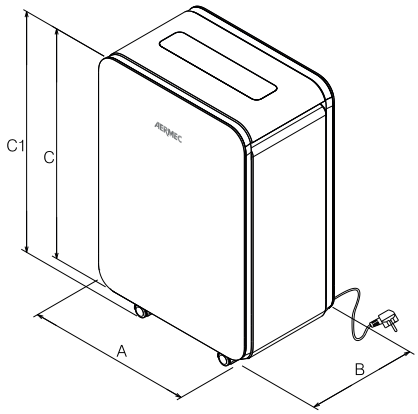
— Swivel wheels
— Power supply + Schuko plug
— Condensate discharge coupling

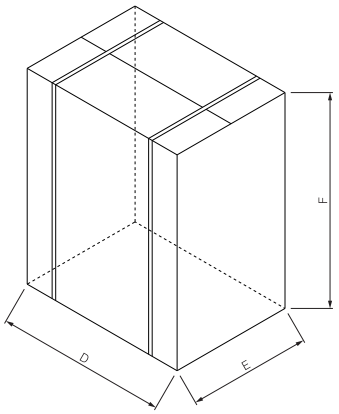
PERFORMANCE SPECIFICATIONS

		DMT160	DMT240
Nominal performance (1)			
Dehumidifying capacity	l/h	0,66	1,00
Input power	W	370	390
Nominal performance (Standard EN 810) (2)			
Dehumidifying capacity	l/h	0,40	0,48
Input power	W	315	325
Input current	A	1,7	1,8
Electric data			
Rated power input (3)	W	510	460
Rated current input (3)	A	3,0	3,0
Compressor			
Type	type	Reciprocating	
Refrigerant	type	R290	
Refrigerant charge	g	65	65
Potential global heating	GWP	3	
Equivalent CO_2	t	0,20	0,20
Fan			
Type	type	Centrifugal	
Air flow rate			
Maximum	m^3/h	170	220
Minimum	m^3/h	145	155
Sound power			
Maximum	dB(A)	53,0	56,0
Minimum	dB(A)	51,0	54,0
Sound pressure (4)			
Maximum	dB(A)	39,0	44,0
Minimum	dB(A)	37,0	42,0
Condensate drainage basin			
Capacity	l	2,6/3,0	2,6/3,0
Performances			
Application area	m^2	22~28	36~42
Power supply cable			
Type of power supply cable	Type	Schuko	
Power supply			
Power supply		220-240V ~ 50Hz	

(1) Indoor air temperature 30°C D.B. / 27°C W.B.
(2) Indoor air temperature 27°C b.s./21°C b.u. (Tested according to EN 810)
(3) Tested according to EN 60335.
(4) Sound pressure measured according to EN 12102 standard, in semi anechoic chamber at a distance of 1 m from the source.

DIMENSIONS AND WEIGHTS





Dimensions and weights

		DMT160	DMT240
Dimensions and weights			
A	mm	351	351
B	mm	240	240
C	mm	489	489
C1	mm	522	522
D	mm	392	392
E	mm	286	286
F	mm	525	525
Net weight	kg	15,5	15,5
Weight for transport	kg	16,5	16,5

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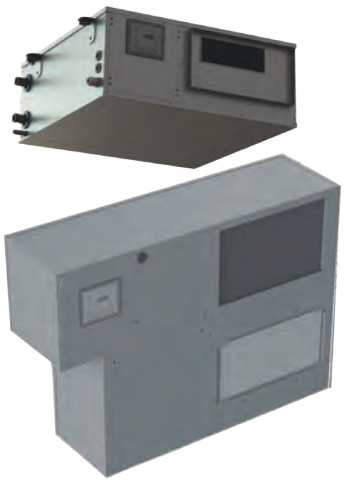
DMH - DMV

Dehumidifier for radiant air-conditioning systems

Dehumidifying capacity 22 l/24h ÷ 36 l/24h

- **Better performance compared to traditional dehumidifiers**
- **Reduced consumption**
- **Prevents the formation of condensate on the surface of the pavement**
- **Unit only for indoor installation**



DESCRIPTION

Dehumidifiers are refrigerant cycle machines combined with radiant air-conditioning systems, from which they draw a certain water flow rate to increase the dehumidification efficiency and reduce electricity consumption.

The cooling systems employ chilled water at temperatures between 15°C and 20°C, which is enough to take the rooms to the desired temperature, but not suitable for dehumidification. To lower the latter, you would need water at 7°C, resulting in a reduction in the performance of the water chiller compared to when the water is produced at 15-20°C.

Water-cooled refrigerant cycle dehumidifiers are used to keep the air humidity at optimal values (55-65%) in rooms, with the following benefits compared to other systems:

— They employ the chilled water available in the radiant panel system;
— They are used to process the air without modifying its temperature and, therefore, without affecting the operation of the radiant panels and their adjustment system.
— They prevent the formation of condensation on the floor surface in radiant air conditioning systems.

FEATURES

Structure: galvanised sheet metal panels, lined on the inside with a soundproofing polyethylene covering.

Filter section: 12 mm thick synthetic filtering baffle made with a galvanised sheet metal frame, efficiency class ISO 16890 COARSE 50% (G3 EN 779), can be removed from the front.

Cooling circuit: consisting of a R134a alternative refrigerant compressor, freon filter, expansion capillary, evaporator and condenser with copper pipes and continuous louvered fin louvers, with hydrophilic treatment and aluminium frame (for "-C" cooling versions, with "I" integration, water-freon condenser).

Hydraulic circuit: with pre-treatment and post-cooling coils featuring with copper pipes and continuous louvered fin louvers, with hydrophilic treatment and aluminium frame; for "-C" cooling versions, plate water condenser (no post-cooling); stainless steel condensate drip tray extended to the whole treatment.

Fan: double intake centrifugal fan with blades facing forwards, with multi-speed motor directly coupled; 3 different electrical connections available (H/M/L) for the functioning speed; the manufacturer's default setting is medium (M) speed.

ACCESSORIES

DMUM: Wall mounted environment humidistat.
DMWB: Outer casing for vertical model. Vertical installation.
DMFP: Front panel for outer casing. Vertical installation.

PERFORMANCE SPECIFICATIONS

		DMV220	DMV220I	DMH220	DMH220C	DMH220I	DMH360C	DMH360I	DMH360
Performances (1)									
Condensed humidity	l/24h	22	22	22	22	22	36	36	36
Power at the evaporator	W	1020	1020	1050	1050	1050	1480	1480	1480
Power dissipated with water	W	870	1820	870	1820	1820	2680	2680	1540
Nominal water flow rate	m^3/h	240	240	240	240	240	390	390	390
Water pressure drop	kPa	3	3	3	3	3	10	10	10
Available sensitive power	W	-	840	-	840	840	1340	1340	-
Total input power	W	350	350	350	350	350	580	580	580
Input current	A	2,0	2,0	2,0	2,0	2,0	3,2	3,2	3,2
Fan									
Type	type	Centrifugo doppia aspirazione							
Available fan speeds		H / M / L							
Nominal fan setting				M				L	
Air flow rate	m^3/h	220	220	220	220	220	360	360	360
High static pressure	Pa	0	0	20	20	20	20	20	20
Compressor									
Type	type	Ermetico alternativo							
Refrigerant	type	R134a							
Refrigerant charge	g	340	270	340	340	270	460	410	460
Operating limits									
Intake air temperature	°C	15 ~ 32							
Water inlet temperature (dehumidifying mode)	°C	10 ~ 21							
Sound data									
Sound pressure level (1 m)	dB(A)	39,0	39,0	42,0	42,0	42,0	47,0	47,0	47,0

(1) At nominal air flow rate at the following conditions: ambient air 26°C BS, RH 65%; incoming water temperature 15°C

Condensed humidity with ambient temperature of 26°C

		DMV220	DMV220I	DMH220	DMH220C	DMH220I	DMH360C	DMH360I	DMH360
Hydraulic circuit water temperature 21°C - Relative humidity 55%									
Condensed humidity	l/24h	12	12	12	12	12	20	20	20
Hydraulic circuit water temperature 18°C - Relative humidity 55%									
Condensed humidity	l/24h	14	14	14	14	14	22	22	22
Hydraulic circuit water temperature 15°C - Relative humidity 55%									
Condensed humidity	l/24h	15	15	15	15	15	25	25	25
Hydraulic circuit water temperature 21°C - Relative humidity 65%									
Condensed humidity	l/24h	17	17	17	17	17	28	28	28
Hydraulic circuit water temperature 18°C - Relative humidity 65%									
Condensed humidity	l/24h	19	19	19	19	19	31	31	31
Hydraulic circuit water temperature 15°C - Relative humidity 65%									
Condensed humidity	l/24h	22	22	22	22	22	36	36	36

Condensed humidity with ambient temperature of 24°C

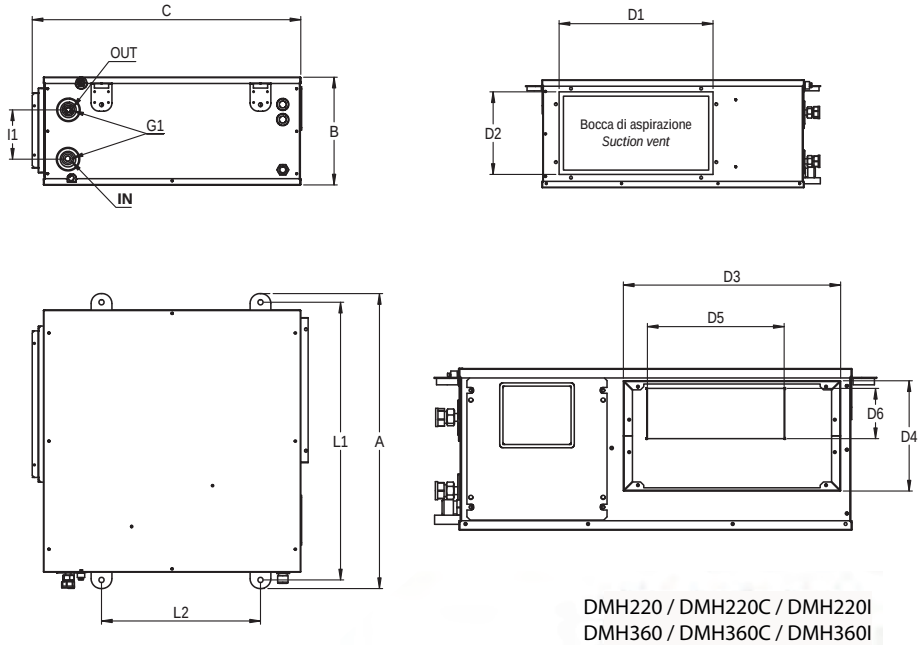
		DMV220	DMV220I	DMH220	DMH220C	DMH220I	DMH360C	DMH360I	DMH360
Hydraulic circuit water temperature 21°C - Relative humidity 55%									
Condensed humidity	l/24h	10	10	10	10	10	17	17	17
Hydraulic circuit water temperature 18°C - Relative humidity 55%									
Condensed humidity	l/24h	12	12	12	12	12	19	19	19
Hydraulic circuit water temperature 15°C - Relative humidity 55%									
Condensed humidity	l/24h	13	13	13	13	13	21	21	21
Hydraulic circuit water temperature 21°C - Relative humidity 65%									
Condensed humidity	l/24h	14	14	14	14	14	23	23	23
Hydraulic circuit water temperature 18°C - Relative humidity 65%									
Condensed humidity	l/24h	17	17	17	17	17	27	27	27
Hydraulic circuit water temperature 15°C - Relative humidity 65%									
Condensed humidity	l/24h	18	18	18	18	18	30	30	30

Operating limits

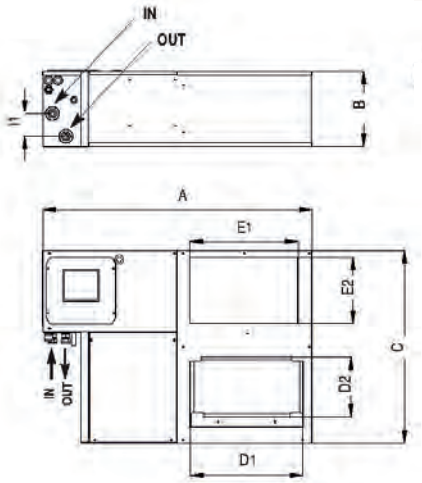
— Intake air temperature 15 ~ 30°C

— Hydraulic circuit water temperature 12 ~ 20°C

DIMENSIONS AND WEIGHTS



DMH220 / DMH220C / DMH220I
DMH360 / DMH360C / DMH360I



DMV220 / DMV220I

		DMH220	DMH220C	DMH220I	DMV220	DMV220I	DMH360	DMH360C	DMH360I
Dimensions and weights									
A	mm	680	680	680	850	850	775	775	775
B	mm	250	250	250	240	240	270	270	270
C	mm	623	623	623	615	615	623	623	623
D1	mm	337	337	337	337	337	437	437	437
D2	mm	172	172	172	172	172	192	192	192
D3	mm	335	335	335	-	-	435	435	435
D4	mm	170	170	170	-	-	195	195	195
D5	mm	210	210	210	-	-	250	250	250
D6	mm	77	77	77	-	-	95	95	95
E1	mm	-	-	-	350	350	-	-	-
E2	mm	-	-	-	215	215	-	-	-
I1	mm	115	115	115	75 (1)	75 (1)	125	125	125
L1	mm	640	640	640	-	-	745	745	745
L2	mm	370	370	370	-	-	370	370	370
G1	Ø	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F
Net weight	kg	35,0	35,0	35,0	40,0	40,0	40,0	40,0	40,0

(1) Pre-shearing for hydraulic and electrical connections on the side, rear and bottom panel

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