

WF 2512 - 9613

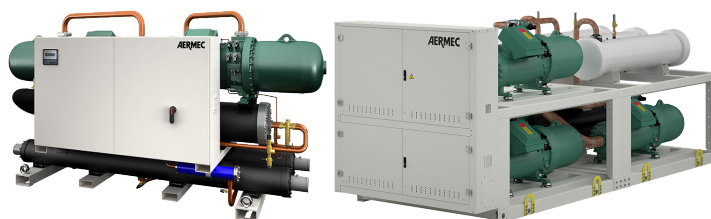
Water cooled heat pump reversible water side

Cooling capacity 631,5 ÷ 2340,0 kW

Heating capacity 697,7 ÷ 2567,7 kW



- Unit optimised for low condenser temperatures.
- Production of hot water from condenser up to 50° C.
- Electronic thermostatic as standard.



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 structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

FEATURES

Operating field

Production of chilled water up to -6 °C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 50 °C.

Bi-tri circuit unit

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

They are equipped with screw compressors and system and source side shell and tube heat exchangers.

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 PCO₂

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Adjustment includes complete management of the alarms and their log.

Possibility to control two units in a Master-Slave configuration

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

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

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

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

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

IS: Condenser isolating valves. Mandatory accessory for units operating in heat pump mode. Factory fitted only.

AKW: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
AER485P1 x n° 2 (1)	°A	*	*	*	*	*	*	*	*				
AER485P1 x n° 3 (1)	°A									*	*	*	*
AERNET	°A	*	*	*	*	*	*	*	*	*	*	*	*
MULTICHILLER_EVO	°A	*	*	*	*	*	*	*	*	*	*	*	*
PRV3	°A	*	*	*	*	*	*	*	*	*	*	*	*

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

Antivibration

Ver	2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Set-up: °												
°	AVX673	AVX673	AVX673	AVX674	AVX674	AVX674	AVX675	AVX675	AVX689	AVX689	AVX689	AVX689
A	AVX673	AVX673	AVX674	AVX675	AVX675	AVX675	AVX676	AVX676	AVX690	AVX690	AVX691	AVX691
Set-up: L												
°	AVX673	AVX673	AVX674	AVX674	AVX674	AVX674	AVX675	AVX675	AVX689	AVX689	AVX689	AVX689
A	AVX674	AVX674	AVX675	AVX675	AVX675	AVX675	AVX676	AVX676	AVX690	AVX690	AVX691	AVX691

Power factor correction

Ver	2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
°A	RIFWF2512	RIFWF2812	RIFWF3212	RIFWF3612	RIFWF4212	RIFWF4812	RIFWF5612	RIFWF6412	RIFWF6713	RIFWF7213	RIFWF8413	RIFWF9613

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

Isolating kit

Ver	2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
°	IS1 (1)	IS1 (1)	IS1 (1)	IS1 (1)	IS1 (1)	IS1 (1)	IS2 (1)	IS2 (1)	IS4 (1)	IS4 (1)	IS4 (1)	IS5 (1)
A	IS1 (1)	IS1 (1)	IS2 (1)	IS2 (1)	IS2 (1)	IS2 (1)	IS3 (1)	IS3 (1)	IS5 (1)	IS5 (1)	IS6 (1)	IS6 (1)

(1) Mandatory accessory for heating mode operation

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

Acoustic kit

Ver	2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Set-up: L												
°A	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)

(1) Available only in low noise version

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

CONFIGURATOR

Field	Description
1,2	WF
3,4,5,6	Size 2512, 2812, 3212, 3612, 4212, 4812, 5612, 6412, 6713, 7213, 8413, 9613
7	Model
°	Optimised for low condenser temperatures
8	Version
°	Standard
A	High efficiency
9	Set-up
°	Standard
L	Silenced
10	Heat recovery
°	Without heat recovery

Field	Description
D	With desuperheater
T	With total recovery (1)
11	Evaporator
°	Standard
E	Evaporating unit
12	Power supply (2)
°	400V ~ 3 50Hz with fuses
2	230V ~ 3 50Hz with fuses
4	230V ~ 3 50Hz with magnet circuit breakers
5	500V ~ 3 50Hz with fuses
8	400V ~ 3 50Hz with magnet circuit breakers
9	500V ~ 3 50Hz with magnet circuit breakers

(1) Not available for the condensersless (E)

(2) 500V ~ 3 50Hz: available only for sizes 2512-2812

PERFORMANCE SPECIFICATIONS

WF - °

Size		2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	631,5	722,3	874,3	986,3	1113,3	1280,1	1411,1	1552,1	1661,4	1881,6	2090,6	2317,6
Input power	kW	125,1	143,2	174,0	194,9	219,3	254,0	280,2	310,0	333,1	376,4	424,5	470,4
Cooling total input current	A	212,0	243,0	282,0	317,0	349,0	416,0	457,0	506,0	529,0	620,0	688,0	764,0
EER	W/W	5,05	5,04	5,02	5,06	5,08	5,04	5,04	5,01	4,99	5,00	4,92	4,93
Water flow rate source side	l/h	129515	148070	179328	202178	228119	262303	289266	318289	340741	385931	429687	476210
Pressure drop source side	kPa	16	16	18	16	18	24	17	19	47	48	48	48
Water flow rate system side	l/h	108585	124220	150335	169578	191398	220090	242598	266823	285596	323421	359343	398350
Pressure drop system side	kPa	41	58	56	47	43	62	65	75	51	40	49	56
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	697,8	797,6	966,2	1089,0	1228,6	1412,8	1558,1	1714,7	1836,0	2079,5	2316,8	2567,4
Input power	kW	157,9	181,9	220,7	246,3	276,7	322,3	356,2	395,2	419,8	472,2	534,2	593,3
Heating total input current	A	263,0	302,0	350,0	394,0	434,0	517,0	568,0	629,0	657,0	771,0	855,0	949,0
COP	W/W	4,42	4,38	4,38	4,42	4,44	4,38	4,37	4,34	4,37	4,40	4,34	4,33
Water flow rate source side	l/h	158429	181241	219344	247420	279257	321120	353959	389305	416696	471884	524295	581208
Pressure drop source side	kPa	87	124	119	100	92	132	138	160	109	84	104	118
Water flow rate system side	l/h	121221	138559	167848	189203	213457	245440	270712	297917	318950	361269	402507	446049
Pressure drop system side	kPa	14	14	16	14	16	21	15	17	41	42	43	42

(1) Date 14511:2018; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

(2) Date 14511:2018; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WF - A

Size		2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	640,4	727,3	890,2	1006,3	1136,2	1281,3	1416,2	1553,1	1707,3	1934,4	2154,0	2340,0
Input power	kW	120,6	138,0	169,0	188,7	213,9	240,0	269,9	299,2	324,2	368,5	412,7	458,8
Cooling total input current	A	202,0	232,0	268,0	303,0	332,0	392,0	437,0	483,0	514,0	603,0	668,0	741,0
EER	W/W	5,31	5,27	5,27	5,33	5,31	5,34	5,25	5,19	5,27	5,25	5,22	5,10
Water flow rate source side	l/h	129922	147620	180618	203996	230292	259679	287828	315995	346993	393008	438292	477401
Pressure drop source side	kPa	64	65	73	70	70	75	75	78	70	70	57	68
Water flow rate system side	l/h	110131	125079	153084	173014	195350	220262	243457	266995	293469	332510	370240	402201
Pressure drop system side	kPa	44	59	62	44	62	42	41	51	36	57	58	68
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	697,7	792,9	969,9	1095,2	1236,2	1393,9	1546,4	1698,3	1864,1	2111,0	2355,3	2567,7
Input power	kW	151,5	174,4	213,5	236,8	270,2	300,7	338,0	375,9	405,5	464,4	520,8	580,2
Heating total input current	A	251,0	288,0	333,0	377,0	413,0	487,0	543,0	600,0	639,0	749,0	830,0	921,0
COP	W/W	4,60	4,55	4,54	4,62	4,57	4,64	4,57	4,52	4,60	4,55	4,52	4,43
Water flow rate source side	l/h	160685	182494	223355	252434	285022	321371	355212	389556	428183	485145	540194	586827
Pressure drop source side	kPa	94	126	132	94	132	89	87	109	77	122	123	146
Water flow rate system side	l/h	121154	137678	168437	190196	214700	242104	268601	294992	323825	366722	409194	446105
Pressure drop system side	kPa	56	56	63	61	61	65	65	68	61	61	50	59

(1) Date 14511:2018; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

(2) Date 14511:2018; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Performance specifications Evaporating units

Size		2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Evaporator: E													
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	°	kW	547,0	624,0	748,0	842,0	954,0	1077,0	1208,0	1328,0	1469,4	1679,0	1801,1
	A	kW	585,0	665,0	800,0	899,0	1016,0	1148,0	1246,0	1382,0	1509,8	1710,2	1852,0
Input power	°	kW	143,0	162,0	195,0	221,0	247,0	279,0	313,0	345,0	381,3	431,1	483,2
	A	kW	143,0	162,0	195,0	221,0	248,0	280,0	313,0	346,0	385,8	437,4	490,0
Cooling total input current	°	A	242,0	277,0	321,0	363,0	398,0	465,0	516,0	571,0	613,0	712,0	790,0
	A	A	242,0	277,0	321,0	363,0	398,0	465,0	516,0	571,0	615,0	713,0	792,0
EER	°	W/W	3,83	3,85	3,84	3,81	3,86	3,86	3,86	3,85	3,85	3,89	3,73
	A	W/W	4,09	4,10	4,10	4,07	4,10	4,10	3,98	3,99	3,91	3,91	3,78
Water flow rate system side	°	l/h	93980	107210	128514	144665	163908	185040	207548	228165	252464	288478	309456
	A	l/h	100509	114254	137449	154458	174560	197239	214076	237443	259397	293839	318199
Pressure drop system side	°	kPa	31	43	41	34	31	44	47	55	39	30	36
	A	kPa	36	49	50	35	49	34	31	40	26	42	41

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

ENERGY INDICES (REG. 2016/2281 EU)

Size			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
SEER - 12/7 (EN14825: 2018) (1)														
SEER	°	W/W	5,76	5,79	5,79	5,84	5,89	5,84	5,84	5,95	6,11	6,21	6,08	6,01
	A	W/W	6,66	6,65	6,74	6,70	6,77	6,73	6,61	6,89	7,01	7,03	6,22	6,13
Seasonal efficiency	°	%	227,3%	228,7%	228,4%	230,7%	232,4%	230,5%	230,7%	235,0%	241,4%	245,4%	240,2%	237,5%
	A	%	263,2%	262,9%	266,4%	264,9%	267,9%	266,3%	261,2%	272,7%	277,4%	278,3%	245,6%	242,2%
SEPR - (EN 14825: 2018) High temperature (2)														
SEPR	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-
	A	W/W	8,16	8,15	8,28	8,16	8,27	8,19	8,09	8,53	8,56	8,52	-	-

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

(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Electric data														
Maximum current (FLA)	°A	A	294,0	336,0	396,0	446,0	494,0	572,0	636,0	702,0	741,0	858,0	954,0	1053,0
Peak current (LRA)	°A	A	447,0	528,0	596,0	659,0	712,0	872,0	968,0	1156,0	859,0	1047,0	1178,0	1376,0

GENERAL TECHNICAL DATA

Size			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Compressor														
Type	°A	type												
Compressor regulation	°A	Type												
Number	°A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Circuits	°A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Refrigerant	°A	type												
Refrigerant load circuit 1	°	kg	60,0	65,0	70,0	80,0	83,0	85,0	90,0	95,0	60,0	60,0	85,0	85,0
	A	kg	68,0	65,0	70,0	80,0	83,0	85,0	90,0	95,0	80,0	80,0	110,0	110,0
Refrigerant load circuit 2	°	kg	60,0	65,0	70,0	80,0	83,0	85,0	90,0	95,0	60,0	60,0	85,0	85,0
	A	kg	68,0	65,0	70,0	80,0	83,0	85,0	90,0	95,0	80,0	80,0	110,0	110,0
Refrigerant load circuit 3	°	kg	-	-	-	-	-	-	-	-	60,0	60,0	85,0	85,0
	A	kg	-	-	-	-	-	-	-	-	80,0	80,0	110,0	110,0
System side heat exchanger														
Type	°A	type												
Number	°A	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°A	Type												
Sizes (in/out)	°	Ø	6"	6"	6"	8"	8"	8"	8"	8"	10"	10"	10"	10"
	A	Ø	8"	8"	8"	10"	10"	10"	10"	10"	10"	10"	10"	10"
Source side heat exchanger														
Type	°A	type												
Number	°A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°A	Type												
Sizes (in/out)	°	Ø	5"	5"	5"	5"	6"	6"	5"	5"	5"	5"	5"	5"
	A	Ø	6"	6"	5"	5"	6"	6"	5"	5"	5"	5"	4"	4"

SOUND DATA

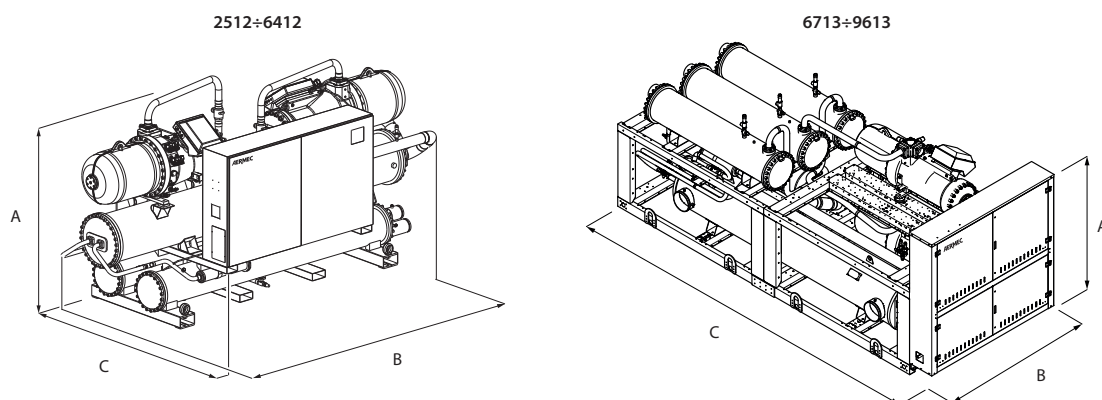
Size			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Set-up: °														
Sound data calculated in cooling mode (1)														
Sound power level	°A	dB(A)	93,6	94,0	93,5	93,7	94,6	95,5	97,3	97,9	96,4	97,3	99,1	99,7
Sound pressure level (10 m)	°A	dB(A)	61,6	62,0	61,4	61,6	62,5	63,4	65,1	65,7	64,0	64,9	66,7	67,3

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Set-up: L														
Sound data calculated in cooling mode (1)														
Sound power level	°A	dB(A)	85,5	86,2	87,0	87,9	90,2	89,8	91,0	90,8	92,0	91,6	92,8	92,6

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Dimensions and weights														
A	°	mm	2100	2100	2050	2120	2140	2140	2210	2210	2250	2250	2250	2250
	A	mm	2180	2180	2190	2340	2340	2340	2380	2380	2250	2250	2250	2250
B	°	mm	3690	3690	4030	4030	4370	4370	4610	4760	2200	2200	2200	2200
	A	mm	4330	4330	4330	4370	4550	4550	4800	4800	2200	2200	2200	2200
C	°	mm	1470	1470	1470	1520	1550	1550	1600	1600	5650	5650	5650	5650
	A	mm	1470	1470	1537	1695	1695	1695	1700	1700	5650	5650	5650	5650
Empty weight	°	kg	3570	3650	4470	4750	5050	5180	6030	6260	7991	8145	8446	8578
	A	kg	4080	4140	5470	5950	6240	6440	7230	7360	8893	9063	9637	9698

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

Aermec si riserva la facoltà di apportare in qualsiasi momento tutte le modifiche ritenute necessarie per il miglioramento del prodotto con eventuale modifica dei relativi dati tecnici.

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