# WRL 026 -161

## Water cooled heat pump reversible water side

**Cooling capacity 6,6 ÷ 44,2 kW**
**Heating capacity 7,5 ÷ 48,0 kW**

- **High efficiency**
- **Suitable for geothermal applications**


EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

## DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
In the configuration with desuperheater, it is also possible to produce free-hot water.
The technological choices made, always oriented to the highest quality, ensure very easy installation.
In fact, the electrical and hydraulic connections are all located at the top of the unit making it easy to install and maintain, also reducing the technical areas and their placement in the smallest space possible.

## VERSIONS

° Without storage tank
**A** With storage tank

## FEATURES

### Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

### Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.
The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.
The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

### Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).
To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).
Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

## MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.
The regulation using an outside air temperature sensor (accessory) allows a dynamic control of the water temperature produced by increasing the energy efficiency of the system.

## ACCESSORIES

**AERBAC-MODU:** Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
**AERSET:** It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
**KSAE:** External air sensor.
**MODU-485BL:** RS-485 interface for supervision systems with MODBUS protocol.
**PR3:** Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
**SGD:** Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
**VT:** Anti-vibration supports.
**VPL:** Pressure switch valve complete with connections, piloted directly in relation to condensation pressure; the valve modulates the volume of water needed to cool the condenser, thereby maintaining the condensation temperature unchanged.

**PR4:** Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

*For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

## ACCESSORIES COMPATIBILITY

| Model | Ver | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|
| AERBAC-MODU | °,A | • | • | • | • | • | • | • | • | • |
| AERSET | °,A | • | • | • | • | • | • | • | • | • |
| KSAE | °,A | • | • | • | • | • | • | • | • | • |
| MODU-485BL | °,A | • | • | • | • | • | • | • | • | • |
| PR3 | °,A | • | • | • | • | • | • | • | • | • |
| SGD | °,A | • | • | • | • | • | • | • | • | • |

### Antivibration

| Version | Integrated hydronic kit, source side | System side - pumps | 026 | 031 | 041 | 051 | 071 |
|---|---|---|---|---|---|---|---|
| ° | ° | ° | VT9 | VT9 | VT9 | VT9 | VT9 |
| ° | B, I, U, V | N, P | VT9 | VT9 | VT9 | VT9 | VT9 |
| A | °, B, I, U, V | °, N, P | VT15 | VT15 | VT15 | VT15 | VT15 |

| Version | Integrated hydronic kit, source side | System side - pumps | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|
| ° | ° | ° | VT9 | VT15 | VT15 | VT15 |
| ° | U | N, P | VT9 | VT15 | VT15 | VT15 |
| ° | B, I, V | N, P | VT9 | VT15 | VT15 | - |
| A | °, B, I, U, V | °, N, P | VT15 | VT15A | VT15A | VT15A |

- not available

### PR4

| Model | Ver | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|
| PR4 | °,A | • | • | • | • | • | • | • | • | • |

### Pressure switch valve

| Ver | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|
| °, A | VPL1 | VPL1 | VPL2 | VPL2 | VPL3 | VPL3 | VPL4 | VPL4 | VPL4 |

## CONFIGURATOR

### Configuration options

| Field | | Description |
|---|---|---|
| **1,2,3** | | **WRL** |
| **4,5,6** | | **Size**<br>026, 031, 041, 051, 071, 081, 101, 141, 161 |
| **7** | | **Operating field** |
| | Y | Low temperature mechanic thermostatic valve (1) |
| | ° | Standard mechanic thermostatic valve (2) |
| **8** | | **Model** |
| | E | Evaporating unit (3) |
| | ° | Heat pump reversible on the water side |
| **9** | | **Version** |
| | ° | Without storage tank |
| | A | With storage tank |
| **10** | | **Heat recovery** |
| | D | With desuperheater |
| | ° | Without heat recovery |
| **11** | | **Integrated hydronic kit, source side** |
| | B | On-off pump (4) |
| | I | Inverter pump (5) |
| | U | Pump high head (6) |
| | V | 2-way modulating valve |
| | ° | Without hydronic kit |
| **12** | | **System side - pumps** |
| | N | Pump high head (6) |
| | P | On-off pump (4) |
| | ° | Without hydronic kit |
| **13** | | **Recovery side - pumps** |
| | ° | Without Pumps |
| **14** | | **Soft-start** |
| | S | With soft-start |
| | ° | Without soft-start |
| **15** | | **Power supply** |
| | M | 230V~ 50Hz (7) |
| | ° | 400V~3N 50Hz |

(1) Water produced from 4 °C ÷ - 8 °C
(2) Water produced from 4 °C ÷ 18 °C
(3) Shipped with holding charge only
(4) For size WRL 051 ÷ 081. The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.
(5) Only for WRL 026 ÷ 081
(6) Only for WRL 101 ÷ 161
(7) Only for WRL 026 ÷ 041

## PERFORMANCE SPECIFICATIONS

**WRL - °**

| Size | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Power supply: M** | | | | | | | | | | |
| **Cooling performance 12 °C / 7 °C (1)** | | | | | | | | | | |
| Cooling capacity | kW | 6,6 | 8,3 | 11,3 | - | - | - | - | - | - |
| Input power | kW | 1,5 | 1,8 | 2,5 | - | - | - | - | - | - |
| Cooling total input current | A | 7,2 | 9,2 | 12,0 | - | - | - | - | - | - |
| EER | W/W | 4,30 | 4,50 | 4,56 | - | - | - | - | - | - |
| Water flow rate source side | l/h | 1386 | 1731 | 2359 | - | - | - | - | - | - |
| Pressure drop source side | kPa | 28 | 29 | 36 | - | - | - | - | - | - |
| Water flow rate system side | l/h | 1137 | 1430 | 1955 | - | - | - | - | - | - |
| Pressure drop system side | kPa | 15 | 17 | 23 | - | - | - | - | - | - |
| **Heating performance 40 °C / 45 °C (2)** | | | | | | | | | | |
| Heating capacity | kW | 7,6 | 9,4 | 12,5 | - | - | - | - | - | - |
| Input power | kW | 2,0 | 2,4 | 3,1 | - | - | - | - | - | - |
| Heating total input current | A | 9,3 | 12,0 | 15,0 | - | - | - | - | - | - |
| COP | W/W | 3,86 | 3,89 | 4,05 | - | - | - | - | - | - |
| Water flow rate source side | l/h | 1662 | 2053 | 2778 | - | - | - | - | - | - |
| Pressure drop source side | kPa | 32 | 35 | 46 | - | - | - | - | - | - |
| Water flow rate system side | l/h | 1319 | 1626 | 2171 | - | - | - | - | - | - |
| Pressure drop system side | kPa | 25 | 26 | 30 | - | - | - | - | - | - |

(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

| Size | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Power supply: °** | | | | | | | | | | |
| **Cooling performance 12 °C / 7 °C (1)** | | | | | | | | | | |
| Cooling capacity | kW | 6,7 | 8,4 | 11,3 | 14,7 | 19,3 | 21,9 | 29,5 | 38,5 | 43,9 |
| Input power | kW | 1,5 | 1,8 | 2,6 | 3,1 | 4,0 | 4,7 | 6,2 | 8,1 | 9,5 |
| Cooling total input current | A | 3,1 | 2,6 | 4,9 | 6,4 | 7,4 | 9,1 | 13,0 | 15,0 | 18,0 |
| EER | W/W | 4,49 | 4,74 | 4,39 | 4,70 | 4,77 | 4,63 | 4,72 | 4,75 | 4,62 |
| Water flow rate source side | l/h | 1396 | 1735 | 2375 | 3054 | 3978 | 4538 | 6100 | 7947 | 9077 |
| Pressure drop source side | kPa | 28 | 30 | 35 | 32 | 40 | 46 | 42 | 57 | 66 |
| Water flow rate system side | l/h | 1154 | 1447 | 1955 | 2541 | 3320 | 3770 | 5078 | 6638 | 7555 |
| Pressure drop system side | kPa | 15 | 17 | 23 | 21 | 26 | 30 | 25 | 34 | 38 |
| **Heating performance 40 °C / 45 °C (2)** | | | | | | | | | | |
| Heating capacity | kW | 7,7 | 9,3 | 12,6 | 16,3 | 21,0 | 24,0 | 32,5 | 42,1 | 48,0 |
| Input power | kW | 1,9 | 2,3 | 3,2 | 4,0 | 5,1 | 5,9 | 8,0 | 10,2 | 12,0 |
| Heating total input current | A | 4,1 | 3,4 | 6,1 | 8,2 | 9,2 | 11,0 | 16,0 | 18,0 | 23,0 |
| COP | W/W | 3,93 | 4,04 | 3,94 | 4,05 | 4,17 | 4,04 | 4,06 | 4,14 | 4,02 |
| Water flow rate source side | l/h | 1680 | 2053 | 2767 | 3602 | 4708 | 5325 | 7200 | 9414 | 10671 |
| Pressure drop source side | kPa | 32 | 34 | 46 | 42 | 52 | 60 | 50 | 68 | 76 |
| Water flow rate system side | l/h | 1326 | 1607 | 2181 | 2819 | 3647 | 4159 | 5629 | 7284 | 8315 |
| Pressure drop system side | kPa | 25 | 26 | 30 | 27 | 34 | 39 | 36 | 48 | 55 |

(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)

**WRL - °**

| Size | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Power supply: M** | | | | | | | | | | |
| **SEER - 12/7 (EN14825: 2018) (1)** | | | | | | | | | | |
| SEER | W/W | 3,77 | 4,13 | 4,27 | - | - | - | - | - | - |
| Seasonal efficiency | % | 147,9% | 162,0% | 167,6% | - | - | - | - | - | - |
| **UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)** | | | | | | | | | | |
| Pdesignh | kW | 11 | 14 | 17 | - | - | - | - | - | - |
| SCOP | W/W | 5,15 | 5,50 | 5,18 | - | - | - | - | - | - |
| ηsh | % | 198.0% | 212.0% | 199.0% | - | - | - | - | - | - |
| Efficiency energy class | | A+++ | A+++ | A+++ | - | - | - | - | - | - |

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

| Size | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Power supply: °** | | | | | | | | | | |
| **SEER - 12/7 (EN14825: 2018) (1)** | | | | | | | | | | |
| SEER | W/W | 3,93 | 4,29 | 4,13 | 4,51 | 4,66 | 4,52 | 4,93 | 4,93 | 4,75 |
| Seasonal efficiency | % | 154,0% | 168,5% | 162,1% | 177,3% | 183,3% | 177,8% | 194,1% | 194,0% | 187,1% |
| **UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)** | | | | | | | | | | |
| Pdesignh | kW | 11 | 14 | 17 | 23 | 30 | 35 | 45 | 60 | 68 |
| SCOP | W/W | 5,08 | 5,45 | 5,38 | 5,50 | 5,48 | 5,33 | 6,03 | 5,85 | 5,50 |
| ηsh | % | 195.0% | 210.0% | 207.0% | 212.0% | 211.0% | 205.0% | 233.0% | 226.0% | 212.0% |
| Efficiency energy class | | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ |

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

## PERFORMANCE SPECIFICATIONS

**WRL ABP**

| Size | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Power supply: M** | | | | | | | | | | |
| **Cooling performance 12 °C / 7 °C (1)** | | | | | | | | | | |
| Cooling capacity | kW | 6,7 | 8,4 | 11,4 | - | - | - | - | - | - |
| Input power | kW | 1,5 | 1,8 | 2,4 | - | - | - | - | - | - |
| Cooling total input current | A | 7,8 | 9,9 | 12,0 | - | - | - | - | - | - |
| EER | W/W | 4,54 | 4,75 | 4,80 | - | - | - | - | - | - |
| Water flow rate source side | l/h | 1386 | 1731 | 2359 | - | - | - | - | - | - |
| Useful head source side | kPa | 59 | 54 | 36 | - | - | - | - | - | - |
| Water flow rate system side | l/h | 1137 | 1430 | 1955 | - | - | - | - | - | - |
| Useful head system side | kPa | 74 | 70 | 56 | - | - | - | - | - | - |
| **Heating performance 40 °C / 45 °C (2)** | | | | | | | | | | |
| Heating capacity | kW | 7,5 | 9,3 | 12,4 | - | - | - | - | - | - |
| Input power | kW | 1,9 | 2,3 | 3,0 | - | - | - | - | - | - |
| Heating total input current | A | 9,9 | 13,0 | 15,0 | - | - | - | - | - | - |
| COP | W/W | 3,97 | 4,01 | 4,17 | - | - | - | - | - | - |
| Water flow rate source side | l/h | 1662 | 2053 | 2778 | - | - | - | - | - | - |
| Useful head source side | kPa | 52 | 43 | 16 | - | - | - | - | - | - |
| Water flow rate system side | l/h | 1319 | 1626 | 2171 | - | - | - | - | - | - |
| Useful head system side | kPa | 63 | 59 | 45 | - | - | - | - | - | - |

(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

| Size | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Power supply: °** | | | | | | | | | | |
| **Cooling performance 12 °C / 7 °C (1)** | | | | | | | | | | |
| Cooling capacity | kW | 6,8 | 8,5 | 11,4 | 14,9 | 19,4 | 22,0 | 29,8 | 38,9 | 44,2 |
| Input power | kW | 1,4 | 1,7 | 2,5 | 3,1 | 3,9 | 4,6 | 6,3 | 8,1 | 9,4 |
| Cooling total input current | A | 3,7 | 3,3 | 5,6 | 7,5 | 8,6 | 10,0 | 14,0 | 17,0 | 20,0 |
| EER | W/W | 4,75 | 5,02 | 4,62 | 4,84 | 4,93 | 4,78 | 4,75 | 4,79 | 4,69 |
| Water flow rate source side | l/h | 1396 | 1735 | 2375 | 3054 | 3978 | 4538 | 6100 | 7947 | 9077 |
| Useful head source side | kPa | 59 | 53 | 36 | 63 | 43 | 28 | 116 | 137 | 125 |
| Water flow rate system side | l/h | 1154 | 1447 | 1955 | 2541 | 3320 | 3770 | 5078 | 6638 | 7555 |
| Useful head system side | kPa | 74 | 70 | 56 | 79 | 66 | 56 | 148 | 164 | 157 |
| **Heating performance 40 °C / 45 °C (2)** | | | | | | | | | | |
| Heating capacity | kW | 7,6 | 9,2 | 12,5 | 16,1 | 20,9 | 23,8 | 32,2 | 41,6 | 47,6 |
| Input power | kW | 1,9 | 2,2 | 3,1 | 3,9 | 4,9 | 5,8 | 8,0 | 10,1 | 11,8 |
| Heating total input current | A | 4,7 | 4,0 | 6,7 | 9,3 | 10,0 | 13,0 | 18,0 | 20,0 | 25,0 |
| COP | W/W | 4,05 | 4,17 | 4,05 | 4,11 | 4,24 | 4,09 | 4,01 | 4,13 | 4,04 |
| Water flow rate source side | l/h | 1680 | 2053 | 2767 | 3602 | 4708 | 5325 | 7200 | 9414 | 10671 |
| Useful head source side | kPa | 52 | 43 | 16 | 46 | 20 | 4 | 90 | 121 | 109 |
| Water flow rate system side | l/h | 1326 | 1607 | 2181 | 2819 | 3647 | 4159 | 5629 | 7284 | 8315 |
| Useful head system side | kPa | 63 | 59 | 46 | 70 | 54 | 41 | 130 | 148 | 138 |

(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

## PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

| Size | | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power supply: M** | | | | | | | | | | | |
| **Cooling performance 12 °C / 7 °C (1)** | | | | | | | | | | | |
| Cooling capacity | ° | kW | 6,6 | 8,3 | 11,3 | - | - | - | - | - | - |
| | A | kW | 6,7 | 8,4 | 11,4 | - | - | - | - | - | - |
| Input power | ° | kW | 1,5 | 1,8 | 2,5 | - | - | - | - | - | - |
| | A | kW | 1,5 | 1,8 | 2,4 | - | - | - | - | - | - |
| Cooling total input current | ° | A | 7,2 | 9,2 | 12,0 | - | - | - | - | - | - |
| | A | A | 7,8 | 9,9 | 12,0 | - | - | - | - | - | - |
| EER | ° | W/W | 4,30 | 4,50 | 4,56 | - | - | - | - | - | - |
| | A | W/W | 4,54 | 4,75 | 4,80 | - | - | - | - | - | - |
| Water flow rate system side | °,A | l/h | 1137 | 1430 | 1955 | - | - | - | - | - | - |
| Pressure drop system side | °,A | kPa | 15 | 17 | 23 | - | - | - | - | - | - |

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

| Size | | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power supply: °** | | | | | | | | | | | |
| **Cooling performance 12 °C / 7 °C (1)** | | | | | | | | | | | |
| Cooling capacity | ° | kW | 6,7 | 8,4 | 11,3 | 14,7 | 19,3 | 21,9 | 29,5 | 38,5 | 43,9 |
| | A | kW | 6,8 | 8,5 | 11,4 | 14,9 | 19,4 | 22,0 | 29,8 | 38,9 | 44,2 |
| Input power | ° | kW | 1,5 | 1,8 | 2,6 | 3,1 | 4,0 | 4,7 | 6,2 | 8,1 | 9,5 |
| | A | kW | 1,4 | 1,7 | 2,5 | 3,1 | 3,9 | 4,6 | 6,3 | 8,1 | 9,4 |
| Cooling total input current | ° | A | 3,1 | 2,6 | 4,9 | 6,4 | 7,4 | 9,1 | 13,0 | 15,0 | 18,0 |
| | A | A | 3,7 | 3,3 | 5,6 | 7,5 | 8,6 | 10,0 | 14,0 | 17,0 | 20,0 |
| EER | ° | W/W | 4,49 | 4,74 | 4,39 | 4,70 | 4,77 | 4,63 | 4,72 | 4,75 | 4,62 |
| | A | W/W | 4,75 | 5,02 | 4,62 | 4,84 | 4,93 | 4,78 | 4,75 | 4,79 | 4,69 |
| Water flow rate system side | °,A | l/h | 1154 | 1447 | 1955 | 2541 | 3320 | 3770 | 5078 | 6638 | 7555 |
| Pressure drop system side | °,A | kPa | 15 | 17 | 23 | 21 | 26 | 30 | 25 | 34 | 38 |

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

## ENERGY INDICES (REG. 2016/2281 EU)

**WRL ABP**

| Size | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Power supply: M** | | | | | | | | | | |
| **SEER - 12/7 (EN14825: 2018) (1)** | | | | | | | | | | |
| SEER | W/W | 4,73 | 5,20 | 5,22 | - | - | - | - | - | - |
| Seasonal efficiency | % | 186,3% | 205,1% | 205,6% | - | - | - | - | - | - |
| **UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)** | | | | | | | | | | |
| Pdesignh | kW | 11 | 13 | 17 | - | - | - | - | - | - |
| SCOP | W/W | 5,90 | 6,28 | 5,55 | - | - | - | - | - | - |
| ηsh | % | 228.0% | 243.0% | 214.0% | - | - | - | - | - | - |
| Efficiency energy class | | A+++ | A+++ | A+++ | - | - | - | - | - | - |

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

| Size | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Power supply: °** | | | | | | | | | | |
| **SEER - 12/7 (EN14825: 2018) (1)** | | | | | | | | | | |
| SEER | W/W | 5,00 | 5,37 | 5,22 | 5,38 | 5,62 | 5,30 | 5,31 | 5,27 | 5,21 |
| Seasonal efficiency | % | 196,9% | 211,7% | 205,8% | 212,0% | 221,7% | 208,8% | 209,2% | 207,7% | 205,5% |
| **UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)** | | | | | | | | | | |
| Pdesignh | kW | 10 | 13 | 17 | 22 | 30 | 34 | 44 | 59 | 66 |
| SCOP | W/W | 5,78 | 6,15 | 5,75 | 6,13 | 5,75 | 5,45 | 6,00 | 5,95 | 5,60 |
| ηsh | % | 223.0% | 238.0% | 222.0% | 237.0% | 222.0% | 210.0% | 232.0% | 230.0% | 216.0% |
| Efficiency energy class | | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ |

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

## ELECTRIC DATA

**Electric data**

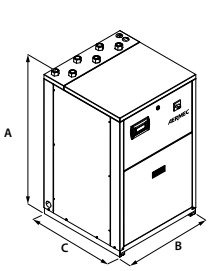
| Size | | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Electric data** | | | | | | | | | | | |
| Maximum current (FLA) | ° | A | 8,0 | 8,0 | 15,0 | 17,0 | 21,0 | 22,0 | 32,0 | 40,0 | 41,0 |
| | M | A | 18,0 | 21,0 | 34,0 | - | - | - | - | - | - |
| Peak current (LRA) | ° | A | 34,0 | 37,0 | 65,0 | 75,0 | 75,0 | 75,0 | 90,0 | 94,0 | 95,0 |
| | M | A | 63,0 | 84,0 | 119,0 | - | - | - | - | - | - |

## GENERAL TECHNICAL DATA

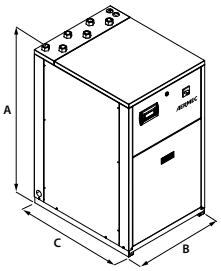
| Size | | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Compressor** | | | | | | | | | | | |
| Type | °,A | type | | | | | Scroll | | | | |
| Number | °,A | no. | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| Circuits | °,A | no. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Refrigerant | °,A | type | | | | | R410A | | | | |
| Refrigerant charge (1) | °,A | kg | 0,8 | 0,9 | 1,2 | 1,6 | 1,9 | 2,0 | 3,6 | 4,4 | 4,7 |
| **Source side heat exchanger** | | | | | | | | | | | |
| Type | °,A | type | | | | | Brazed plate | | | | |
| Number | °,A | no. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **System side heat exchanger** | | | | | | | | | | | |
| Type | °,A | type | | | | | Brazed plate | | | | |
| Number | °,A | no. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Source side hydraulic connections** | | | | | | | | | | | |
| Connections (in/out) | °,A | Type | | | | | Gas-F | | | | |
| Sizes (in/out) | °,A | Ø | | | | | 1"1/4 | | | | |
| **System side hydraulic connections** | | | | | | | | | | | |
| Connections (in/out) | °,A | Type | | | | | Gas-F | | | | |
| Sizes (in/out) | °,A | Ø | | | | | 1"1/4 | | | | |
| **Sound data calculated in cooling mode (2)** | | | | | | | | | | | |
| Sound power level | °,A | dB(A) | 55,5 | 57,0 | 57,5 | 59,0 | 60,0 | 60,5 | 62,0 | 63,0 | 63,5 |
| Sound pressure level (10 m) | ° | dB(A) | 24,3 | 25,8 | 26,3 | 27,7 | 28,7 | 29,2 | 30,6 | 31,6 | 32,1 |
| | A | dB(A) | 24,1 | 25,6 | 26,1 | 27,6 | 28,6 | 29,1 | 30,5 | 31,5 | 32,0 |

(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.
(2) 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).

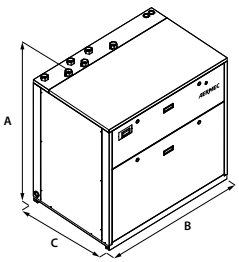
## DIMENSIONS



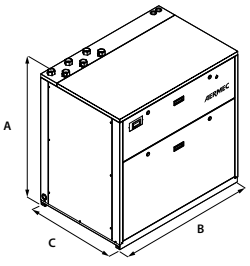
WRL 026-041



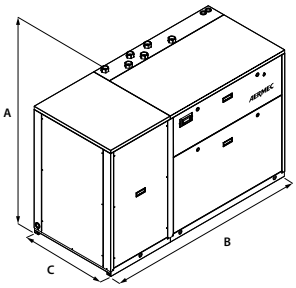
WRL 051-081



WRL 101-161



WRL-A 026-081



WRL-A 101-161

| Size | | | 026 | 031 | 041 | 051 | 071 | 081 | 101 | 141 | 161 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Dimensions and weights** | | | | | | | | | | | |
| A | ° | mm | 976 | 976 | 976 | 1126 | 1126 | 1126 | 1126 | 1126 | 1126 |
| | A | mm | 1126 | 1126 | 1126 | 1126 | 1126 | 1126 | 1126 | 1126 | 1126 |
| B | ° | mm | 605 | 605 | 605 | 605 | 605 | 605 | 1155 | 1155 | 1155 |
| | A | mm | 1155 | 1155 | 1155 | 1155 | 1155 | 1155 | 1755 | 1755 | 1755 |
| C | ° | mm | 603 | 603 | 603 | 773 | 773 | 773 | 773 | 773 | 773 |
| | A | mm | 773 | 773 | 773 | 773 | 773 | 773 | 773 | 773 | 773 |
| Empty weight | ° | kg | 120 | 125 | 130 | 150 | 170 | 180 | 260 | 270 | 280 |
| | A | kg | 190 (1) | 200 (1) | 210 (1) | 230 (1) | 250 (1) | 260 (1) | 340 (1) | 350 (1) | 360 (1) |

(1) Units with two heat exchangers and storage tank, without pumps



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