

WFI

Water cooled heat pump reversible water side

Cooling capacity 291 ÷ 2406 kW
Heating capacity 326 ÷ 2664 kW

- Condenser side hot water production up to 60°C.
- Production of negative chilled water down to -8°C.
- Available also with R513A refrigerant



AERMEC AI



DESCRIPTION

Units for internal installation offering chilled/hot water, designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

FEATURES

Operating field

Production of chilled water up to 16°C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 60°C depending on the model.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10°C.

Mono, bi-tri circuit unit

Unit with 1-2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

All units are equipped with an inverter compressor combined with an on-off compressor (two-circuit sizes) or two on/off compressors (three-circuit sizes) with R134a refrigerant.

The R513A (XP10) refrigerant with this type of gas is also available on the configurator. On average, the units have a yield > 2% and an EER < 3% compared to the same size with R134a.

For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO₅

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 adjustment includes complete management of the alarms and their log.

Adjustment includes complete management of the alarms and their log.

The possibility to control 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 tablet 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.

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.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	*	*	*	*	*	*	*		*		*										
AER485P1 x 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	°																		*	*	*	*
AERNET	A	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MULTICHILLER-EVO	°																		*	*	*	*
MULTICHILLER-EVO	A	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PGD1	°																		*	*	*	*
PGD1	A	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SGD	°																		*	*	*	*
SGD	A	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Antivibration

Version	Set-up	Heat recovery	1101	1251	1401
°	°,K,L	°,D,T	-	-	-
A	°	°	AVX680	AVX680	AVX681
A	K	°	AVX681	AVX681	AVX688
A	L	°	AVX681	AVX681	AVX681
A	°,K,L	D,T	-	-	-
Version	Set-up	Heat recovery	1601	1801	2101
°	°,K,L	°,D,T	-	-	-
A	°	°	AVX687	AVX687	AVX682
A	K	°	AVX682	AVX682	AVX685
A	L	°	AVX682	AVX682	AVX682
A	°,K,L	D,T	-	-	-
Version	Set-up	Heat recovery	2401	2502	2801
°	°,K,L	°,D,T	-	-	-
A	°	°	AVX685	AVX673	AVX683
A	K	°	AVX683	Contact us.	AVX683
A	L	°	AVX683	AVX674	AVX683
A	°,L	D,T	-	AVX674	-
A	K	D,T	-	Contact us.	-
Version	Set-up	Heat recovery	2802	3201	3202
°	°,K,L	°,D,T	-	-	-
A	°,L	°	AVX674	AVX683	AVX679
A	K	°	Contact us.	AVX683	Contact us.
A	°,L	D,T	AVX674	-	AVX679
A	K	D,T	Contact us.	-	Contact us.
Version	Set-up	Heat recovery	3602	4202	4802
°	°,K,L	°,D,T	-	-	-
A	°	°,D	AVX679	AVX679	AVX678
A	L	°	AVX679	AVX679	AVX678
A	K	°,D,T	Contact us.	Contact us.	Contact us.
A	°	T	AVX679	AVX678	AVX678
A	L	D,T	AVX679	AVX678	AVX678
Version	Set-up	Heat recovery	5602	6402	6703
°	°,K,L	°,D,T	-	-	Contact us.
A	°,L	°,D,T	AVX678	AVX678	Contact us.
A	K	°,D,T	Contact us.	Contact us.	Contact us.
Version	Set-up	Heat recovery	7203	8403	9603
°	°,K,L	°,D,T	Contact us.	Contact us.	Contact us.
A	°,K,L	°,D,T	Contact us.	Contact us.	Contact us.

- not available

Power factor correction

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	-	-	-	-	-	-	-	RIFWFI2502	-	RIFWFI2802	-

The accessory cannot be fitted on the configurations indicated with -

A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603
A	RIFWFI3202	RIFWFI3602	RIFWFI4202	RIFWFI4802	RIFWFI5602	RIFWFI6402	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603

A grey background indicates the accessory must be assembled in the factory

For the size of the units with the RIF accessory we ask you to contact the headquarters.

Isolating kit

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15	ISG1	ISG15

A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	ISG5	ISG5	ISG6	ISG6
A	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	WFI
4,5,6,7	Size 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
8	Model
H	Optimised for high condensation
°	Standard condensation
9	Version
°	Standard (1)
A	High efficiency
10	Operating field
X	Electronic thermostatic expansion valve (2)
Z	Double electronic thermostatic for low temperature (3)
11	Set-up
K	Super silenced
L	Silenced with hood
°	Standard without hood
12	Heat recovery
D	With desuperheater (4)
T	With total recovery (4)
°	Without heat recovery
13	Evaporator
°	Standard
14	Power supply
8	400V ~ 3 50Hz with magnet circuit breakers (5)
°	400V ~ 3 50Hz with fuses
15	Refrigerant gas
G	R513A (XP10) (6)
°	R134a

(1) Only for sizes from 6703 to 9603

(2) Water produced from 0 °C ÷ 16 °C

(3) Water produced from -8 °C up to 10 °C

(4) Not available for the condenserless "E"

(5) Not available for 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2801, 3201 size

(6) For further details refer to the technical documentation or to the Magellano selection program.

MODEL PERFORMANCE DATA (°) - FOR TEMPERATURES WATER PRODUCED UP TO +55°C

WFI 1101 - 3201 - model (°) version A - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	291,4	339,7	388,2	433,5	496,2	552,0	635,3	714,7	783,3
Input power	kW	55,9	66,5	75,6	85,1	98,6	111,6	122,5	138,9	148,8
Cooling total input current	A	94,90	110,80	124,70	140,30	160,70	181,20	198,60	222,50	241,00
EER	W/W	5,21	5,11	5,13	5,09	5,03	4,95	5,19	5,15	5,26
Water flow rate source side	l/h	59.350	69.394	79.271	88.730	101.760	113.566	129.637	145.972	159.590
Pressure drop source side	kPa	42	41	36	32	30	30	33	33	31
Water flow rate system side	l/h	50.123	58.428	66.772	74.535	85.331	94.907	109.229	122.894	134.668
Pressure drop system side	kPa	38	43	45	27	32	24	35	45	26
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	326,0	387,7	437,0	490,2	566,3	631,1	707,9	798,2	873,1
Input power	kW	74,3	88,1	97,5	106,3	126,9	143,0	156,9	178,5	189,7
Heating total input current	A	124,60	144,50	157,90	173,20	204,10	230,30	251,30	281,50	304,50
COP	W/W	4,39	4,40	4,48	4,61	4,46	4,41	4,51	4,47	4,60
Water flow rate system side	l/h	56.587	67.319	75.890	85.131	98.344	109.614	122.953	138.630	151.661
Pressure drop system side	kPa	39	39	33	29	28	28	30	29	28
Water flow rate source side	l/h	74.024	88.235	99.938	112.439	128.897	142.918	161.620	182.106	199.956
Pressure drop source side	kPa	83	98	101	61	74	54	76	98	57

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 2502 - 9603 - model (°) version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	670,0	757,4	889,1	1002,3	1143,6	1304,6	1441,8	1621,2	1771,1	1940,6	2167,0	2406,5
Input power	kW	127,4	144,9	168,9	192,8	218,4	244,5	275,3	309,9	329,2	362,0	410,0	458,2
Cooling total input current	A	214,20	243,80	276,80	315,10	351,10	399,00	446,20	496,50	527,00	596,60	666,90	750,80
EER	W/W	5,26	5,23	5,26	5,20	5,24	5,34	5,24	5,23	5,38	5,36	5,29	5,25
Water flow rate source side	l/h	136.129	154.084	180.866	204.404	232.973	264.813	293.658	330.152	359.034	393.872	440.716	490.182
Pressure drop source side	kPa	55	58	48	46	44	47	48	48	38	31	32	40
Water flow rate system side	l/h	115.215	130.225	152.866	172.295	196.591	224.275	247.834	278.670	304.461	333.577	372.486	413.608
Pressure drop system side	kPa	53	43	38	27	31	44	31	39	61	54	57	33
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	746,2	839,5	979,7	1112,5	1270,4	1441,8	1597,0	1815,3	1951,6	2145,2	2391,0	2664,3
Input power	kW	165,1	183,8	210,4	242,5	276,5	310,2	346,1	394,1	419,0	459,6	518,3	573,6
Heating total input current	A	272,90	305,30	340,70	393,50	440,60	499,30	556,20	623,50	656,50	742,70	826,40	930,70
COP	W/W	4,52	4,57	4,66	4,59	4,59	4,65	4,61	4,61	4,66	4,67	4,61	4,64
Water flow rate system side	l/h	129.578	145.788	170.162	193.225	220.670	250.442	277.422	315.345	339.051	372.698	415.418	462.891
Pressure drop system side	kPa	50	51	42	41	40	42	43	44	34	28	28	36
Water flow rate source side	l/h	171.302	192.864	225.753	254.786	291.203	332.319	366.559	417.106	451.025	495.203	550.498	612.203
Pressure drop source side	kPa	118	95	82	60	67	97	69	88	133	118	125	73

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 6703 - 9603 - model (°) version ° - gas R134a

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1723,4	1905,7	2114,5	2327,9
Input power	kW	331,7	366,9	409,8	463,6
Cooling total input current	A	522,40	592,40	659,20	743,60
EER	W/W	5,20	5,19	5,16	5,02
Water flow rate source side	l/h	350.768	387.913	431.371	476.493
Pressure drop source side	kPa	73	69	58	71
Water flow rate system side	l/h	296.246	327.572	363.441	400.118
Pressure drop system side	kPa	47	51	39	46
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1909,4	2114,9	2342,8	2593,9
Input power	kW	418,2	463,2	513,0	581,3
Heating total input current	A	650,80	737,50	816,80	921,70
COP	W/W	4,57	4,57	4,57	4,46
Water flow rate system side	l/h	331.680	367.403	407.019	450.652
Pressure drop system side	kPa	65	62	52	63
Water flow rate source side	l/h	438.855	486.287	537.130	592.236
Pressure drop source side	kPa	103	112	85	102

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
SEER - 12/7 (EN14825: 2018)																							
SEER	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,07	8,06	8,03	7,92
	A	W/W	8,50	8,66	8,65	8,80	8,78	8,83	8,75	8,56	8,86	8,58	8,95	8,62	8,58	8,52	8,58	8,66	8,68	8,65	8,60	8,59	8,64
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	319,80	319,20	318,20	313,60
	A	%	337,10	343,20	342,80	348,90	348,20	350,10	347,00	339,20	351,20	340,00	355,00	341,70	340,20	337,90	340,30	343,50	344,30	343,10	341,00	340,50	342,50
Water Regulation (1)	°	type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	VWVO / VW	VWVO / VW	VWVO / VW	VWVO / VW
	A	type																			VWVO / VW		
SEPR - (EN 14825: 2018)																							
SEPR	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,60	8,60	8,40	8,40
	A	W/W	9,40	9,40	9,30	8,70	9,30	8,90	9,10	9,10	9,00	9,00	8,90	8,90	8,80	8,90	8,80	8,90	8,90	9,00	8,80	8,60	8,80
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
Model: °																						
Gas R134a																						
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	862,9	965,5	1.077,5	1.211,4
	A	A	163,0	189,0	206,0	226,0	262,0	300,0	329,0	354,5	371,0	395,1	405,0	447,5	511,1	576,7	647,2	724,3	824,0	862,9	965,5	1.077,5
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.176,0	1.301,0	1.533,0	1.744,0
	A	A	23,0	23,0	23,0	23,0	23,0	23,0	506,0	23,0	550,0	23,0	666,0	730,0	889,0	982,0	1.179,0	1.355,0	1.176,0	1.301,0	1.533,0	1.744,0

MODEL PERFORMANCE DATA (H) - FOR TEMPERATURES WATER PRODUCED UP TO +60°C

WFI 1101 - 3201 - model (H) version A - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	294,7	338,4	389,7	436,1	479,8	540,5	637,9	703,6	781,8
Input power	kW	57,3	67,1	79,0	87,4	98,3	110,3	127,2	142,1	162,7
Cooling total input current	A	97,50	111,80	129,30	142,70	158,70	176,80	205,70	227,60	262,40
EER	W/W	5,15	5,05	4,94	4,99	4,88	4,90	5,02	4,95	4,80
Water flow rate source side	l/h	60.130	69.281	80.074	89.564	98.879	111.372	130.851	144.597	161.585
Pressure drop source side	kPa	44	41	37	32	30	30	33	32	33
Water flow rate system side	l/h	50.692	58.217	67.029	74.994	82.505	92.934	109.677	120.988	134.409
Pressure drop system side	kPa	39	44	46	26	32	24	35	43	27
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	325,5	376,9	434,9	486,7	538,4	604,0	709,5	783,3	871,3
Input power	kW	70,4	82,2	96,5	105,2	119,3	133,5	151,5	168,8	185,2
Heating total input current	A	118,00	134,60	155,10	170,00	190,00	212,20	241,30	265,20	295,10
COP	W/W	4,63	4,58	4,51	4,63	4,51	4,52	4,68	4,64	4,71
Water flow rate system side	l/h	56.513	65.431	75.521	84.523	93.497	104.898	123.224	136.049	151.346
Pressure drop system side	kPa	39	37	33	29	27	27	29	29	29
Water flow rate source side	l/h	74.998	86.674	99.584	111.688	122.874	137.657	163.575	180.444	200.734
Pressure drop source side	kPa	86	97	100	58	71	52	78	97	59

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 2502 - 9603 - model (H) version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	672,4	770,8	886,7	999,1	1145,7	1305,1	1454,0	1620,1	1770,5	1939,2	2161,5	2375,7
Input power	kW	132,4	153,1	173,5	195,9	224,6	254,6	288,9	327,3	341,6	376,7	435,1	482,5
Cooling total input current	A	225,70	257,20	285,00	316,10	364,30	415,10	475,10	543,00	567,00	620,50	714,70	806,40
EER	W/W	5,08	5,04	5,11	5,10	5,10	5,13	5,03	4,95	5,18	5,15	4,97	4,92
Water flow rate source side	l/h	137.384	157.768	181.226	204.349	234.273	266.548	297.970	332.858	360.998	396.033	443.977	488.997
Pressure drop source side	kPa	53	55	48	48	49	48	50	46	36	32	32	38
Water flow rate system side	l/h	115.641	132.532	152.452	171.756	196.959	224.366	249.941	278.496	304.349	333.335	371.531	408.313
Pressure drop system side	kPa	54	44	36	27	32	44	32	40	61	54	51	30
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	741,6	852,1	975,8	1106,1	1267,8	1441,2	1611,1	1800,9	1948,7	2138,6	2398,1	2642,8
Input power	kW	160,3	184,4	206,0	235,2	268,6	305,3	343,0	389,8	412,9	453,9	520,2	571,4
Heating total input current	A	267,70	305,20	333,80	376,20	430,90	489,60	558,10	637,80	668,90	732,10	837,90	945,40
COP	W/W	4,63	4,62	4,74	4,70	4,72	4,72	4,70	4,62	4,72	4,71	4,61	4,62
Water flow rate system side	l/h	128.783	147.970	169.486	192.116	220.216	250.335	279.872	312.842	338.539	371.554	416.652	459.154
Pressure drop system side	kPa	47	48	42	42	44	43	44	40	32	28	29	33
Water flow rate source side	l/h	171.266	196.282	225.782	254.976	292.792	333.536	371.554	414.003	451.814	494.844	551.546	606.152
Pressure drop source side	kPa	118	96	80	60	71	97	71	88	134	118	113	66

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 6703 - 9603 - model (H) version ° - gas R134a

Size		6703	7203	8403	9603
Model: H					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1706,6	1904,2	2109,2	2298,6
Input power	kW	343,5	381,7	434,3	486,5
Cooling total input current	A	561,30	616,30	704,70	796,10
EER	W/W	4,97	4,99	4,86	4,72
Water flow rate source side	l/h	349.811	390.073	434.460	475.234
Pressure drop source side	kPa	73	70	59	70
Water flow rate system side	l/h	293.360	327.313	362.530	395.080
Pressure drop system side	kPa	47	51	38	46
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1891,1	2108,3	2348,6	2571,3
Input power	kW	411,1	457,6	515,2	578,0
Heating total input current	A	662,20	727,00	826,20	933,40
COP	W/W	4,60	4,61	4,56	4,45
Water flow rate system side	l/h	328.503	366.257	408.016	446.727
Pressure drop system side	kPa	64	62	52	62
Water flow rate source side	l/h	435.501	485.905	538.185	586.506
Pressure drop source side	kPa	104	112	85	101

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size		1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																						
SEER - 12/7 (EN14825: 2018)																						
SEER	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,07	7,10	7,20	7,04
	A	W/W	7,75	7,85	7,49	7,80	7,51	7,74	7,79	7,53	7,94	7,50	7,97	7,61	7,46	7,62	7,67	7,76	7,53	7,52	7,47	7,50
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	279,70	281,00	284,80	278,60
	A	%	306,80	310,90	296,50	309,10	297,30	306,60	308,50	298,00	314,60	297,10	315,60	301,30	295,40	301,80	303,60	307,30	298,00	297,80	295,60	296,90
Water Regulation (1)	°	type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	VWVO	VWVO	VWVO	VWVO
	A	type	VWVO / VW																	/VW	/VW	/VW
SEPR - (EN 14825: 2018)																						
SEPR	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,40	8,30	8,20	8,10
	A	W/W	9,20	9,10	9,10	8,50	9,00	8,60	8,80	8,80	8,80	8,80	8,70	8,60	8,40	8,60	8,50	8,60	8,60	8,70	8,60	8,40
Water Regulation (1)	°	type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FWVO	FWVO	FWVO	FWVO
	A	type	FWVO / FW																	/FW	/FW	/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
Model: H																						
Gas R134a																						
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	954,0	1.052,0	1.180,0	1.290,0
	A	A	165,0	190,0	216,0	237,0	274,0	308,0	356,0	378,0	387,0	428,0	418,0	473,0	535,0	616,0	704,0	787,0	864,0	954,0	1.357,0	1.180,0
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.234,0	1.357,0	1.595,0	1.784,0
	A	A	23,0	23,0	23,0	23,0	23,0	23,0	507,0	23,0	560,0	23,0	676,0	742,0	897,0	1.009,0	1.203,0	1.359,0	1.234,0	1.052,0	1.595,0	1.784,0

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

Model performance data (°) - for condensing temperatures up to 55°C

Model output data - model WFI° - AE - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	261,4	307,5	351,6	393,3	441,4	493,3	571,6	642,9	693,1
Input power	kW	68,4	80,8	90,0	100,3	117,7	133,8	145,8	164,9	178,0
Cooling total input current	A	119,00	139,00	152,00	168,00	197,00	222,00	240,00	269,00	292,00
EER	W/W	3,82	3,81	3,91	3,92	3,75	3,69	3,92	3,90	3,89
Evaporator water flow rate	l/h	44.906	52.830	60.402	67.574	75.833	84.756	98.206	110.455	119.091
Pressure drop evaporator side	kPa	31	36	37	21	27	20	28	36	21
Length of refrigerant lines from/to 0 - 10 m										
Gas line (C1)	Ø	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-

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

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	603,1	688,5	797,4	899,3	1008,4	1169,8	1287,8	1439,2	1558,1	1742,4	1896,4	2110,0
Input power	kW	152,9	171,4	198,1	229,9	259,8	287,4	323,9	364,6	386,3	431,2	481,0	540,3
Cooling total input current	A	261,40	292,50	330,20	380,60	424,70	476,40	532,40	600,30	631,30	709,70	792,60	891,20
EER	W/W	3,94	4,02	4,03	3,91	3,88	4,07	3,98	3,95	4,03	4,04	3,94	3,91
Evaporator water flow rate	l/h	103.615	118.287	137.003	154.508	173.247	200.980	221.262	247.268	267.705	299.365	325.826	362.526
Pressure drop evaporator side	kPa	43	35	29	22	25	35	25	31	47	43	39	24
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

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

Model output data - model WFI° - °E - gas R134a

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1515,4	1689,7	1833,1	2021,9
Input power	kW	387,7	429,0	481,0	541,3
Cooling total input current	A	633,00	713,00	793,00	893,00
EER	W/W	3,91	3,94	3,81	3,74
Evaporator water flow rate	l/h	260.358	290.307	314.947	347.392
Pressure drop evaporator side	kPa	37	40	29	35
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

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

Model performance data (H) - for condensing temperatures up to 60°C

Model output data - model WFIH - AE - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	260,1	304,6	351,5	393,7	432,7	485,1	579,1	638,3	697,1
Input power	kW	65,4	76,0	88,4	97,7	111,1	123,1	143,8	158,6	176,5
Cooling total input current	A	113,00	129,00	148,00	162,00	180,00	200,00	235,00	257,00	290,00
EER	W/W	3,98	4,01	3,98	4,03	3,89	3,94	4,03	4,02	3,95
Evaporator water flow rate	l/h	44.694	52.328	60.399	67.637	74.335	83.339	99.495	109.670	119.762
Pressure drop evaporator side	kPa	31	35	37	21	26	19	29	36	21

Length of refrigerant lines from/to 0 - 10 m

Gas line (C1)	Ø	54,0	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-

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

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	602,3	690,5	794,5	897,8	1009,4	1177,8	1297,5	1436,1	1566,5	1750,8	1908,3	2101,3
Input power	kW	147,9	170,4	193,3	218,4	248,4	284,6	324,0	361,7	383,8	424,1	485,5	536,4
Cooling total input current	A	256,50	291,20	322,90	358,50	412,80	473,10	536,10	602,70	646,00	707,30	806,60	899,10
EER	W/W	4,07	4,05	4,11	4,11	4,06	4,14	4,01	3,97	4,08	4,13	3,93	3,92
Evaporator water flow rate	l/h	103.477	118.635	136.501	154.254	173.418	202.354	222.930	246.737	269.151	300.804	327.864	361.031
Pressure drop evaporator side	kPa	43	35	29	22	25	36	26	31	47	44	40	24

Length of refrigerant lines from/to 0 - 10 m

Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

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

Model output data - model WFIH - °E - gas R134a

Size		6703	7203	8403	9603
Model: H					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1524,4	1698,4	1844,7	2016,4
Input power	kW	383,7	425,2	483,3	533,7
Cooling total input current	A	645,80	709,00	803,30	895,10
EER	W/W	3,97	3,99	3,82	3,78
Evaporator water flow rate	l/h	261.912	291.802	316.947	346.444
Pressure drop evaporator side	kPa	38	40	29	35

Length of refrigerant lines from/to 0 - 10 m

Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

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

GENERAL TECHNICAL DATA

Size	1101 1251 1401 1601 1801 2101 2401 2502 2801 2802 3201 3202 3602 4202 4802 5602 6402 6703 7203 8403 9603																					
Compressor																						
Type	°A	type	Screw																			
Compressor regulation	°A	type	I	I	I	I	I	I	I	I+1	I	I+1	I	I+1	I+1	I+1	I+1	I+1	I+1	I+1	I+1	I+1
Number	°A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	3	3	3	3
Circuits	°A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	3	3	3	3
Refrigerant	°A	type	R134a																			
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
	A	kg	59,0	57,0	72,0	66,0	61,0	85,0	81,0	50,0	110,0	53,0	104,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
	A	kg	-	-	-	-	-	-	-	50,0	-	53,0	-	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0
Refrigerant load circuit 3 (1)	°A	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger																						
Type	°A	type	Shell and tube																			
Number	°A	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°A	Type	Grooved joints																			
Source side heat exchanger																						
Type	°A	type	Shell and tube																			
Number	°A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	3	3	3	3
Connections (in/out)	°A	Type	Grooved joints																			

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Sound data calculated with functioning in cooling mode - R134a gas

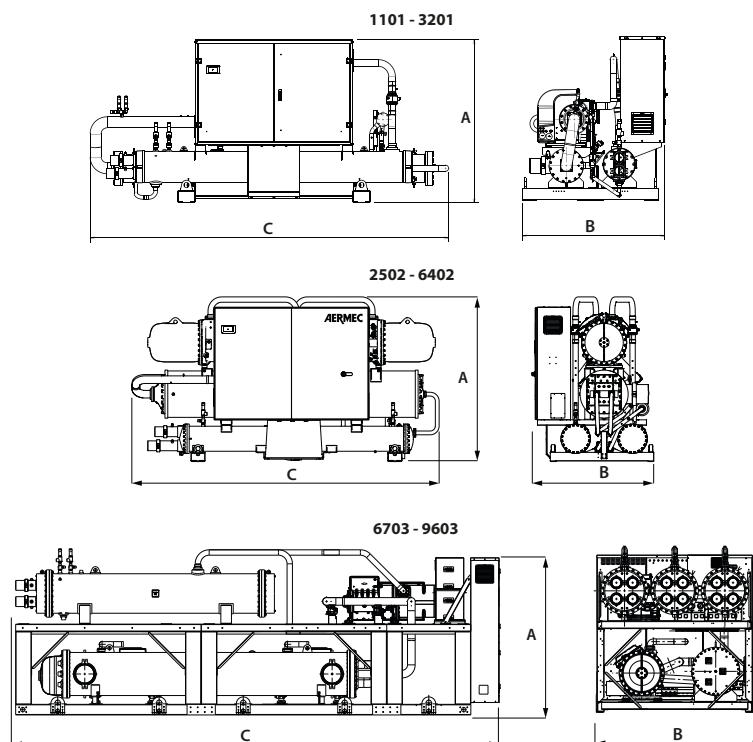
Size	1101 1251 1401 1601 1801 2101 2401 2502 2801 2802 3201 3202 3602 4202 4802 5602 6402 6703 7203 8403 9603																					
Model: H																						
Standard equipment																						
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99,5	100,6	101,0	102,0
	A	dB(A)	94,0	95,8	96,1	97,0	97,1	97,2	97,3	97,3	97,3	97,7	98,0	98,8	98,8	98,9	98,9	99,3	100,0	99,5	100,6	101,0
Silenced equipment																						
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	94,4	94,6	94,6	94,9
	A	dB(A)	86,1	88,0	88,2	89,1	89,2	89,3	89,3	89,5	89,3	90,0	89,8	91,6	91,9	92,7	92,4	92,5	92,6	94,4	94,6	94,6
Super silenced equipment																						
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91,5	91,6	91,6	91,9
	A	dB(A)	83,1	85,0	85,3	86,2	86,3	86,4	86,3	86,5	86,4	87,0	86,8	88,6	89,0	89,7	89,5	89,6	90,0	91,5	91,6	91,6

(1) Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

Size		1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																						
Standard equipment																						
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99,2	98,9	100,0	100,5
	A	dB(A)	94,0	95,8	96,1	97,0	97,1	97,2	97,3	96,9	97,3	97,4	98,0	97,9	98,0	98,8	98,8	98,6	98,9	99,2	98,9	100,0
Silenced equipment																						
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92,3	91,3	92,8	93,0
	A	dB(A)	86,1	88,0	88,2	89,1	89,2	89,3	89,3	89,3	89,6	89,8	90,3	90,5	91,5	91,1	91,2	91,3	92,3	91,3	92,8	93,0
Super silenced equipment																						
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89,4	88,4	89,8	90,0
	A	dB(A)	83,1	85,0	85,3	86,2	86,3	86,4	86,3	86,4	86,7	86,8	87,4	87,5	88,5	88,1	88,2	88,8	89,4	88,4	89,8	90,0

(1) Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

DIMENSIONS



Unit dimensions and weights °/H in standard configuration

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H, °																							
Dimensions and weights - standard configuration																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1510	1560	1610	1610	1610	1610	1610	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4380	4380	4395	4500	4580	4580	5650	5650	5650	5650
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	12.060

Unit dimensions and weights °/H in silenced configuration

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H, °																							
Dimensions and weights - quiet configuration																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	6840	6840	6840
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	12.670
Super silenced equipment dimensions and weights																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	5650	5650	5650
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.890	10.890	11.230	11.330
	A	kg	2.370	2.380	2.580	2.760	2.800	3.020	3.500	4.400	3.940	4.670	3.980	5.910	5.970	6.460	7.240	7.550	7.640	10.880	12.650	13.310	13.390

■ 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.

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