AERMEC

NEW!

WRL

Reversible water-cooled chillers
for the production of hot water up to 55 °C
Cooling capacity from 50 to 168 kW
Heating capacity from 53 to 187 kW

R410A

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

Aermec participates in the EUROVENT Certification Program.
The products of interest appear in the EUROVENT Guide of Certified products.

PGD1
Simplified remote panel.
ACCESSORY

- **HIGH EFFICIENCIES**
- **POSSIBILITY OF HAVING:**
  PARTIAL HEAT RECOVERY
  PRODUCTION OF HOT WATER UP TO 55 °C
- **USED FOR GEOTHERMAL APPLICATIONS**

Features

WRL is the range of water-cooled chillers functioning with R410A refrigerant. They are indoor units with hermetic scroll compressors that respond perfectly to the market requirements: small dimensions, easy installation, low noise.

High efficiency
Aermec has designed these units optimising functioning in heat pump mode, allowing to reach high efficiencies and low consumption.

Connections
The electric and hydraulic connections are all positioned in the upper part of the unit facilitating the installation and maintenance operations. All this also allows to reduce the technical spaces and their positioning in as smaller space possible.

Silent
The WRL units are distinguished for its working silence. Careful soundproofing of the unit with suitable sound-absorbent material confers all units with noise limits.

Dynamic set point
Thanks to the use of a latest generation electronic regulation and the use of an external air temperature probe (Accessory), the heat pump can adapt the temperature of the water produced, on variation of the climatic conditions, increasing the energy efficiency of the system.

Advantages
The technological choices made, orientated always at maximum quality coupled with the use of the most innovative technologies making the WRL series able to ensure, as well as the maximum energy efficiency, complete installation facility and excellent versatility of use aimed at the use of alternative sources.

Range
Available in 8 models:
• Water side cycle inversion

Version
• WRL°= Reversible water side: cooling / heating

Technical features
- Structure and base in hot galvanised sheet steel and with epoxy paint. (RAL 9002).
- Large plate heat exchangers.
- Compressors with high performance and low electric absorption.
- Flow meter as per standard.
- Conform with Safety Directives (CE) and the Standards regarding electromagnetic compatibility.
  The safety of the appliance is guaranteed by the door-lock isolating switch on the electric control board and active protections on the main components.
- Command can be accessed from outdoors, with the user interface with display, showing all functioning parameters in 4 languages.
- Last generation electronic regulation.
- User-friendly remote control panel with alarm signals.

Accessories

- **AER485P1**: RS-485 interface for supervising systems with MODBUS protocol.
- **VT:** Anti-vibration mounts, four anti-vibration mounts to be mounted under the unit's sheet steel base.
- **STA:** Room temperature probe, 230Vac recess kit containing the room probe with display and regulation knob, able to control an ON-OFF valve or a zone pump.
- **STH:** Room temperature and humidity probe, 230Vac recess kit containing the probe with display and regulation knob, able to control an ON-OFF valve or a zone pump and dehumidifier consent.
- **SSM:** Probe to be used together with the mixer valve in applications with radiant panels. Accessory to be requested together with the VMFCRP zone accessory.
- **S...I:** System storage tanks; available in sizes 200, 300, 400 and 500 litres (S200I, S300I, S400I and S500I).
- **PGD1:** Simplified remote panel. Allows to perform the basic controls of the unit with alarm signals. Remote controllable to 500 m with 2 PAIRS of TWISTED cable + SHIELD with shielded pairs and TCONN6J000.
- **KSAE:** External air probe. Temperature probe with plastic container.
- **VMFCRP:** WRL Zones Management can manage up to a maximum of 3 zones with the following methods:
  - Zone 1: Managed as per standard thanks to last generation electronic regulation. ***It is recommended to mount the "SSM" electronic marking probe (accessory) to control the flow temperature.***
  - The management of the remaining Zone 2 and Zone 3 is possible using the VMFCRP + SSM accessories for each zone.

Accessories compatibility

WRL	180	200	300	400	500	550	600	650
AER485P1	✔	✔	✔	✔	✔	✔	✔	✔
VT	9	9	9	9	15	15	15	15
STA	✔	✔	✔	✔	✔	✔	✔	✔
STH	✔	✔	✔	✔	✔	✔	✔	✔
SSM	✔	✔	✔	✔	✔	✔	✔	✔
S...I (200-300-400-500)	✔	✔	✔	✔	✔	✔	✔	✔
PGD1	✔	✔	✔	✔	✔	✔	✔	✔
KSAE	✔	✔	✔	✔	✔	✔	✔	✔
VMFCRP	✔	✔	✔	✔	✔	✔	✔	✔

Choosing the unit

By appropriately combining the variety of options available, it is possible to configure every model in a manner that satisfies all specific implant requirements.

Fields configurator:

1 2 3	4 5 6	7	8	9	10	11	12	13	14	15
Code	Size	Field of use	Model	Version	Heat recovery	Source side pump	User side pumps kit	Field not used	Soft start	Power supply

CODE:
WRL
SIZE: 180 - 200 - 300 - 400 - 500 - 550 - 600 - 650
FIELD OF USE:
° - Standard with water produced over +4 °C
Y - Low temperature with water produced to -8 °C
X - Electronic thermostatic valve with water produced to -8 °C
MODEL:
° - Reversible water side
E - Moto-evaporating (not available for heat pump versions)
VERSION:
° - Standard
HEAT RECOVERY
° - Without heat recovery
D - Desuperheater
PUMPS (CONDENSER SIDE)
° - Without pump
B - Low static pressure pump
U - High static pressure pump
F - Low static pressure inverter pump
I - High static pressure inverter pump
PUMPS (EVAPORATOR SIDE)
° - Without pump
P - Low static pressure pump
N - High static pressure pump
FIELD NOT USED
°
SOFT START
° - Without Soft Start
S - Soft Start
POWER SUPPLY
° - 400V-3N -50 Hz
5 - 500V-3-50Hz (only models WRL400-550-600-650)

Technical data

WRL Model		180	200	300	400	500	550	600	650
Cooling capacity	Kw	49.6	64.0	74.1	85.4	99.5	128.8	149.1	167.6
Input power	Kw	10.6	14.1	16.3	17.7	20.1	26.4	30.4	35.0
Input current	A	20.4	26.3	28.5	33.4	37.0	53.0	61.8	71.2
E.E.R.	-	4.66	4.55	4.55	4.82	4.96	4.88	4.91	4.78
Evaporator water capacity	l/h	8520	11010	12750	14680	17120	22150	25650	2883
Evaporator pressure drops	kPa	27	45	45	65	31	48	54	65
Condenser water consumption	l/h	10170	13190	15270	17430	20230	26230	30360	34250
Condenser pressure drops	kPa	29	49	60	85	31	50	56	69
Heating capacity	Kw	52.9	71.6	78.8	92.6	105.2	145.2	166.5	187.2
Input power	Kw	12.6	17.2	18.9	21.2	23.3	32.3	37.0	42.2
Input current	A	24.3	31.4	34.0	38.2	42.8	60.2	69.5	79.3
C.O.P.	-	4.18	4.16	4.16	4.38	4.51	4.49	4.51	4.44
Condenser water capacity	l/h	9090	12310	13550	15930	18090	24980	28640	32200
Condenser pressure drops	kPa	22	37	45	64	27	47	54	67
Evaporator water consumption	l/h	11890	16080	17690	21100	24140	33300	38190	42780
Evaporator pressure drops	kPa	50	82	81	118	60	104	117	144
Compressor					SCROLL				
N° circuits/N° compressors		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Flow rate control	%	50/100	50/100	50/100	50/100	50/100	50/100	50/100	50/100
Evaporator					PLATES				
Hydraulic connections	ø	2″	2″	2″	2″	2″½	2″½	2″½	2″½
Quantity	n°	1	1	1	1	1	1	1	1
Condenser					PLATES				
Hydraulic connections	ø	2″	2″	2″	2″	2″½	2″½	2″½	2″½
Quantity	n°	1	1	1	1	1	1	1	1
Desuperheater (optional)					PLATES				
Hydraulic connections	ø	1″½	1″½	1″½	1″½	1″½	1″½	1″½	1″½
Quantity	n°	1	1	1	1	1	1	1	1
Expansion vessel (versions with pumps)					-				
Expansion vessel (per circuit)	n°/l	1/8	1/8	1/8	1/8	1/12	1/12	1/12	1/12

Performance in compliance with the EN 14511 Standard.

Cooling:

Evaporator	
Input temperature	12 °C
Output temperature	7 °C
Condenser	
Input temperature	30 °C
Output temperature	35 °C

Heating:

Evaporator	
Input temperature	10 °C
Output temperature	7 °C
Condenser	
Input temperature	40 °C
Output temperature	45 °C

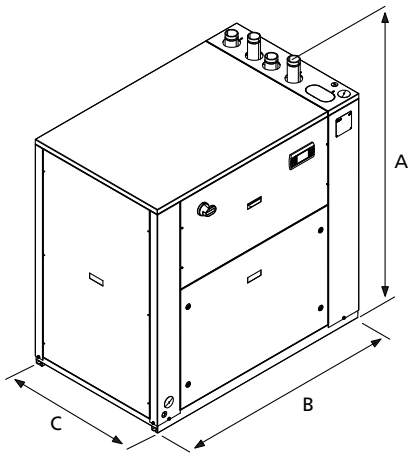
Technical data “WRLE”

WRLE Model		180	200	300	400	500	550	600	650
Cooling capacity	Kw	46.0	60.1	69.6	80.1	90.6	121.3	140.2	158.7
Input power	Kw	12.4	16.0	18.5	19.8	23.1	29.6	34.1	38.5
Input current	A	22.9	28.5	32.4	35.6	41.8	55.8	64.8	73.9
E.E.R.	-	3.7	3.8	3.8	4.1	3.9	4.1	4.1	4.1
Evaporator water capacity	l/h	7900	10340	11980	13770	15580	20860	24110	27300
Evaporator pressure drops	kPa	23	39	39	56	25	42	47	57
Gas line	mm	28	28	28	28	35	35	35	35
Liquid line	mm	22	22	22	22	28	28	28	28

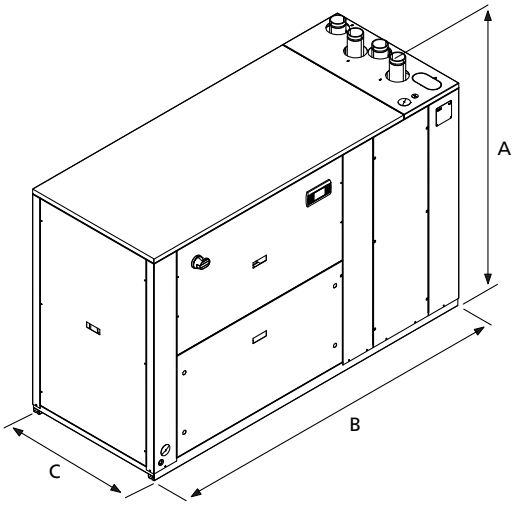
Cooling:

Condensation temperature	45°C
Processed water temperature	7°C; Δt 5°C

Dimensions (mm)



WRL 180-400



WRL 500-650

WRL Model		**180**	**200**	**300**	**400**	**500**	**550**	**600**	**650**
Height (A)	mm	1380	1380	1380	1380	1380	1380	1380	1380
Width (B)	mm	1320	1320	1320	1320	2009	2009	2009	2009
Depth (C)	mm	845	845	845	845	845	845	845	845
Empty weight	kg	375	375	381	388	518	594	670	715

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italy
Tel. 0442633111 - Telefax 044293730
www .aermec. com

Code : SWRL2UY.02 / 1104