

# 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.



### 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<sub>5</sub>

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.

**AERBAC-ONE:** Ethernet communication interface for Bacnet/IP and Modbus TCP/IP protocols, HTTPS protocol for web interface, encrypted communication protocols and access credential management in accordance with the latest standards. One accessory is provided for each unit control board.

**AERBACP:** Ethernet communication interface for Bacnet/IP and Modbus TCP/IP protocols. 1 accessory is provided for each unit control board.

**AERNET:** The device remotely controls, manages and remotely monitors a chiller/heat pump using a PC, smartphone or table via a Cloud connection. AERNET acts as Master while each connected unit is configured as Slave up to a maximum of 6 control cards. The connection is made via cable and/or USB key. Wi-Fi connectivity is not available. It is also possible to save a log file with all the data from the connected units to your terminal with a simple click for possible post-analysis. With the purchase of the Router, the Customer benefits from a 24-month free period during which he can use the Aernet Service at no additional cost. At the end of this initial period, the Service may be renewed by subscribing to a 1, 2 or 3 year subscription. For further details on costs and renewal methods, please contact our office or consult the technical documentation available on our website. [www.aermec.com](http://www.aermec.com).

**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 board designed to receive external signals from the electricity grid or energy suppliers, converting them into Modbus commands for our units. This system allows you to vary the operation of our generators to optimise consumption based on electricity prices, grid load or the availability of renewable sources. The key principle of the standard is demand response: shifting consumption from peak demand times to times when energy is cheaper and more environmentally sustainable.

**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 no. 2	A								•		•		•	•	•	•	•	•				
AER485P1 x no. 3	°,A																			•	•	•
AERBAC-ONE	A	•	•	•	•	•	•	•		•		•										
AERBAC-ONE x no. 2	A								•		•		•	•	•	•	•	•				
AERBAC-ONE x no. 3	°,A																			•	•	•
AERBACP	A	•	•	•	•	•	•	•		•		•										
AERBACP x no. 2	A								•		•		•	•	•	•	•	•				
AERBACP x no. 3	°,A																			•	•	•
AERNET	°																			•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	°																			•	•	•
MULTICHILLER-EVO	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	°																			•	•	•
PGD1	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	°																			•	•	•
SGD	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

**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
°	-	-	-	-	-	-	RIFWF16703	RIFWF17203	RIFWF18403	RIFWF19603
A	RIFWF13202	RIFWF13602	RIFWF14202	RIFWF14802	RIFWF15602	RIFWF16402	RIFWF16703	RIFWF17203	RIFWF18403	RIFWF19603

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
<b>1,2,3,4</b>	<b>WFGI</b>
	Size
<b>5,6,7,8</b>	1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
<b>9</b>	<b>Model</b>
H	Optimised for high condensation
°	Standard condensation
<b>10</b>	<b>Version</b>
°	Standard (1)
A	High efficiency
<b>11</b>	<b>Operating field</b>
X	Electronic thermostatic expansion valve
Z	Double electronic thermostatic for low temperature
<b>12</b>	<b>Set-up</b>
K	Super low noise with hood (2)
L	Silenced with hood
°	Standard without hood

Field	Description
<b>13</b>	<b>Heat recovery</b>
D	With desuperheater (3)
T	With total recovery (3)
°	Without heat recovery
<b>14</b>	<b>Evaporator</b>
°	Standard
<b>15</b>	<b>Power supply</b>
8	400V ~ 3 50Hz with magnet circuit breakers (4)
°	400V ~ 3 50Hz with fuses
<b>16</b>	<b>Refrigerant gas (5)</b>
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	
<b>Model:</b> °										
<b>Cooling performance 12 °C / 7 °C (1)</b>										
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	74,20	87,10	94,80	105,70	124,90	140,10	152,30	169,80	186,60
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	44.248	52.351	58.332	66.233	75.332	83.987	98.906	111.058	119.737
Pressure drop source side	kPa	30	33	29	26	22	21	24	24	21
Water flow rate system side	l/h	37.296	43.987	49.124	55.816	62.963	69.984	83.363	93.854	100.830
Pressure drop system side	kPa	22	24	24	15	18	13	20	26	14
<b>Heating performance 40 °C / 45 °C (2)</b>										
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	97,50	113,60	120,00	130,60	158,70	178,00	192,80	214,80	235,80
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	42.220	50.823	55.848	63.486	72.879	81.140	93.796	105.337	113.866
Pressure drop system side	kPa	27	31	27	23	20	20	22	22	19
Water flow rate source side	l/h	55.079	66.427	73.525	84.200	95.108	105.386	123.347	139.074	149.713
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
<b>Model: °</b>													
<b>Cooling performance 12 °C / 7 °C (1)</b>													
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	171,40	192,30	214,80	244,80	273,50	311,40	345,90	396,40	406,60	467,50	518,50	590,50
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	102.932	115.945	135.099	150.773	177.155	200.809	223.021	249.142	267.794	296.179	326.287	360.505
Pressure drop source side	kPa	61	55	46	30	45	50	36	51	11	24	23	22
Water flow rate system side	l/h	87.066	98.181	114.326	126.885	149.451	170.077	188.509	210.265	227.441	251.516	275.910	303.500
Pressure drop system side	kPa	45	35	33	41	32	44	34	43	26	31	29	17
<b>Heating performance 40 °C / 45 °C (2)</b>													
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	218,40	240,80	264,40	305,70	343,30	389,60	431,10	497,80	506,50	582,10	642,50	732,00
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	97.998	109.633	127.054	142.602	167.814	189.909	210.585	237.978	252.762	280.014	307.509	340.678
Pressure drop system side	kPa	56	50	41	27	41	45	32	46	10	22	20	20
Water flow rate source side	l/h	129.450	145.407	168.838	187.634	221.376	252.011	278.815	314.719	336.930	373.381	407.768	449.226
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
<b>Model: °</b>					
<b>Cooling performance 12 °C / 7 °C (1)</b>					
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	396,00	475,40	524,80	588,00
EER	W/W	5,40	5,40	5,20	5,07
Water flow rate source side	l/h	265.488	293.277	318.297	354.161
Pressure drop source side	kPa	44	39	34	41
Water flow rate system side	l/h	225.045	248.539	268.020	297.184
Pressure drop system side	kPa	27	29	22	26
<b>Heating performance 40 °C / 45 °C (2)</b>					
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	493,30	591,90	650,30	728,90
COP	W/W	4,75	4,75	4,63	4,53
Water flow rate system side	l/h	250.744	277.455	300.382	335.030
Pressure drop system side	kPa	39	35	30	37
Water flow rate source side	l/h	333.379	368.962	396.107	439.877
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
<b>Model: °</b>										
<b>SEER - 12/7 (EN14825: 2018)</b>										
SEER	W/W	8,67	8,82	8,87	8,92	9,10	9,10	9,10	9,13	9,11
Seasonal efficiency	%	343,60	349,90	351,60	353,90	361,00	361,00	360,80	362,20	361,40
Water Regulation (1)	type	VWVO / VW								
<b>SEPR - (EN 14825: 2018)</b>										
SEPR	W/W	9,70	9,80	9,60	9,30	9,80	9,40	9,50	9,20	9,10
Water Regulation (1)	type	FWVO / FW								
<b>Performance in average ambient conditions (average) - 55 °C (2)</b>										
Pdesignh	kW	300,00	368,00	399,00	-	-	-	-	-	-
SCOP	W/W	5,25	5,25	5,33	-	-	-	-	-	-
ηsh	%	202,00	202,00	205,00	-	-	-	-	-	-
Water Regulation (1)	type	FWVO / FW	FWVO / FW	FWVO / FW	-	-	-	-	-	-

(1) VWVO - variable water flow rate/variable outlet temperature; FWVO - fixed water flow rate/variable outlet temperature; VWFO - variable water flow rate/fixed outlet temperature; FWFO - fixed water flow rate/fixed outlet temperature.

(2) Efficiencies for average temperature applications (55 °C)

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
<b>Model: °</b>														
<b>SEER - 12/7 (EN14825: 2018)</b>														
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
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	335,70	337,90	329,70	326,00
	A	%	340,80	345,40	342,70	347,30	346,20	347,80	355,70	349,10	355,80	353,70	354,50	349,30
Water Regulation (1)	°	type	-	-	-	-	-	-	-	-	VWVO / VW	VWVO / VW	VWVO / VW	VWVO / VW
	A	type	VWVO / VW											
<b>SEPR - (EN 14825: 2018)</b>														
SEPR	°	W/W	-	-	-	-	-	-	-	-	-	8,80	8,70	8,60
	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
Water Regulation (1)	°	type	-	-	-	-	-	-	-	-	-	FWVO / FW	FWVO / FW	FWVO / FW
	A	type	FWVO / FW											

(1) VW/VO - variable water flow rate/variable outlet temperature; FW/VO - fixed water flow rate/variable outlet temperature; VW/FO - variable water flow rate/fixed outlet temperature; FW/FO - fixed water flow rate/fixed outlet temperature.

### Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603	
<b>Model: °</b>																								
<b>Electric data</b>																								
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.063,0	1.177,0	1.391,0	1.583,0
	A	A	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	1.124,0	1.287,0	1.063,0	1.177,0	1.391,0	1.583,0		

### 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
<b>Model: H</b>											
<b>Cooling performance 12 °C / 7 °C (1)</b>											
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	118,7
Cooling total input current		A	75,60	87,00	98,70	109,40	123,30	137,50	158,20	180,70	197,00
EER		W/W	5,28	5,14	5,04	5,09	4,85	4,81	5,00	4,95	5,00
Water flow rate source side		l/h	44.780	52.069	59.378	67.087	73.813	82.562	99.166	111.592	122.023
Pressure drop source side		kPa	30	33	29	26	22	21	24	24	22
Water flow rate system side		l/h	37.844	43.840	49.813	56.306	61.471	68.609	82.982	93.228	102.044
Pressure drop system side		kPa	22	24	24	15	18	13	20	26	15
<b>Heating performance 40 °C / 45 °C (2)</b>											
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	114,1	129,3	134,4
Heating total input current		A	91,50	104,60	118,40	130,30	147,70	165,00	185,60	210,60	221,50
COP		W/W	4,77	4,71	4,64	4,73	4,53	4,48	4,71	4,68	4,89
Water flow rate system side		l/h	42.056	49.149	55.968	63.270	69.832	77.853	93.424	105.035	114.165
Pressure drop system side		kPa	27	29	26	23	19	19	21	21	19
Water flow rate source side		l/h	55.990	65.269	74.006	83.856	91.549	101.626	123.761	139.042	152.399
Pressure drop source side		kPa	48	54	54	33	40	28	44	57	33

(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
<b>Model: H</b>													
<b>Cooling performance 12 °C / 7 °C (1)</b>													
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	114,6	130,0	147,0	170,3	191,2	214,5	243,6	249,2	279,1	314,1	360,9
Cooling total input current	A	181,90	204,60	224,90	248,00	290,70	326,50	369,60	410,50	449,00	490,90	555,60	650,80
EER	W/W	5,11	5,07	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	104.337	118.851	135.775	151.933	177.734	201.586	222.077	249.762	267.707	296.196	325.814	363.151
Pressure drop source side	kPa	61	57	48	30	46	50	35	53	11	24	23	25
Water flow rate system side	l/h	87.940	99.961	114.232	127.463	149.434	169.953	186.288	209.453	225.564	249.326	273.015	302.384
Pressure drop system side	kPa	46	36	33	41	32	43	33	41	25	31	28	17
<b>Heating performance 40 °C / 45 °C (2)</b>													
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	120,7	137,6	154,1	178,0	203,8	229,2	255,2	289,6	297,5	333,5	372,6	425,6
Heating total input current	A	215,90	242,80	263,40	295,10	343,90	385,10	434,20	478,80	529,70	579,20	651,40	763,00
COP	W/W	4,67	4,66	4,74	4,62	4,72	4,75	4,71	4,77	4,86	4,80	4,72	4,62
Water flow rate system side	l/h	97.770	111.434	126.975	142.910	167.067	189.246	208.586	239.997	251.090	277.882	305.657	341.230
Pressure drop system side	kPa	54	50	42	26	40	44	31	49	9	21	20	22
Water flow rate source side	l/h	130.239	148.043	169.179	189.222	222.144	252.647	276.929	320.765	334.856	370.130	405.298	448.896
Pressure drop source side	kPa	101	79	73	91	70	94	72	97	55	67	63	38

(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
<b>Model: H</b>					
<b>Cooling performance 12 °C / 7 °C (1)</b>					
Cooling capacity	kW		1298,7	1433,8	1544,1
Input power	kW		252,6	280,4	312,8
Cooling total input current	A		449,20	490,80	553,20
EER	W/W		5,14	5,11	4,94
Water flow rate source side	l/h		265.376	293.300	317.856
Pressure drop source side	kPa		43	39	34
Water flow rate system side	l/h		223.228	246.460	265.406
Pressure drop system side	kPa		26	29	22
<b>Heating performance 40 °C / 45 °C (2)</b>					
Heating capacity	kW		1433,5	1584,7	1718,0
Input power	kW		300,7	334,3	369,6
Heating total input current	A		530,00	579,00	649,00
COP	W/W		4,77	4,74	4,65
Water flow rate system side	l/h		249.013	275.290	298.460
Pressure drop system side	kPa		39	35	30
Water flow rate source side	l/h		331.388	365.876	394.002
Pressure drop source side	kPa		59	64	49

(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
<b>Model: H</b>										
<b>SEER - 12/7 (EN14825: 2018)</b>										
SEER	W/W	7,93	7,98	7,69	7,94	7,49	7,62	7,83	7,93	8,02
Seasonal efficiency	%	314,30	316,20	304,40	314,40	296,40	301,70	310,30	314,20	317,80
Water Regulation (1)	type	VWVO / VW								
<b>SEPR - (EN 14825: 2018)</b>										
SEPR	W/W	9,10	9,00	8,70	8,90	8,40	8,40	8,80	8,60	8,90
Water Regulation (1)	type	FWVO / FW								
<b>Performance in average ambient conditions (average) - 55 °C (2)</b>										
Pdesignh	kW	296,00	348,00	395,00	-	-	-	-	-	-
SCOP	W/W	5,45	5,43	5,23	-	-	-	-	-	-
ηsh	%	210,00	209,00	201,00	-	-	-	-	-	-
Water Regulation (1)	type	FWVO / FW	FWVO / FW	FWVO / FW	-	-	-	-	-	-

(1) VWVO - variable water flow rate/variable outlet temperature; FWVO - fixed water flow rate/variable outlet temperature; VWFO - variable water flow rate/fixed outlet temperature; FWFO - fixed water flow rate/fixed outlet temperature.

(2) Efficiencies for average temperature applications (55 °C)

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
<b>Model: H</b>														
<b>SEER - 12/7 (EN14825: 2018)</b>														
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
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	287,70	286,90	287,60	281,60
	A	%	294,90	295,70	300,50	291,40	301,00	304,50	309,30	298,90	302,40	297,70	302,90	295,00
Water Regulation (1)	°	type	-	-	-	-	-	-	-	-	VWVO / VW	VWVO / VW	VWVO / VW	VWVO / VW
	A	type	VWVO / VW											
<b>SEPR - (EN 14825: 2018)</b>														
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
Water Regulation (1)	°	type	-	-	-	-	-	-	-	-	FWVO / FW	FWVO / FW	FWVO / FW	FWVO / FW
	A	type	FWVO / FW											

(1) VW/VO - variable water flow rate/variable outlet temperature; FW/VO - fixed water flow rate/variable outlet temperature; VW/FO - variable water flow rate/fixed outlet temperature; FW/FO - fixed water flow rate/fixed outlet temperature.

## Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603	
<b>Model: H</b>																								
<b>Electric data</b>																								
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	853,0	939,0	1.047,0	1.178,0
	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	1.047,0	1.178,0	1.178,0
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.179,0	1.297,0	1.527,0	1.737,0
	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	1.002,0	1.198,0	1.357,0	1.179,0	1.297,0	1.527,0	1.737,0	

## 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
<b>Model: °</b>											
<b>Cooling performance 12 °C / 7 °C - gas R1234ze (1)</b>											
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	92,00	108,00	115,00	128,00	151,00	168,90	184,00	206,00	227,00
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	34.021	39.713	44.127	50.189	56.115	62.473	75.211	84.731	89.274
Pressure drop evaporator side		kPa	17	20	19	12	15	11	17	21	12
<b>Length of refrigerant lines from/to 0 - 10 m</b>											
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
<b>Model: °</b>														
<b>Cooling performance 12 °C / 7 °C - gas R1234ze (1)</b>														
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	207,00	229,00	256,00	293,00	327,00	370,00	411,00	471,00	488,00	555,00	616,00	700,00
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	77.982	87.695	101.893	113.381	131.535	153.062	167.617	186.047	202.720	226.251	249.032	270.431
Pressure drop evaporator side		kPa	36	28	26	33	27	35	26	33	20	26	25	14
<b>Length of refrigerant lines from/to 0 - 10 m</b>														
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
<b>Model: °</b>					
<b>Cooling performance 12 °C / 7 °C - gas R1234ze (1)</b>					
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	489,00	556,00	615,00	700,00
EER	W/W	3,94	3,97	3,84	3,70
Evaporator water flow rate	l/h	197.057	219.704	238.518	260.630
Pressure drop evaporator side	kPa	20	23	17	21
<b>Length of refrigerant lines from/to 0 - 10 m</b>					
Gas line (C1)	∅	76,0	88,9	88,9	88,9
Gas line (C2)	∅	76,0	88,9	88,9	88,9
Gas line (C3)	∅	76,0	88,9	88,9	88,9
Liquid line (C1)	∅	54,0	54,0	54,0	54,0
Liquid line (C2)	∅	54,0	54,0	54,0	54,0
Liquid line (C3)	∅	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
<b>Model: H</b>										
<b>Cooling performance 12 °C / 7 °C - gas R1234ze (1)</b>										
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	92,00	108,00	115,00	128,00	151,00	168,90	184,00	206,00	227,00
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	34.021	39.713	44.127	50.189	56.115	62.473	75.211	84.731	89.274
Pressure drop evaporator side	kPa	17	20	19	12	15	11	17	21	12
<b>Length of refrigerant lines from/to 0 - 10 m</b>										
Gas line (C1)	∅	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	∅	-	-	-	-	-	-	-	-	-
Gas line (C3)	∅	-	-	-	-	-	-	-	-	-
Liquid line (C1)	∅	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	∅	-	-	-	-	-	-	-	-	-
Liquid line (C3)	∅	-	-	-	-	-	-	-	-	-

(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
<b>Model: H</b>													
<b>Cooling performance 12 °C / 7 °C - gas R1234ze (1)</b>													
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	207,00	229,00	256,00	293,00	327,00	370,00	411,00	471,00	488,00	555,00	616,00	700,00
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	77.982	87.695	101.893	113.381	131.535	153.062	167.617	186.047	202.720	226.251	249.032	270.431
Pressure drop evaporator side	kPa	36	28	26	33	27	35	26	33	20	26	25	14
<b>Length of refrigerant lines from/to 0 - 10 m</b>													
Gas line (C1)	∅	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)	∅	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)	∅	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	∅	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)	∅	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)	∅	-	-	-	-	-	-	-	-	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
<b>Model: H</b>					
<b>Cooling performance 12 °C / 7 °C - gas R1234ze (1)</b>					
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	489,00	556,00	615,00	700,00
EER	W/W	3,94	3,97	3,84	3,70
Evaporator water flow rate	l/h	197.057	219.704	238.518	260.630
Pressure drop evaporator side	kPa	20	23	17	21
<b>Length of refrigerant lines from/to 0 - 10 m</b>					
Gas line (C1)	∅	76,0	88,9	88,9	88,9
Gas line (C2)	∅	76,0	88,9	88,9	88,9
Gas line (C3)	∅	76,0	88,9	88,9	88,9
Liquid line (C1)	∅	54,0	54,0	54,0	54,0
Liquid line (C2)	∅	54,0	54,0	54,0	54,0
Liquid line (C3)	∅	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

**GENERAL TECHNICAL DATA**

**Refrigerant circuit**

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
<b>Model: °</b>										
<b>Compressor</b>										
Type	type	Screw								
Compressor regulation	type									
Number	no.	1	1	1	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1	1	1	1
Refrigerant	type	R1234ze(E)								
Total refrigerant charge (1)	kg	59,00	57,00	72,00	66,00	61,00	85,00	81,00	110,00	104,00
Potential global heating (GWP)		1.37								
Equivalent CO <sub>2</sub>	tCO <sub>2</sub> eq	0,08	0,08	0,10	0,09	0,08	0,12	0,11	0,15	0,14

(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
<b>Model: °</b>													
<b>Compressor</b>													
Type	°A type	Screw											
Compressor regulation	°A type												
Number	° no.	-	-	-	-	-	-	-	-	3	3	3	3
	A no.	2	2	2	2	2	2	2	2	3	3	3	3
Circuits	° no.	-	-	-	-	-	-	-	-	3	3	3	3
	A no.	2	2	2	2	2	2	2	2	3	3	3	3
Refrigerant	° type	-	-	-	-	-	-	-	-	R1234ze(E)	R1234ze(E)	R1234ze(E)	R1234ze(E)
	A type	R1234ze(E)											
Total refrigerant charge (1)	° kg	-	-	-	-	-	-	-	-	321,00	345,00	408,00	471,00
	A kg	100,00	106,00	162,00	142,00	140,00	246,00	248,00	242,00	318,00	312,00	330,00	360,00
Potential global heating (GWP)	°	1.37											
Equivalent CO <sub>2</sub>	° tCO <sub>2</sub> eq	-	-	-	-	-	-	-	-	0,44	0,47	0,56	0,65
	A tCO <sub>2</sub> eq	0,14	0,15	0,22	0,19	0,19	0,34	0,34	0,33	0,44	0,43	0,45	0,49

(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		1101	1251	1401	1601	1801	2101	2401	2801	3201
<b>Model: H</b>										
<b>Compressor</b>										
Type	type	Screw								
Compressor regulation	type									
Number	no.	1	1	1	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1	1	1	1
Refrigerant	type	R1234ze(E)								
Total refrigerant charge (1)	kg	59,00	57,00	72,00	66,00	61,00	85,00	81,00	110,00	-
Potential global heating (GWP)		1.37								
Equivalent CO <sub>2</sub>	tCO <sub>2</sub> eq	0,08	0,08	0,10	0,09	0,08	0,12	0,11	0,15	-

(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
<b>Model: H</b>														
<b>Compressor</b>														
Type	°A	type	Screw											
Compressor regulation	°A	type												
Number	°	no.	-	-	-	-	-	-	-	-	3	3	3	3
	A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Circuits	°	no.	-	-	-	-	-	-	-	-	3	3	3	3
	A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Refrigerant	°	type	-	-	-	-	-	-	-	-	R1234ze(E)	R1234ze(E)	R1234ze(E)	R1234ze(E)
	A	type	R1234ze(E)											
Total refrigerant charge (1)	°	kg	-	-	-	-	-	-	-	-	321,00	345,00	408,00	471,00
	A	kg	100,00	106,00	162,00	142,00	140,00	246,00	248,00	242,00	318,00	312,00	330,00	360,00
Potential global heating (GWP)	°		-	-	-	-	-	-	-	-	1,37	1,37	1,37	1,37
	A		1,37											
Equivalent CO <sub>2</sub>	°	tCO <sub>2</sub> eq	-	-	-	-	-	-	-	-	0,44	0,47	0,56	0,65
	A	tCO <sub>2</sub> eq	0,14	0,15	0,22	0,19	0,19	0,34	0,34	0,33	0,44	0,43	0,45	0,49

(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.

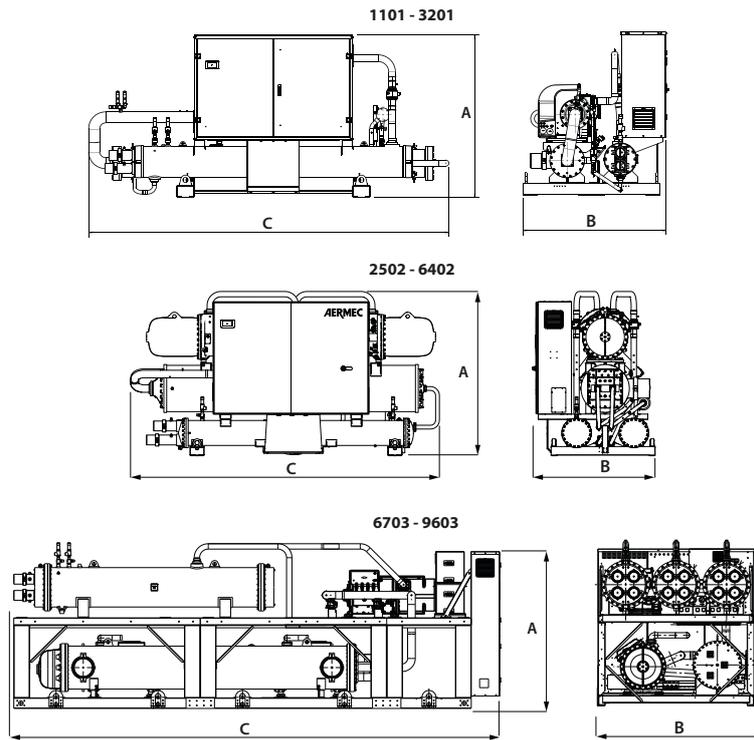
## SOUND DATA

### 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
<b>Refrigerant gas: °</b>																						
<b>Standard equipment</b>																						
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
<b>Silenced equipment</b>																						
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



Size		1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
<b>Model: H, °</b>																						
<b>Dimensions and weights - standard configuration</b>																						
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
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1510	1560	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
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.740	9.680	9.900	10.000
	A	kg	2.020	2.030	2.230	2.410	2.450	2.670	3.090	3.710	3.530	3.980	3.570	5.160	5.220	5.710	6.440	6.680	6.770	9.730	11.440	11.980
<b>Dimensions and weights - quiet configuration</b>																						
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
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
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
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.270	10.240	10.510	10.610
	A	kg	2.180	2.190	2.390	2.570	2.610	2.830	3.280	4.020	3.720	4.290	3.760	5.500	5.560	6.050	6.810	7.080	7.170	10.260	12.000	12.590

■ For the sizes of D-T-E versions please contact the factory.

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.

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