



Aermec participate in the EUROVENT program: LCP the products are present on the site www.eurovent-certification.com



- **OPTIMISED FOR LOW CONDENSER TEMPERATURES**
for example: units working in cooling mode with ground or tower water, or units working in heat pump mode with low leaving water temperature
- **MAXIMUM CONDENSER LEAVING WATER TEMPERATURE: 50 °C**
- **STANDARD ELECTRONIC EXPANSION VALVE**

Characteristics

Version

- **WF_°** Standard chillers
- **WF_A** High efficiency version
- **Operational limits (1)**
 - **condenser leaving water temperature up to 50 °C**
 - evaporator leaving liquid temperature down to -6 °C
- Two independent refrigerant circuits
- High efficiency, low noise screw compressors with modulating capacity control from 12,5 a 100% for each compressor)
- Shell and tube evaporator optimised for refrigerant R134a
- **Standard electronic expansion valve**
- Compact dimensions
- Suitable for use in heat pump mode with leaving water temperature up to 50 °C (with hydraulic system reversing) and with ground water or geothermal loops. **For heating mode operation the IS accessory, condenser**

isolating valves, is required

- **Options available:**
 - partial heat recovery
 - total heat recovery
 - evaporating unit
 - low noise unit with compressor acoustical enclosures made from galvanised steel and high density sound absorbent material
- **Modulating capacity control microprocessor system**
 - Redundancy of the unit (one microprocessor per circuit)
 - Leaving water temperature control with modulating capacity control (12.5-100% for each compressor) and dynamic display of the refrigeration capacity
 - Condensing control based on pressure with 0-10 Vdc signal for controlling a modulating valve / variable speed pump
 - Electrical panel with all cables numbered
- Current transformer as standard for each compressor
- "Always Working" function. In the case of critical conditions the unit will not stop but automatically adjusts operation
- Automatic set point compensation using analogue inputs 4-20 mA or 0-10 V or an external air sensor
- Auto-adaptive differential to ensure correct compressor operating timers
- PDC (Pull Down Control) system which prevents capacity loading when the water temperature quickly approaches the set point
- DL (Demand Limit) system permits current limiting of the unit during times of insufficient electrical power (load peaks or generator operation)
- Multilingual display panel

(1) For more details on operating limits, refer to the technical documentation available on the website www.aermec.com

Accessories

- **AER485P1:** RS-485 interface for supervision systems with MODBUS protocol.
- **AERWEB300:** Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
 - AERWEB300-6:** Web server to monitor and remote control max. 6 units in RS485 network;
 - AERWEB300-18:** Web server to monitor and remote control max. 18 units in RS485 network;
 - AERWEB300-6G:** Web server to monitor and remote control max. 6 units in RS485 network
- with integrated GPRS modem;
- AERWEB300-18G:** Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;
- **PRV3:** Remote control of the chiller operating functions.
- **MULTICHILLER:** Control system for multiple parallel installed constant flow chillers providing individual chiller on/off and control capability.
- **AVX:** Spring anti-vibration mounts.
- **RIF:** Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
- **AKW: ACOUSTIC KIT. (only for Versions L)** Allows further unit sound reduction using an optimised enclosure made from a high density ecological material.
- **IS:** Condenser isolating valves. Mandatory accessory for units operating in heat pump mode. Factory fitted only.

Accessories factory fitted only

Compatibility of accessories

Mod	Vers	2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
AER485P1		•(x2)	•(x2)	•(x2)	•(x2)	•(x2)	•(x2)	•(x2)	•(x2)	•(x3)	•(x3)	•(x3)	•(x3)
AERWEB300		•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER		•	•	•	•	•	•	•	•	•	•	•	•
PRV3		•	•	•	•	•	•	•	•	•	•	•	•
Compatibility AVX													
standard / standard Low noise													
Mod WF		2512°	2812°	3212°	3612°	4212°	4812°	5612°	6412°	6713°	7213°	8413°	9613°
AVX		673	673	673	674	674	674	675	675	689	689	689	689
High efficiency/High efficiency low noise													
Mod WF		2512A	2812A	3212A	3612A	4212A	4812A	5612A	6412A	6713A	7213A	8413A	9613A
AVX		673	673	674	675	675	675	676	676	690	690	691	691
Accessories factory fitted only													
RIF (RIFWF)		2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
AKW	(1)	•	•	•	•	•	•	•	•	•	•	•	•
IS1	(2)	°/A	°/A	°	°	°	°	-	-	-	-	-	-
IS2	(2)	-	-	A	A	A	A	°	°	-	-	-	-
IS3	(2)	-	-	-	-	-	-	A	A	-	-	-	-
IS4	(2)	-	-	-	-	-	-	A	A	°	°	°	-
IS5	(2)	-	-	-	-	-	-	-	-	A	A	-	°
IS6	(2)	-	-	-	-	-	-	-	-	-	-	A	A

(1) The accessory is only available for the low noise version "L"
(2) For heating mode operation the IS accessory, condenser isolating valves, is required
Attention: For D - T - E version - please contact us
* Contact us

Unit Configurator

By suitably combining the numerous options available it is possible to configure each model in such a way as to meet the most demanding of system requirements.

Field	Code
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 condensing temperature
8	Version
	° Standard
A	High efficiency
9	Equipment
	° Standard
L	low noise
10	Heat recovery
	° Without recovery
D	With Desuperheater
T	With total recovery (3)
11	Evaporator
	° Standard
E	Evaporating unit
12	Power supply
	° 400V/3/50Hz with fuses
2	230V/3/50Hz with fuses
5	500V/3/50Hz with fuses (4)
8	400V/3/50Hz with circuit breakers
4	230V/3/50Hz cwith circuit breakers
9	500V/3/50Hz with circuit breakers (4)
12	Safety valve
	° Standard
S	Double safety valve

(3) options T are not compatible with option "E"
(4) 500V/3/50Hz available only size 2512-2812

Technical Data

WF - °			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
		V/ph/Hz	400V/3/50Hz											
12°C / 7°C	Cooling capacity	(1) kW	630	720	872	984	1111	1276	1406	1546	1657	1877	2085	2310
	Total input power	(1) kW	125,06	143,21	174	194,84	219,28	253,97	280,17	309,99	333	375	423	468
	EER	(1)	5,04	5,03	5,01	5,05	5,06	5,02	5,02	4,99	4,97	5,00	4,93	4,94
	ESEER	(1)	5,79	5,84	5,80	5,81	5,83	5,83	5,80	5,80	6,08	6,15	6,14	6,07
	Cooling Energy Class Eurovent	(1)	B	B	B	A	A	B	B	B	B	B	B	B
	Water flow rate system side	(1) l/h	108704	124356	150500	169764	191608	220332	242864	267116	284634	322561	358213	396960
	Pressure drop	(1) kPa	41	58	56	47	43	62	65	75	51	40	49	56
	Water flow rate geothermal side	(1) l/h	128639	147069	178115	200810	226576	260529	287309	316136	338989	383829	427229	473373
40°C / 45°C	Pressure drop	(1) kPa	16	16	18	16	18	24	17	19	46	48	48	47
	Heating capacity	(2) kW	678	775	940	1060	1195	1374	1515	1668	1794	2029	2240	2481
	Total input power	(2) kW	158,11	180,8	219,28	246,23	277,48	319,33	353,36	390,48	408,9	461,7	515,1	569,9
	COP	(2)	4,29	4,29	4,29	4,31	4,31	4,3	4,29	4,27	4,39	4,39	4,35	4,35
	Heating Energy Class Eurovent	(2)	B	B	B	B	B	B	B	B	B	B	B	B
	Water flow rate system side	(2) l/h	116616	133300	161508	182148	205368	235984	260408	286724	307987	348360	384621	425926
	Pressure drop	(2) kPa	13	13	14	13	14	19	14	15	39	40	39	38
	Water flow rate geothermal side	(2) l/h	91126	104215	126214	142442	160596	184676	203545	223978	241294	273048	300606	332972
	Pressure drop	(2) kPa	28	39	38	32	29	43	44	51	37	28	34	39

WF - A			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
		V/ph/Hz	400V/3/50Hz											
12°C / 7°C	Cooling capacity	(1) kW	639	725	887	1004	1132	1278	1413	1549	1704	1928	2147	2331
	Total input power	(1) kW	120,53	137,92	168,89	188,58	213,76	239,85	269,78	298,99	324	368	413	459
	EER	(1)	5,3	5,26	5,25	5,32	5,3	5,33	5,24	5,18	5,26	5,23	5,20	5,08
	ESEER	(1)	6,26	6,22	6,26	6,26	6,29	6,27	6,16	6,10	6,50	6,49	6,36	6,33
	Cooling Energy Class Eurovent	(1)	A	A	A	A	A	A	A	A	A	A	A	A
	Water flow rate system side	(1) l/h	110252	125216	153252	173204	195564	220504	243724	267288	292737	331296	368889	400521
	Pressure drop	(1) kPa	44	59	62	44	62	42	41	51	36	57	58	69
	Water flow rate geothermal side	(1) l/h	129043	146621	179396	202616	228734	257923	285881	313857	345634	391422	436221	475372
40°C / 45°C	Pressure drop	(1) kPa	63	64	72	69	69	74	74	77	69	69	56	67
	Heating capacity	(2) kW	676	772	944	1066	1199	1358	1506	1654	1815	2055	2274	2484
	Total input power	(2) kW	150,92	171,87	210,18	237,08	260	300,67	338,30	373,85	398	452	504	559
	COP	(2)	4,5	4,49	4,49	4,5	4,5	4,52	4,45	4,43	4,56	4,55	4,52	4,45
	Heating Energy Class Eurovent	(2)	A	A	A	A	A	A	A	B	A	A	A	A
	Water flow rate system side	(2) l/h	116272	132268	161680	182664	206228	232716	258172	283456	311646	352831	390454	426515
	Pressure drop	(2) kPa	51	51	58	56	55	59	59	62	35	35	28	33
	Water flow rate geothermal side	(2) l/h	92252	104980	128346	144919	161508	184840	204250	223978	246715	279106	308311	335417
	Pressure drop	(2) kPa	30	40	42	30	42	29	28	35	42	66	67	80

Date (14511:2013)

(1) Water system side (in/out) 12°C/7°C; Water geothermal (in/out) 30°C/35°C

(2) Water system side (in/out) 40°C/45°C; Water geothermal (in/out) 10°C/5°C

WF - °E			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
12°C / 7°C	Cooling capacity	(3) kW	547	624	748	842	954	1077	1208	1328	1469	1679	1801	1998
	Total input power	(3) kW	143	162	195	221	247	279	313	345	381	431	483	534
	EER	(3)	3,83	3,85	3,84	3,81	3,86	3,86	3,86	3,85	3,85	3,89	3,73	3,74
	Water flow rate system side	(3) l/h	94084	107328	128656	144824	164088	185244	207776	228416	252463	288478	309457	343261
	Pressure drop	(3) kPa	31	43	41	34	31	44	47	55	39	30	36	41

WF - AE			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
12°C / 7°C	Cooling capacity	(3) kW	585	665	800	899	1016	1148	1246	1382	1452	1643	1814	1976
	Total input power	(3) kW	143	162	195	221	248	280	313	346	386	437	490	541
	EER	(3)	4,09	4,1	4,1	4,07	4,1	4,1	3,98	3,99	3,76	3,76	3,70	3,65
	Water flow rate system side	(3) l/h	100620	114380	137600	154628	174752	197456	214312	237704	249965	283154	312517	340632
	Pressure drop	(3) kPa	36	49	50	35	49	34	31	40	26	42	41	49

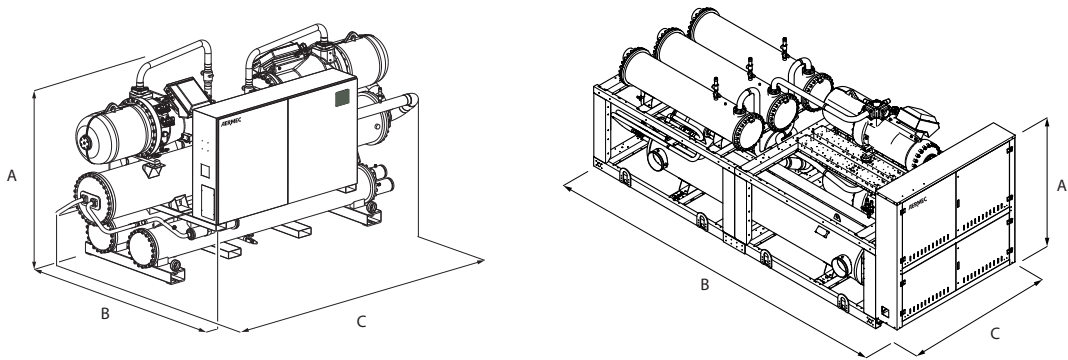
(3) Water system side (in/out) 12°C/7°C; Condensing temperature 45°C

			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613	
Electrical data															
Total input current (cooling)	°	A	212	243	282	317	349	416	457	506	529	620	688	764	
Total input current (heating)		A	271	312	361	406	447	533	585	648	648	751	832	919	
Total input current (cooling)	A	A	202	232	268	303	332	392	437	483	514	603	668	741	
Total input current (heating)		A	258	297	343	388	425	501	559	619	631	731	809	894	
Total input current (cooling)	°E	A	242	277	321	363	398	465	516	571	613	712	790	873	
	AE	A	242	277	321	363	398	465	516	571	615	713	792	874	
Maximum current (FLA)		A	294	336	396	446	494	572	636	702	741	858	954	1053	
Starting current (LRA)		A	447	528	596	659	712	872	968	1156	859	1047	1178	1376	
Screw Compressor															
Compressors / Circuit	n°/n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3	3/3	3/3	
Refrigerant	Type	R134a													
Heat exchanger system side															
Exchanger	Type/n°	Shell&tube/1													
hydraulic connections (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"	
Heat exchanger source side															
Exchanger	Type/n°	Shell&tube/2									Shell&tube/3				
hydraulic connections (In/Out)	°	Ø	5"	5"	5"	5"	5"	5"	6"	6"	5"	5"	5"	5"	
	A	Ø	4"	4"	5"	5"	5"	5"	6"	6"	5"	5"	6"	6"	
Sound data															
Sound power level		dB(A)	62	62	62	62	63	64	65	66	96	97	99	100	
Sound pressure level		dB(A)	94	94	94	94	95	96	97	98	64	65	67	67	

Sound power Aermec determines sound power values on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification.

Sound pressure Sound pressure in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).

Note: For more information, refer to the selection program or the technical documentation available on the website www.aermec.com



Mod WF - °			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Height	mm	(A)	2100	2100	2050	2120	2140	2140	2210	2210	2225	2225	2225	2225
Width	mm	(B)	3690	3690	4030	4030	4370	4370	4610	4760	5650	5650	5650	5650
Depth	mm	(C)	1470	1470	1470	1520	1550	1550	1600	1600	2200	2200	2200	2200
Weight	Kg		3570	3650	4470	4750	5050	5180	6030	6260	7991	8145	8446	8578
Mod WF - A			2512	2812	3212	3612	4212	4812	5612	6412	6713	7213	8413	9613
Height	mm	(A)	2180	2180	2190	2340	2340	2340	2380	2380	2225	2225	2225	2225
Width	mm	(B)	4330	4330	4330	4370	4550	4550	4800	4800	5650	5650	5650	5650
Depth	mm	(C)	1470	1470	1537	1695	1695	1695	1700	1700	2200	2200	2200	2200
Weight	Kg		4080	4140	5470	5950	6240	6440	7230	7360	8893	9063	9637	9698

Attention: For D - T - E version - please contact us