

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 R513A (XP10) refrigerant gas



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 PCO⁵

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 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 supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

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 unit); 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, 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

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	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
AER485P1	*	*	*		*	*		*	*	
AER485P1 x n° 2 (1)				*			*			*
AERNET	*	*	*	*	*	*	*	*	*	*
MULTICHILLER_EVO	*	*	*	*	*	*	*	*	*	*
PGD1	*	*	*	*	*	*	*	*	*	*

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
A,E,N,U	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	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
°	Alluminium microchannel
O	Painted alluminium microchannel
R	Copper-copper
S	Copper-Tinned copper
V	Copper-painted aluminimium
12	Fans
J	Inverter
13	Power supply
°	400V ~ 3 50Hz with magnet circuit breakers
14,15	Integrated hydronic kit (1)
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
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

Field	Description
DJ	Pump J + stand-by pump
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 speed
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
JA	Pump A + stand-by pump, both equipped with inverter device to work at fixed speed
JB	Pump B + stand-by pump, both equipped with inverter device to work at fixed speed
JC	Pump C + stand-by pump, both equipped with inverter device to work at fixed speed
JD	Pump D + stand-by pump, both equipped with inverter device to work at fixed speed
JE	Pump E + stand-by pump, both equipped with inverter device to work at fixed speed
JF	Pump F + stand-by pump, both equipped with inverter device to work at fixed speed
JG	Pump G + stand-by pump, both equipped with inverter device to work at fixed speed
JH	Pump H + stand-by pump, both equipped with inverter device to work at fixed speed
JI	Pump I + stand-by pump, both equipped with inverter device to work at fixed speed
JJ	Pump J + stand-by 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
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J
16	Refrigerant gas
°	R134a
G	R513A (XP10)

(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 14511:2018; System side water heat exchanger 12 °C/7 °C; External 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 14511:2018; System side water heat exchanger 12 °C/7 °C; External 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 14511:2018; System side water heat exchanger 12 °C/7 °C; External 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 14511:2018; System side water heat exchanger 12 °C/7 °C; External 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
	N,U	W/W	5,35	5,41	5,60	5,48	5,76	5,80	5,62	5,71	5,73
Seasonal efficiency	A,E	%	203,1%	206,0%	216,0%	206,8%	218,4%	218,4%	217,5%	216,5%	219,8%
	N,U	%	211,0%	213,5%	221,0%	216,1%	227,3%	229,1%	221,9%	225,4%	226,3%
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
	N,U	W/W	6,47	6,61	6,52	6,80	6,49	6,62	6,57	6,50	6,47

(1) Calculation performed with FIXED/VARIABLE water flow rate and FIXED/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	797,0
	N,U	A	165,0	249,0	329,0	413,0	498,0	493,0	577,0	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	720,0
	N,U	A	36,0	45,0	210,0	305,0	315,0	384,0	479,0	575,0	720,0

GENERAL TECHNICAL DATA

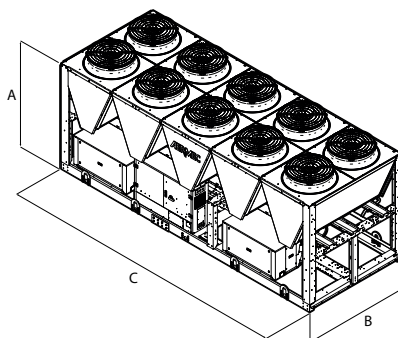
Size		1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Compressor											
Type	A,E,N,U	type	Centrifugal								
Compressor regulation	A,E,N,U	Type	Inverter								
Number	A,E,N,U	no.	1	1	2	2	3	3	3	3	4
Circuits	A,E,N,U	no.	1	1	1	2	1	2	1	1	2
Refrigerant	A,E,N,U	type	R134a								
Refrigerant charge	A,E	kg	81,0	166,0	152,0	243,0	285,0	264,0	306,0	317,0	398,0
	N,U	kg	81,0	166,0	163,0	254,0	296,0	275,0	317,0	328,0	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
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"
	N,U	Ø	6"	6"	6"	6"	6"	6"	6"	6"	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	22
	N,U	no.	6	8	12	14	16	18	20	22	22
Air flow rate	A,E	m³/h	112920	150560	188200	225840	263480	301120	338760	376400	414040
	N,U	m³/h	112920	150560	225840	263480	301120	338760	376400	414040	414040

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
	E	dB(A)	82,3	83,9	84,8	86,5	87,0	86,8	87,9	89,3	89,3
	N	dB(A)	82,3	84,0	85,3	86,8	87,1	87,1	88,1	89,5	89,3
	U	dB(A)	88,3	90,0	91,3	92,8	93,1	93,1	94,1	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	62,1
	E	dB(A)	50,1	51,5	52,3	53,9	54,2	53,9	54,9	56,2	56,1
	N	dB(A)	50,1	51,6	52,7	54,0	54,2	54,1	55,0	56,3	56,1
	U	dB(A)	56,1	57,6	58,7	60,0	60,2	60,1	61,0	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
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

Aermec reserves the right to make any modifications deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

Aermec S.p.A.

Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
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
- Night mode



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.

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 PCO⁵

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 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 supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 4: RS-485 interface for supervision systems with MODBUS protocol.

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 unit); 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, 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

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 n° 2 (1)	A,E,N,U			*	*	*					
AER485P1 x n° 3 (1)	A,E,N,U						*	*	*	*	
AER485P1 x n° 4 (1)	A,E,N,U										*
AERNET	A,E,N,U	*	*	*	*	*	*	*	*	*	*
MULTICHILLER_EVO	A,E,N,U	*	*	*	*	*	*	*	*	*	*
PGD1	A,E,N,U	*	*	*	*	*	*	*	*	*	*

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A,E,N,U	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	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
°	Alluminium microchannel
O	Painted alluminium microchannel
R	Copper-copper
S	Copper-Tinned copper
V	Copper-painted aluminimium
12	Fans
J	Inverter
13	Power supply
°	400V ~ 3 50Hz with magnet circuit breakers
14,15	Integrated hydronic kit (1)
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
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

Field	Description
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump
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 speed
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
JA	Pump A + stand-by pump, both equipped with inverter device to work at fixed speed
JB	Pump B + stand-by pump, both equipped with inverter device to work at fixed speed
JC	Pump C + stand-by pump, both equipped with inverter device to work at fixed speed
JD	Pump D + stand-by pump, both equipped with inverter device to work at fixed speed
JE	Pump E + stand-by pump, both equipped with inverter device to work at fixed speed
JF	Pump F + stand-by pump, both equipped with inverter device to work at fixed speed
JG	Pump G + stand-by pump, both equipped with inverter device to work at fixed speed
JH	Pump H + stand-by pump, both equipped with inverter device to work at fixed speed
JI	Pump I + stand-by pump, both equipped with inverter device to work at fixed speed
JJ	Pump J + stand-by 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
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J

(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 14511:2018; System side water heat exchanger 12 °C/7 °C; External 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 14511:2018; System side water heat exchanger 12 °C/7 °C; External 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 14511:2018; System side water heat exchanger 12 °C/7 °C; External 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 14511:2018; System side water heat exchanger 12 °C/7 °C; External 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/VARIABLE water flow rate and FIXED/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

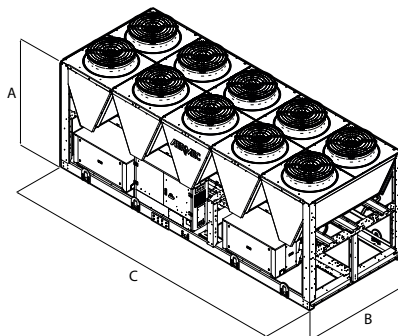
Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Compressor											
Type	A,E,N,U	type		Centrifugal							
Compressor regulation	A,E,N,U	Type		Inverter							
Number	A,E,N,U	no.	1	1	2	2	3	3	3	3	4
Circuits	A,E,N,U	no.	1	1	1	2	1	2	1	1	2
Refrigerant	A,E,N,U	type		R1234ze							
Refrigerant charge	A,E	kg	71,0	110,0	142,0	177,0	188,0	254,0	265,0	307,0	318,0
	N,U	kg	82,0	121,0	153,0	188,0	198,0	265,0	276,0	286,0	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
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"
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
	N,U	no.	6	8	10	12	14	16	18	20	22
Air flow rate	A,E	m³/h	75280	112920	150560	188200	225840	263480	301120	338760	376400
	N,U	m³/h	112920	150560	188200	225840	263480	301120	338760	376400	414040

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	94,2
	E	dB(A)	82,2	85,4	85,2	87,1	88,4	88,3	89,9	90,1	91,2
	N	dB(A)	83,3	85,9	85,8	87,5	88,7	88,6	90,1	90,3	91,2
	U	dB(A)	86,3	88,9	88,8	90,5	91,7	91,6	93,1	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	61,0
	E	dB(A)	50,3	53,5	52,8	54,6	55,8	55,5	57,0	57,1	58,0
	N	dB(A)	51,1	53,5	53,3	54,9	55,9	55,7	57,1	57,2	58,0
	U	dB(A)	54,1	56,5	56,3	57,9	58,9	58,7	60,1	60,2	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
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	1190	1190	4760	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

Aermec reserves the right to make any modifications deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

Aermec S.p.A.

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

