

# 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 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.

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.

**AERBACP:** Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

**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.

**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, 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	°	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AERBACP	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AERBACP	°	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AERNET	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AERSET	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AERSET	°	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
MULTICHILLER_EVO	°	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
MULTICHILLER_EVO	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
MULTICHILLER_EVO	°	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PGD1	°	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	-	-	-	-	-	-	-	RIFWF12502	-	RIFWF12802	-

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>
	<b>Size</b>
<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>
°	Standard condensation
H	Optimised for high 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>
°	Standard without hood
K	Super low noise with hood (2)
L	Silenced with hood

Field	Description
<b>13</b>	<b>Heat recovery</b>
°	Without heat recovery
D	With desuperheater (3)
T	With total recovery (3)
<b>14</b>	<b>Evaporator</b>
°	Standard
E	Evaporating unit
<b>15</b>	<b>Power supply</b>
°	400V ~ 3 50Hz with fuses
8	400V ~ 3 50Hz with magnet circuit breakers (4)
<b>16</b>	<b>Refrigerant gas (5)</b>
°	R1234ze
G	R515B

(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	74,0	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
<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	97,0	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
<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	171,0	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
<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	218,0	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
<b>Model: °</b>					
<b>Cooling performance 12 °C / 7 °C (1)</b>					
Cooling capacity	kW		1309,2	1445,9	1729,0
Input power	kW		242,2	267,6	340,9
Cooling total input current	A		396,0	475,0	588,0
EER	W/W		5,40	5,40	5,07
Water flow rate source side	l/h		265488	293277	354161
Pressure drop source side	kPa		44	39	41
Water flow rate system side	l/h		225045	248539	297184
Pressure drop system side	kPa		27	29	26
<b>Heating performance 40 °C / 45 °C (2)</b>					
Heating capacity	kW		1443,5	1597,2	1928,5
Input power	kW		304,0	336,2	425,5
Heating total input current	A		493,0	592,0	729,0
COP	W/W		4,75	4,75	4,53
Water flow rate system side	l/h		250744	277455	335030
Pressure drop system side	kPa		39	35	37
Water flow rate source side	l/h		333379	368962	439877
Pressure drop source side	kPa		59	64	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) (1)</b>										
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
<b>SEPR - (EN 14825: 2018) High temperature (2)</b>										
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
<b>Model: °</b>													
<b>SEER - 12/7 (EN14825: 2018) (1)</b>													
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%
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
<b>SEPR - (EN 14825: 2018) High temperature (2)</b>													
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

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.  
 (2) Calculation performed with VARIABLE water flow rate.

Size			1101		1251		1401
<b>Model: °</b>							
<b>UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)</b>							
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		202		205

(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	
<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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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
<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	118,6
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
<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	114,2	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
<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	114,5	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
<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		120,6	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
<b>Model: H</b>					
<b>Cooling performance 12 °C / 7 °C (1)</b>					
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
<b>Heating performance 40 °C / 45 °C (2)</b>					
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
<b>Model: H</b>										
<b>SEER - 12/7 (EN14825: 2018) (1)</b>										
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
<b>SEPR - (EN 14825: 2018) High temperature (2)</b>										
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	
<b>Model: H</b>														
<b>SEER - 12/7 (EN14825: 2018) (1)</b>														
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
<b>SEPR - (EN 14825: 2018) High temperature (2)</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

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.  
 (2) Calculation performed with VARIABLE water flow rate.

Size		1101	1251	1401	
<b>Model: H</b>					
<b>UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)</b>					
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	209	201

(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	
<b>Model: H</b>																							
<b>Electric data</b>																							
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	23,0	23,0	23,0	23,0	23,0	23,0	23,0	23,0	23,0	23,0	23,0	23,0	23,0	23,0

## 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	92,0	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
<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: °</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	207,0	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
<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 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		489,0	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
<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	92,0	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)	∅	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	207,0	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)	∅	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	489,0	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)	∅	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

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
<b>Compressor</b>																							
Type	°A	type	Screw																				
Compressor regulation	°A	Type	1	1	1	1	1	1	1	1/1	1	1/1	1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
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
<b>System side heat exchanger</b>																							
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																				
<b>Source side heat exchanger</b>																							
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.

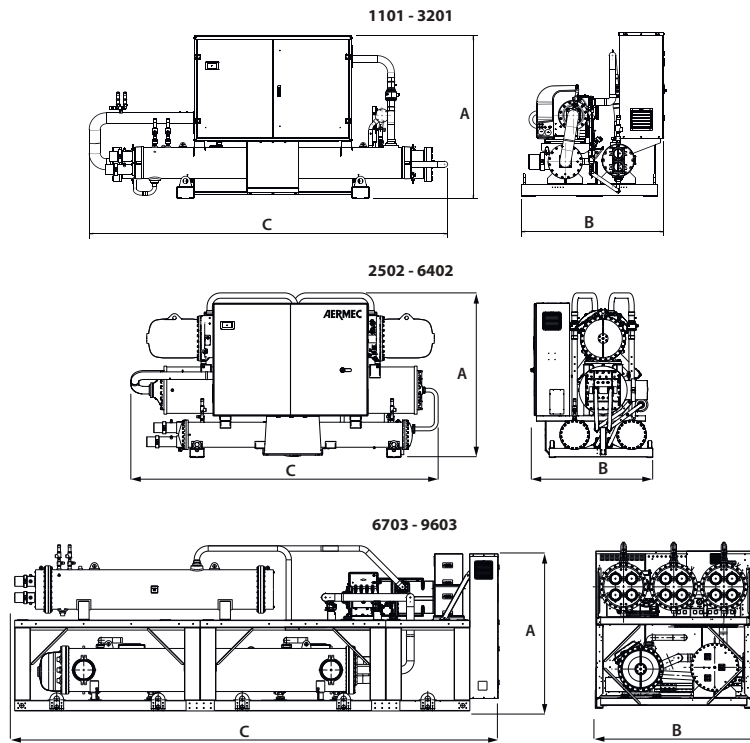
## SOUND DATA

### 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
<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	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	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
<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	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.

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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