

POWER WORLD

THE POWER TO PROMOTE WORLD DEVELOPMENT!

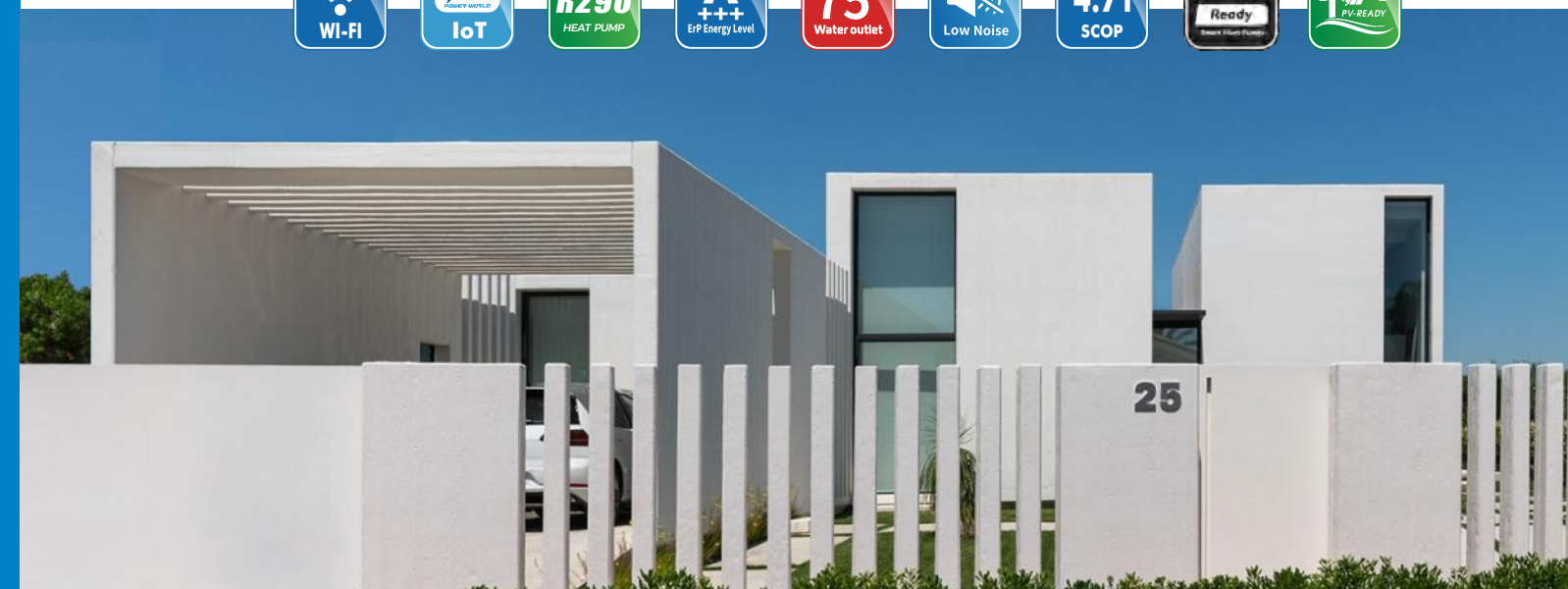
FULL DC INVERTER HEAT PUMP

R290

HEATING

COOLING

DHW



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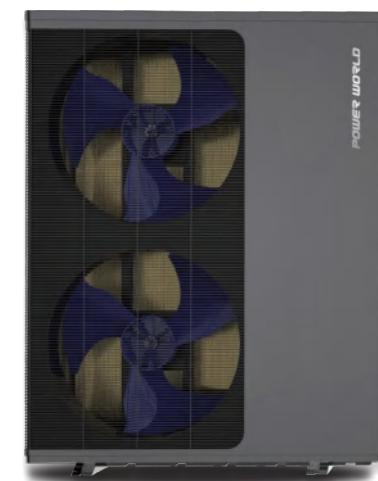
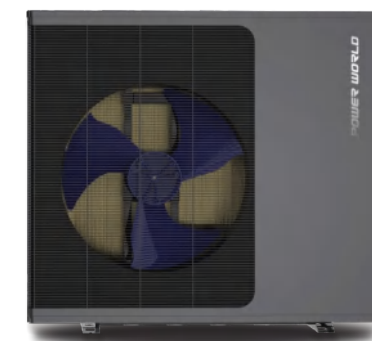
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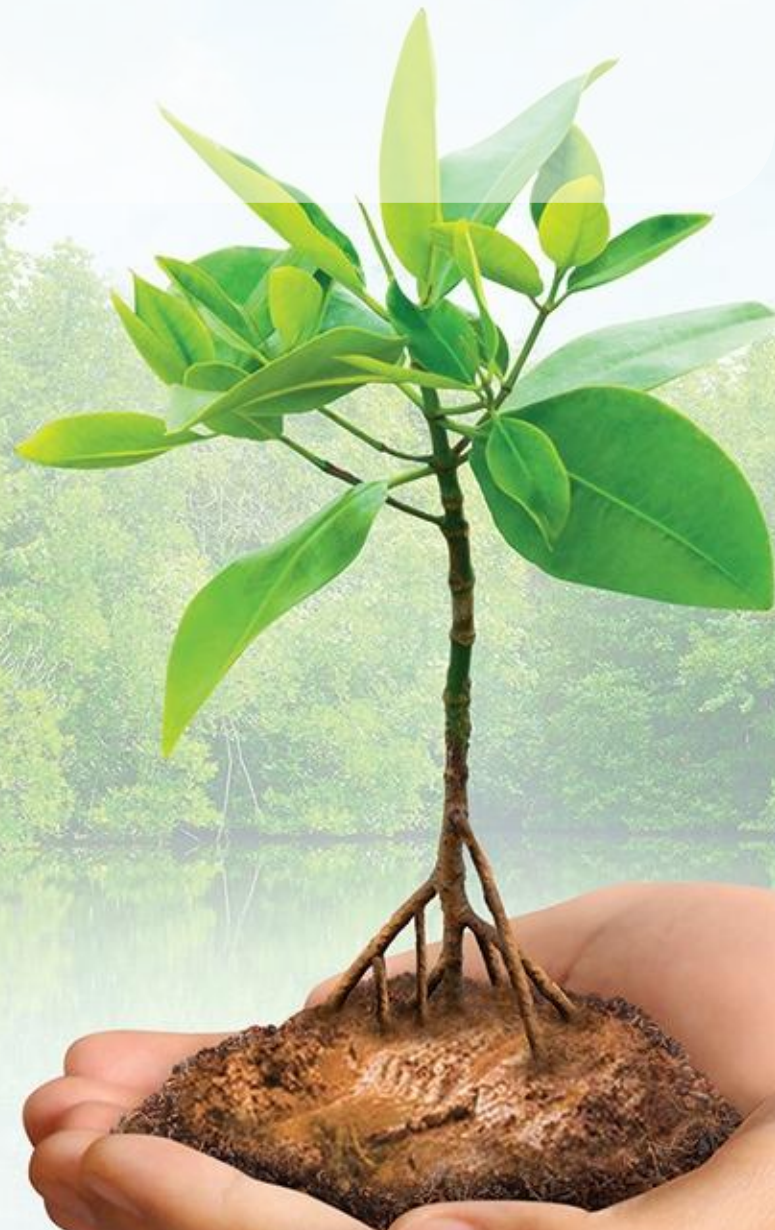
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LOW GWP R290 REFRIGERANT

R290



Year-round supply

MULTIFUNCTIONAL HEAT PUMP

- Heating Only
- Cooling Only
- Domestic Hot Water Only
- Heating+ DHW (Priority)
- Cooling+ DHW (Priority)



HIGHLY Inverter Compressor



Brushless DC Inverter Motor



SHIMGE DC Inverter Silent Circulation Pump(Built-in)



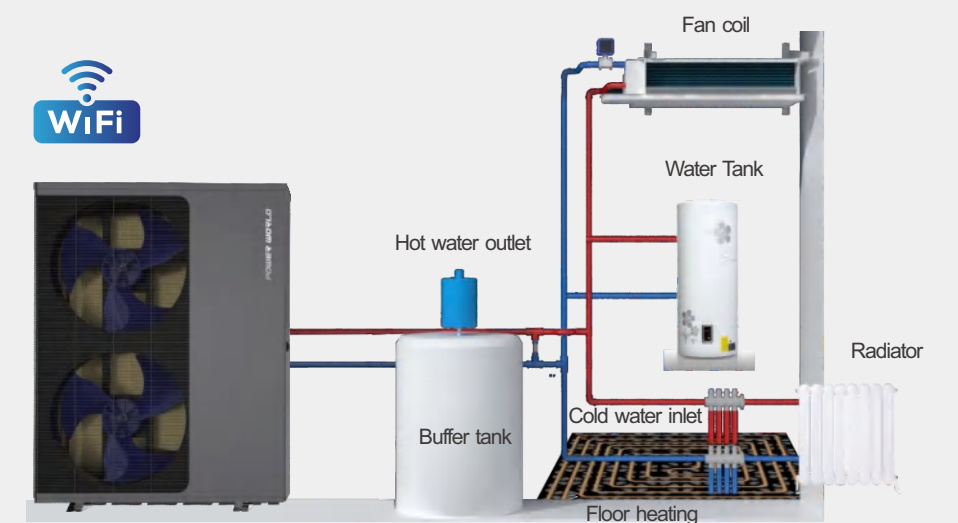
Plate Heat Exchanger



Crankshaft Heater



Silent Fan



Reliable
Stable

STABLE AND RELIABLE
OPERATE AT -25°C

Under low ambient temperature, the performance, heating ability and operational stability of normal heat pumps will be limited. Power World's R290 FULL DC INVERTER heat pump can operate stably and efficiently in extremely cold regions of -25°C without EVI technology, maintaining a high COP and outputting 75°C hot water to ensure the heating and cooling of the house need.



75°C
Hot Water

-25°C
Outdoor
Temps

Powerful
Heating

Reliable operation in extreme temperatures of -25°C
Powerful heating can output 75°C hot water

Inverter

FULL INVERTER
TECHNOLOGY

The Full DC inverter technology makes the unit can intelligently adjust the operating frequency and control the water temperature to keep the room at a constant-temps. It can save up to 50% energy electricity compared to ON-OFF units and up to 75% energy compared to traditional boiler electric heat pumps.



Ther-
mostatic

50%~75%
Energy-save

Auto
Adjustment

Intelligent
Defrosting

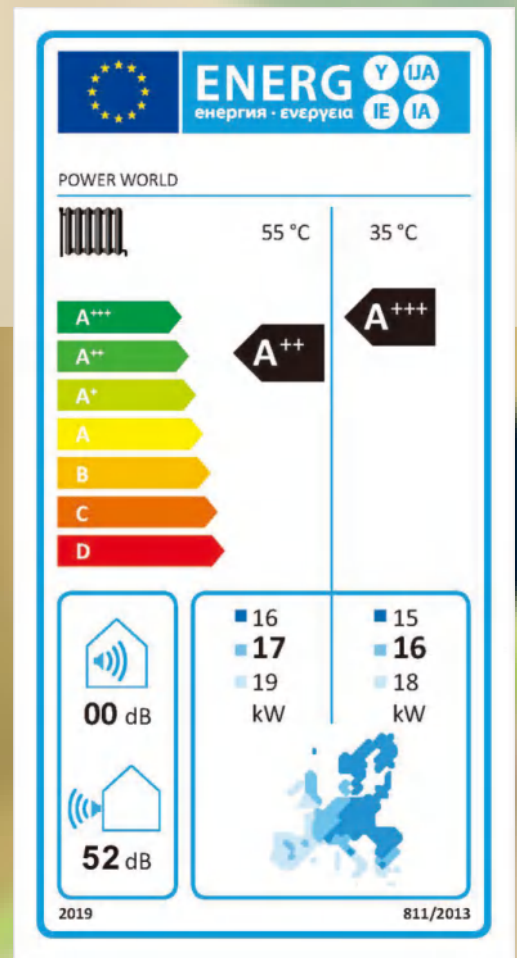
Stepless DC Inverter Fan Motor
DC Inverter HIGHLY Compressor
DC Inverter Circulation Pump



Higher
Efficiency

HIGHER EFFICIENCY A+++ ENERGY LEVEL

The higher the energy efficiency class, the lower the energy consumption. R290 Full DC Inverter Heat Pump has perfect performance and super high energy efficiency. Its SCOP is as high as 4.71 and energy efficiency class reaches A+++, which ensures that the unit can run efficiently while saving maximum energy consumption.



A+++

4.71
SCOP

Quiet

SUPER SILENT OPERATION

The unit uses a special three-layer sound insulation cotton, combined with Power World's multiple noise reduction technology, so that the unit can run smoothly and quietly without mechanical noise.



Multiple noise reduction processes

47
dB(A)

Power World's full DC inverter technology combines the unit's special airflow design, casing design, damping design and pipe welding technology, and adopts international famous brand mute components, so that the unit noise is lower than 47dB.

Special soundproof cotton

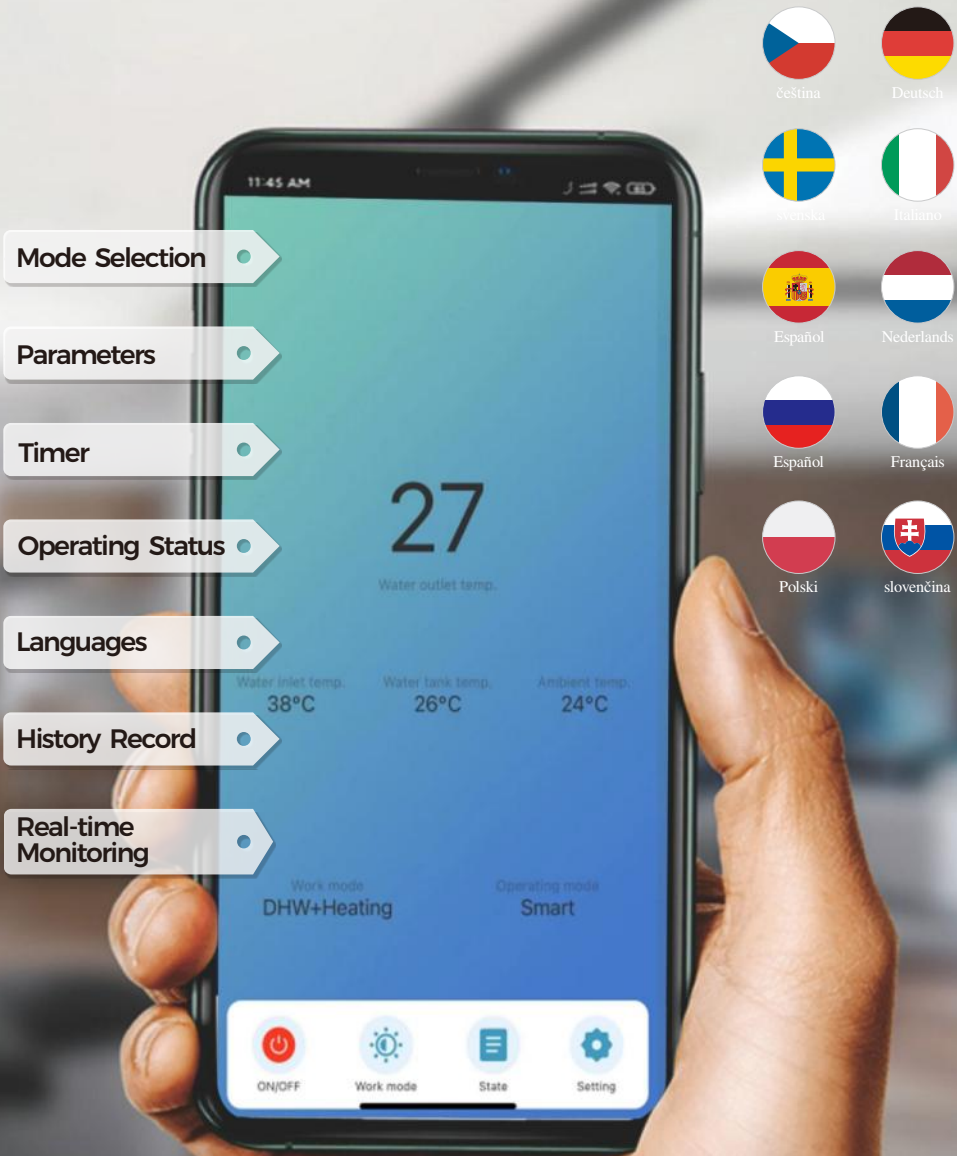


The three-layer sound insulation cotton has the functions of sound absorption, sound insulation and noise reduction, and its noise reduction ability is stronger than that of ordinary sound insulation cotton.

Multi-
Language

LCD CONTROL PANEL AND WI-FI APP

5-Inches large LCD touch screen control panel and “Smart Life” Wi-Fi App support local language +English options. This user-friendly design reduces users' foreign language dyslexia, and also facilitates distributors to expand their market locally.



Vacation
Mode

FOUR OPERATING MODES SAVE YOUR ENERGY

Based on the different needs of users, Power World has developed 4 operating modes: Powerful Mode, Smart Mode, Silent Mode, Vacation Mode. Users can choose modes with different operating frequencies according to actual needs, which help users save a lot of electricity bills.



- ✓ Support RS485 and Modbus Protocol
- ✓ Inlet and Outlet Water Temp Curve
- ✓ Cascade Function Max 8units
- ✓ Operating Power Curve
- ✓ $\pm 0.1^{\circ}\text{C}$ Precise temps control

Smart Home

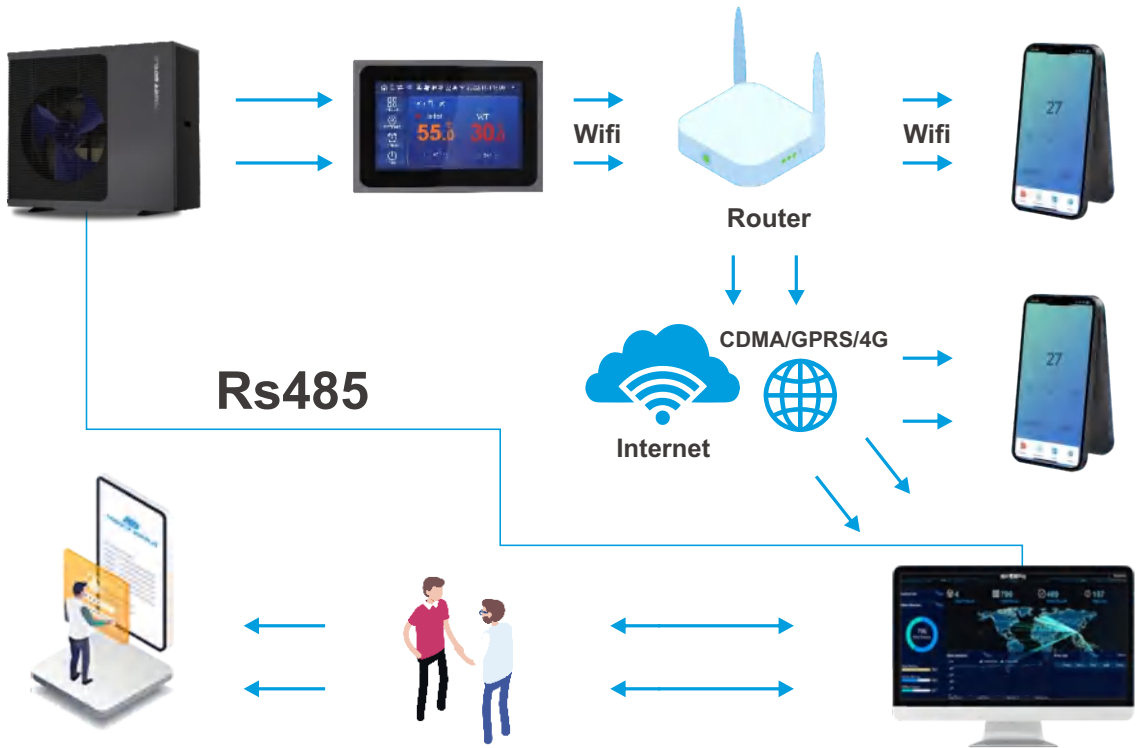
FREE WI-FI APP CONTROL AND POWER WORLD'S IOT PLATFORM

Wi-Fi Module

The built-in WIFI module of this R290 heat pump can be directly connected to the “Smartlife” APP through the router. Users do not need to buy a WIFI module box, they can control the HP system and view the operating parameters of the unit anytime and anywhere through the smart phone.

IoT Platform

Power World's IoT cloud management platform can be connected with Wi-Fi or DUT to realize remote monitoring of data. This platform can record all the operating parameters of the units from Power World. If the unit has an error, the error report will be synchronized to the local service provider or PW's console, and then we will quickly provide users with the best solution, which greatly saves the after-sales communication cost and time costs of users, dealers, and manufacturers.



R290 FULL DC INVERTER HEAT PUMP



| Model | PW030-DKZLRS-E/S | PW040-DKZLRS-E/S | PW050-DKZLRS-E/S | PW050-DKZLRS-E | PW060-DKZLRS-E |
|--|--------------------|------------------|------------------|------------------|----------------|
| Heating Condition - Ambient Temp.(DB/WB)7/6°C,Water Temp.(In/Out):30/35°C | | | | | |
| Heating capacity range (kw) | 3.3~8.3 | 4.5~11.4 | 5.9~14.8 | 5.9~14.8 | 8.8~22.0 |
| Heating input range (kw) | 0.64~2.18 | 0.85~2.95 | 1.13~3.83 | 1.13~3.83 | 1.68~5.77 |
| Cop range | 3.81~5.17 | 3.86~5.29 | 3.86~5.22 | 3.86~5.22 | 3.81~5.24 |
| DHW Condition-Ambient Temp.(DB/WB)7/6°C,Water Temp.(In/Out):15/55°C | | | | | |
| Heating Capacity Range (kW) | 3.7~7.4 | 5.2~10.2 | 6.6~13.2 | 6.6~13.2 | 7.8~17.6 |
| Heating Power Input Range(kW) | 0.79~2.10 | 1.10~2.87 | 1.41~3.73 | 1.41~3.73 | 1.67~5.01 |
| COP Range | 3.52~4.69 | 3.55~4.71 | 3.54~4.67 | 3.54~4.67 | 3.51~4.66 |
| Heated water output (L/H) | 159 | 219 | 283 | 283 | 377 |
| Cooling Condition - Ambient Temp.(DB/WB)35/24°C,Water Temp.(In/Out):12/7°C | | | | | |
| Cooling Capacity Range (kW) | 2.4~5.8 | 3.3~8.2 | 4.3~10.8 | 4.3~10.8 | 6.2~15.3 |
| Cooling Power Input Range(kW) | 0.79~2.19 | 1.08~3.07 | 1.39~3.99 | 1.39~3.99 | 1.99~5.60 |
| EER Range | 2.65~3.04 | 2.67~3.06 | 2.71~3.10 | 2.71~3.10 | 2.73~3.12 |
| ErP Level (35°C) | A+++ | A+++ | A+++ | A+++ | A+++ |
| Refrigerant | R290 | | | | |
| Power supply | 230V/1Ph/50Hz/60Hz | | | 380V/3Ph/50-60Hz | |
| Diameter of pipe (mm) | DN25 | DN25 | DN25 | DN25 | DN25 |
| Max water head (m) | 9 | 9 | 9 | 9 | 12 |
| Noise dB(A) | ≤47 | ≤50 | ≤52 | ≤52 | ≤53 |
| Net Weight (kg) | 108 | 120 | 132 | 132 | 170 |
| Net Dimension (L/W/H) mm | 1080×460×820 | 1080×460×960 | 1080×480×1060 | 1080×480×1060 | 1080×480×1372 |
| Operation Ambient Temp. (°C) | -25~43 | | | | |
| Operating water temperature (°C) | 20~65(DHW) | | | | |
| Operating water temperature (°C) | 20~70(Heating) | | | | |
| Operating water temperature (°C) | 7~35(Cooling) | | | | |

REMARK:

Heating working condition: Inlet water temperature 30°C, Outlet water temperature 35°C, Dry bulb temperature 7°C, Wet bulb temperature 6°C. Cooling working condition: Inlet water temperature 12°C, Outlet water temperature 7°C, Dry bulb temperature 35°C, Wet bulb temperature 24°C. DHW working condition: Inlet water temperature 15°C, Outlet water temperature 55°C, Dry bulb temperature 7°C, Wet bulb temperature 6°C.