

Specially designed for zero-carbon HEAT PUMP R290 up to 22 kW

FULL DC INVERTER HEAT PUMP

R290

HEATING

COOLING

DHW



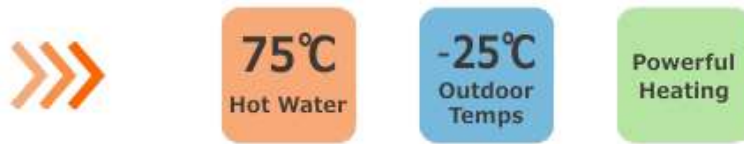
LOW GWP R290 REFRIGERANT

To reduce carbon emissions to the environment and curb global warming, Power World has developed an R290 Full DC Inverter Heat Pump. Compared to R410A refrigerant with a GWP of 2100 and R32 with a GWP of 675, R290 has a GWP of less than 20 and is recognized by the industry as the most development potential and eco-friendly refrigerant.

The perfect performance of the R290 FULL DC INVERTER Heat Pump can meet the user's needs of house heating, cooling and domestic hot water throughout the year (by 3-way valve)

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.



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.

ENERGY EFFICIENCY

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

.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. 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.

FOUR OPERATING MODES SAVE YOUR ENERGY

operating modes: Powerful Mode, Smart Mode, Silent Mode, Vacation

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.





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

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.

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-INVERTER HEAT PUMP for cooling, heating and DHW					
Model	PW030-DKZLRS-E/S	PW040-DKZLRS-E/S	PW050-DKZLRS-E/S	PW050-DKZLRS-E	PW060-DKZLRS-E
Picture					
Heating Condition - Ambient Temp.(DB/WB): 7/6℃, Water Temp.(In/Out): 30/35℃					
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 Power 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℃, Water Temp.(In/Out): 15/55℃					
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
Cooling Condition - Ambient Temp.(DB/WB): 35/24℃, Water Temp.(In/Out): 12/7℃					
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℃)	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
Water Pump Type	Shimge DC pump				
Max Head of Circulating Pump (m)	9	9	9	9	12
Noise dB(A)	≤47	≤50	≤52	≤52	≤53
Net Weight (kg)	105	115	160	160	165
Net Dimension (L/W/H) (mm)	1080×460×820	1080×460×960	1080×480×1060	1080×480×1060	1080×480×1372
Operation Ambient Temp. (℃)	-25~43℃				
Operating Water Temperature (℃)	20~65℃ (DHW)				
Operating Water Temperature (℃)	20~70℃ (Heating)				
Operating Water Temperature (℃)	7~35℃ (Cooling)				