

 **Heating**

 **Cooling**

 **Hot water**



R290 COMMERCIAL HIGH TEMPERATURE FULL DC INVERTER HEAT PUMP

R-290

35°C/55°C

A+++

 **380V/3Ph/50-60Hz**

Sun Stellar's R290 commercial heat pump redefines sustainable climate control for large-scale applications. Engineered with precision and powered by R290 refrigerant—a natural, eco-conscious propane with zero Ozone Depletion Potential (ODP) and an exceptionally low Global Warming Potential (GWP) of just 3—this system delivers powerful performance while protecting the planet.

FEATURES

R290 refrigerant, ODP=0, low GWP(GWP=3)

Dual DC Inverter Technology: Delivers precise and efficient heating with a maximum output temperature of 78°C.

Built-in Wi-Fi Module: Provides seamless connectivity and control.

SG Smart Grid Functionality: Enhances energy management and integration.

Night Operation Mode: Convenient control during off-hours.

Top Efficiency Ratings: Achieves ErP Level A+++ (at 35°C) with a high SCOP of 4.57.

Multilingual Support: Easy operation in various languages.

Automatic Temperature Adjustment: Ensures optimal performance.

Cascade Control: Supports up to 8 units for flexible scaling.

R290
zero carbon

A+++
Energy-Saving

78°C

High temp
Water outlet

SG
Ready
Smart Heat Pumps


PVC-READY

PREMIUM CONFIGURATION, RELIABLE QUALITY



R 290 FULL-INVERTER HEAT PUMP FOR COOLING , HEATING AND DOMESTIC HOT WATER

Model	ST-20-H-EVI-X	ST-25-H-EVI-X	ST-75-H-EVI-X	ST-150-H-EVI-X
DHW Condition - Ambient Temp.(DB/WB): 7/6°C - 20/15°C, Water Temp.(In/Out): 30/35°C - 15/55°C				
Heating Capacity Range (kW)	12.5~20	17.5~25	49.8~75	98.7~150
Heating Power Input Range (kW)	3.27~4.88	4.78~6.48	10.2~17.08	16.7~33.4
COP Range	3.89~4.18	3.87~4.08	4.39~5.62	4.6~5.9
Heated Water Output (L/H)	300~420	480~650	1490~1950	3050~3940
Cooling Condition - Ambient Temp.(DB/WB): 35/24°C, Water Temp.(In/Out): 12/7°C				
Cooling Capacity Range (kW)	8.17~13.78	11.38~16.25	17.8~44.5	35.9~89.2
Cooling Power Input Range (kW)	3.30~5.58	4.60~6.58	7.2~19.9	14.3~39.8
EER Range	2.08~2.58	2.08~2.58	2.12~2.65	2.3~2.65
ErP Level (35°C)	A+++			
ErP Level (55°C)	A++			
Power Supply	220 V /1Ph/50 Hz	380V/3Ph/50-60Hz		
Max. Power Input (kW)	5.68	7.95	19.93	41.8
Max. Current (A)	25	13.5	30	66
Fuse or Circuit Breaker (A)	32	40	40	200
Wire Diameter (mm ²)	6mm ²	6mm ²	10mm ²	35mm ²
Diameter of Pipe (mm)	DN25	DN25	10mm ²	DN50
Sound Power Level dB(A)	≤67	≤70	≤77	≤87
Sound Pressure Level dB(A)	≤55	≤57	≤62	≤70
Water Flow (m3/h)	2.55	3.78	5.8	11.7
Water Pressure Drop (max) kPa	40	45	80	80
Net Weight (kg)	145	190	370	480
Body Size (W*D*H) (mm)	1100x490x1090	1100x490x1440	1195x980x1900	2510x980x1900
IP Grade (Level of Protection)	IPX4			
Anti-electric Shock Rate	I			
Refrigerant	R290			
Operation Ambient Temp. (°C)	-25~45°C			
Operating Water Temperature (°C) DHW	20~78°C(DHW)			
Operating Water Temperature (°C) Heating	20~78°C (Heating)			
Operating Water Temperature (°C) Cooling	7~35°C(Cooling)			

*The Above Specifications are subject to change without prior notice for product Improvement.