



Aermec participate in the EUROVENT program: LCP the products are present on the site [www.eurovent-certification.com](http://www.eurovent-certification.com)



- **OPTIMISED FOR HIGH CONDENSER TEMPERATURES**  
for example: units operating in heating mode
- **MAXIMUM CONDENSER LEAVING WATER TEMPERATURE: 60°C**
- **STANDARD ELECTRONIC EXPANSION VALVE WHICH ALLOWS**

### Characteristics

#### Version

- **HWF\_°** Standard chillers
- **HWF\_A** High efficiency version
- **Operational limits (1)**
- **condenser leaving water temperature up to 60 °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 60 °C (with hydraulic system reversing) and with dry-

cooler. **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](http://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**

Mod	Vers	2512	2812	3212	3612	4212	4812	5612	6412
AER485P1		•(x2)	•(x2)	•(x2)	•(x2)	•(x2)	•(x2)	•(x2)	•(x2)
AERWEB300		•	•	•	•	•	•	•	•
MULTICHILLER		•	•	•	•	•	•	•	•
PRV3		•	•	•	•	•	•	•	•
<b>Compatibility AVX</b>									
<b>standard / standard Low noise</b>									
Mod HWF		2512°	2812°	3212°	3612°	4212°	4812°	5612°	6412°
AVX		673	673	673	674	674	674	675	675
Mod HWF		2512°L	2812°L	3212°L	3612°L	4212°L	4812°L	5612°L	6412°L
AVX		673	673	674	674	674	674	675	675
<b>High efficiency/High efficiency low noise</b>									
Mod HWF		2512A	2812A	3212A	3612A	4212A	4812A	5612A	6412A
AVX		673	673	674	675	675	675	676	676
Mod HWF		2512AL	2812AL	3212AL	3612AL	4212AL	4812AL	5612AL	6412AL
AVX		674	674	675	675	675	675	676	676
<b>Accessories factory fitted only</b>									
RIF		RIFHWF2512	RIFHWF2812	RIFHWF3212	RIFHWF3612	RIFHWF4212	RIFHWF4812	RIFHWF5602	RIFHWF6412
AKW	(1)	•	•	•	•	•	•	•	•
IS1	(2)	°/A	°/A	°	°	°	°	°	°
IS2	(2)			A	A	A	A	°	°
IS3	(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

## 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.

<b>Field</b>	<b>Code</b>
<b>1,2,3</b>	<b>HWF</b>
<b>4,5,6,7</b>	<b>Size</b>
	2512-2812-3212-3612-4212-4812-5612-6412
<b>8</b>	<b>Model</b>
	° Optimised for high condensing temperature
<b>9</b>	<b>Version</b>
	° Standard
	<b>A</b> High efficiency
<b>10</b>	<b>Equipment</b>
	° Standard
	<b>L</b> low noise
<b>11</b>	<b>Heat recovery</b>
	° Without recovery
	<b>D</b> With Desuperheater
	<b>T</b> With total recovery <b>(3)</b>
<b>12</b>	<b>Evaporator</b>
	° Standard
	<b>E</b> Evaporating unit
<b>13</b>	<b>Power supply</b>
	° 400V/3/50Hz with fuses
	<b>8</b> 400V/3/50Hz with circuit breakers
	<b>5</b> 500V/3/50Hz with fuses <b>(4)</b>
	<b>9</b> 500V/3/50Hz with circuit breakers <b>(4)</b>

(3) options T are not compatible with option "E"

(4) 500V/3/50Hz available only size 2512-2812

## Technical Data

HWF - °		2512	2812	3212	3612	4212	4812	5612	6412	
		V/ph/Hz		400V/3/50Hz						
12°C / 7°C	Cooling capacity	(1) kW	628	713	843	946	1092	1256	1415	1512
	Total input power	(1) kW	130,1	148,1	173,6	195,4	225	259,6	294,3	314,4
	EER	(1)	4,83	4,81	4,85	4,84	4,85	4,84	4,81	4,81
	ESEER	(1)	5,50	5,52	5,56	5,51	5,52	5,55	5,51	5,53
	Cooling Energy Class Eurovent	(1)	B	B	B	B	B	B	B	B
	Water flow rate system side	(1) l/h	108360	123152	145512	163228	188340	216892	244412	261268
	Pressure drop	(1) kPa	41	56	53	44	41	60	65	72
	Water flow rate geothermal side	(1) l/h	129112	146682	173127	194437	224288	258069	291144	311105
	Pressure drop	(1) kPa	16	16	17	15	17	23	18	18
	40°C / 45°C	Heating capacity	(2) kW	671	763	899	1010	1164	1339	1513
Total input power		(2) kW	151,1	172	202,02	227,94	262,36	302,02	343,45	366,08
COP		(2)	4,5	4,42	4,45	4,43	4,44	4,44	4,41	4,49
Heating Energy Class Eurovent		(2)	A	B	A	B	B	B	B	B
Water flow rate system side		(2) l/h	115240	131064	154456	173548	200036	230128	260064	277780
Pressure drop		(2) kPa	13	12	13	12	14	18	14	14
Water flow rate geothermal side		(2) l/h	90893	103286	121939	136783	157715	181606	204835	218956
Pressure drop		(2) kPa	28	39	36	30	28	41	45	49

HWF - A		2512	2812	3212	3612	4212	4812	5612	6412	
		V/ph/Hz		400V/3/50Hz						
12°C / 7°C	Cooling capacity	(1) kW	643	730	855	966	1108	1249	1435	1524
	Total input power	(1) kW	128,7	147,1	172,1	193	222,3	249,4	287,4	306,7
	EER	(1)	5,00	4,96	4,96	5,01	4,98	5,01	4,99	4,97
	ESEER	(1)	5,82	5,81	5,80	5,81	5,82	5,82	5,80	5,79
	Cooling Energy Class Eurovent	(1)	B	B	B	B	B	B	B	B
	Water flow rate system side	(1) l/h	110940	126076	147576	166668	191264	215516	247508	262988
	Pressure drop	(1) kPa	44	60	57	41	59	40	42	50
	Water flow rate geothermal side	(1) l/h	131038	148952	174374	196897	225905	254569	292443	310864
	Pressure drop	(1) kPa	65	66	68	66	67	72	77	76
	40°C / 45°C	Heating capacity	(2) kW	680	774	902	1022	1172	1321	1519
Total input power		(2) kW	148,93	169,89	193	223,46	256,93	289,2	333,54	355,32
COP		(2)	4,68	4,67	4,56	4,58	4,56	4,57	4,66	4,55
Heating Energy Class Eurovent		(2)	A	A	A	A	A	A	A	A
Water flow rate system side		(2) l/h	116616	132612	155144	175268	200896	226526	260236	276748
Pressure drop		(2) kPa	51	52	53	51	52	56	60	59
Water flow rate geothermal side		(2) l/h	92923	105651	121948	139647	160046	180445	207131	220212
Pressure drop		(2) kPa	30	41	39	28	40	28	29	34

### 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

HWF - °E		2512	2812	3212	3612	4212	4812	5612	6412	
12°C / 7°C	Cooling capacity	(3) kW	540	615	726	816	947	1070	1225	1311
	Total input power	(3) kW	141	161	189	212	246	278	318	340
	EER	(3)	3,83	3,82	3,84	3,85	3,85	3,85	3,85	3,86
	Water flow rate system side	(3) l/h	92883	105773	124872	140352	162884	184040	210700	225492
	Pressure drop	(3) kPa	30	42	39	32	31	44	49	54

HWF - AE		2512	2812	3212	3612	4212	4812	5612	6412	
12°C / 7°C	Cooling capacity	(3) kW	577	657	779	873	1012	1143	1263	1362
	Total input power	(3) kW	143	162	191	214	248	280	320	342
	EER	(3)	4,03	4,06	4,08	4,08	4,08	4,08	3,95	3,98
	Water flow rate system side	(3) l/h	99244	113004	133988	150156	174064	196596	217236	234264
	Pressure drop	(3) kPa	35	48	47	33	49	34	32	39

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

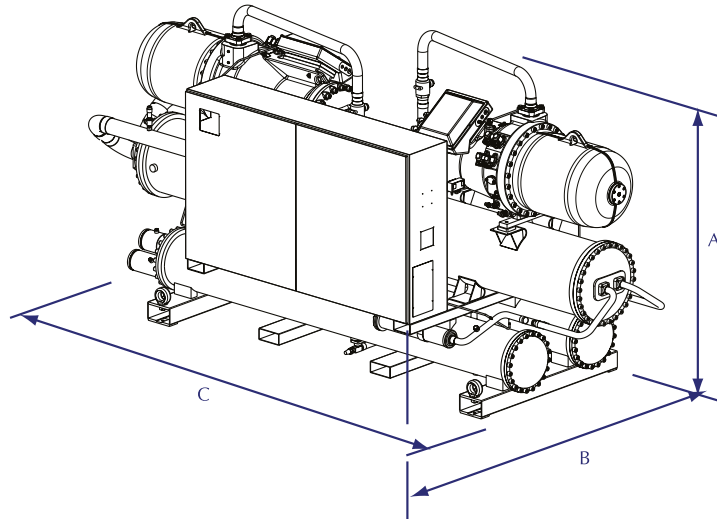
		2512	2812	3212	3612	4212	4812	5612	6412	
<b>Dati elettrici</b>										
Total input corrente (cooling)	°	A	226	255	286	314	378	426	488	530
Total input corrente (heating)		A	267	300	337	371	446	503	575	625
Total input corrente (cooling)	A	A	221	249	278	306	367	408	471	514
Total input corrente (heating)		A	261	293	328	361	433	481	556	606
Total input corrente (cooling)	°E/AE	A	247	278	315	345	416	465	532	579
Maximum current (FLA)		A	370	418	468	516	612	690	776	846
Starting current (LRA)		A	545	613	670	723	892	995	1193	1340
<b>Screw Compressor</b>										
Compressors / Circuit	n°/n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2
Refrigerant	Type	R134a								
<b>Heat exchanger system side</b>										
Exchanger	Type/n°	Shell&tube/1								
hydraulic connections (In/Out)	°	Ø	6"	6"	6"	8"	8"	8"	8"	8"
	A	Ø	8"	8"	8"	10"	10"	10"	10"	10"
<b>Heat exchanger source side</b>										
Exchanger	Type/n°	Shell&tube/2								
hydraulic connections (In/Out)	°	Ø	5"	5"	5"	5"	5"	5"	6"	6"
	A	Ø	4"	4"	5"	5"	5"	5"	6"	6"
<b>Sound data</b>										
Sound power level		dB(A)	94	94	94	94	95	96	97	98
Sound pressure level		dB(A)	62	62	62	62	63	64	65	66

**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](http://www.aermec.com)

## Dimensions and Weight



<b>Mod HWF</b>			<b>2512°</b>	<b>2812°</b>	<b>3212°</b>	<b>3612°</b>	<b>4212°</b>	<b>4812°</b>	<b>5612°</b>	<b>6412°</b>
Height	mm	(A)	2100	2100	2050	2120	2140	2140	2210	2210
width	mm	(B)	1470	1470	1470	1520	1550	1550	1600	1600
depth	mm	(C)	3690	3690	4030	4030	4370	4370	4610	4760
Weight	Kg		3570	3650	4470	4750	5100	5200	6110	6310
<b>Mod HWF</b>			<b>2512A</b>	<b>2812A</b>	<b>3212A</b>	<b>3612A</b>	<b>4212A</b>	<b>4812A</b>	<b>5612A</b>	<b>6412A</b>
Height	mm	(A)	2180	2180	2190	2340	2340	2340	2380	2380
width	mm	(B)	1470	1470	1537	1695	1695	1695	1700	1700
depth	mm	(C)	4330	4330	4330	4370	4550	4550	4800	4800
Weight	Kg		4080	4140	5470	5950	6290	6460	7310	7410

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