



Hydrosol Series 1

Hot Water Heat Pump Range



A tall, white, cylindrical Solvue R290 Sanitary Hot Water Heat Pump unit is positioned outdoors against a light-colored wall. The unit features a control panel with a digital display and several colored ports (red, white, blue) near the bottom. The Solvue logo is visible on the upper part of the unit. In the background, there is a garden with green plants and a paved area.

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R290 Sanitary Hot Water Heat Pump

Features



High Energy Efficiency

Engineered with a variable-frequency compressor and an advanced micro-channel heat exchanger, the system achieves exceptional energy efficiency-delivering powerful performance with environmentally responsible, energy-saving operation.



Solar PV Integration Ready

Seamlessly integrated with residential photovoltaic systems, the unit intelligently recognizes inverter signals to capture and utilize surplus solar energy. By prioritizing self-generated power, it reduces reliance on the grid, and significantly lowers overall electricity costs.



Smart Wi-Fi Control

Equipped with a built-in Wi-Fi module and integrated with the global Smart Life app, the system enables intuitive remote control. Users can adjust temperature settings, switch operating modes, and program schedules in real time.



Enhanced Safety

Constructed with a high-corrosion-resistant enamel water tank, the system is designed for long-term durability and dependable performance. Combined with a built-in timed sterilization function ensures outstanding hygiene and delivers exceptional safety and reliability.



Federal Small - Scale Technology Certificates (STCs)

Certified System Code	STC=10 Years Deeming				
Model	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
11/80LT1	15	16	18	20	19
28/120LT1	28	28	33	36	36
28/27LT1	28	28	33	36	35

Available Designs



Model Reference		SVHW-1-11/80LT	SVHW-1-28/190LT	SVHW-1-28/270LT
Volume	L	80	190	270
Power supply	V/Ph/Hz	220-240/1/50	220-240/1/50-60	220-240/1/50-60
COP	W/W	4.05	5.41	5.46
Norminal Heating Capacity	W	1100	2800	2800
Max. current (Boost mode)	A	9.2	12	12
Heating Time HP only	H	3.6	3.3	4.7
Rated Power Input	W	270	510	510
E-heater Capacity	W	1600	1600	1600
Refrigerant type			R290	
Refrigerant charge	g	145	350	350
Maximum Water Temp. HP only	°C	65	70	
Maximum Water Temp. HP & E-Heater	°C		75	
Operation ambient temp.	°C	Heat Pump only: -7 43. Heat Pump & E-Heater: -20~43		
Sound pressure level (1m)	dB(A)	36	49	49
Dimension (D×H)	mm	Φ510x1230	Φ560x1820	Φ640×1952
Net weight	kg	59	95	135
Packaging Dimension (W×D×H)	mm	570×570×1290	640×640×1956	670×670×2072
Loading Qty. of 40HQ	Units	160	58	54
*: Above test results are given based on the test condition ambient 20 C/15 C, Water from 15 C-55 C.				



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Hydrosol Series 1

R290 - Hot Water Heat Pump

80L

SVHW-1-11/80LT

1.1 kW

Nominal heating capacity

Heating

1.1 kW

Refrigerant

R290

Apartments, townhouses, and smaller homes.

190L

SVHW-1-28/190LT

2.8 kW

Nominal heating capacity

Heating

2.8 kW

Refrigerant

R290

Medium to large homes and small commercial.

270L

SVHW-1-28/270LT

2.8 kW

Nominal heating capacity

Heating

2.8 kW

Refrigerant

R290

Large homes, commercial and manifold systems.

Our Path to Green Solution

High Efficiency Micro Channel Heat Exchanger



Enhance Heat Transfer Efficiency by 30%

It's with larger surface area, which facilitates more efficient heat exchange between the refrigerant and the air or water, and with less refrigerant charge.

Durability and Corrosion Resistance With 1500 hrs. Salt Spray Test

Adopting materials that are more resistant to corrosion (1500 hrs. Salt spray test) than those used in traditional heat exchangers. This enhances their longevity and reliability, especially in environments with high humidity or corrosive elements.

Compact and Lightweight Design

It makes the DHW heat pump easier to install and requires less space, which is particularly beneficial in residential installation scenarios.

Quick Thermal Response

It can adjust its temperature quickly, allowing the heat pump to respond rapidly to changes in hot water demand.

High Efficiency System Composition

EXV

Delivers precise & optimized control of refrigerant flow. Enhance the efficiency in different weather conditions.

DC inverter rotaty compressor

Creative high efficient motor core design and highly stable moving parts for consistent heating performance

DC Fan Motor and Optimized channel

Engineered for maximum airflow with minimal energy consumption, Low noise level.

Bigger Evaporator

Enhance the efficiency, leading to faster heating, lower energy consumption, and improved performance in different environmental conditions.

PV Ready Function



On Signal from PV Inverter

Heat Pump in Boost Mode with higher settings to store energy



Off Signal from PV Inverter

Heat Pump back to normal mode

Reduced Energy Bills

Designed to lower running costs, the Hydrosol Series 1 R290 Heat Pump uses renewable heat from the surrounding air and intelligently manages energy consumption. Its smart controls and Solar PV compatibility help households reduce electricity usage and save on utility bills.



How You Save More

- ✓ Consumes significantly less electricity than conventional electric storage water heaters.
- ✓ Solar PV Ready technology utilizes excess solar energy before drawing power from the grid.
- ✓ Smart scheduling allows heating during off-peak electricity periods or peak solar generation
- ✓ Intelligent inverter operation prevents unnecessary energy consumption.
- ✓ Lower electricity demand helps reduce long-term household energy costs.
- ✓ High-efficiency operation provides reliable hot water while keeping running expenses low.

Energy Efficiency

The Hydrosol Series 1 R290 Heat Pump is engineered to maximize heating performance while minimizing electricity consumption. Advanced technologies work together to deliver fast, reliable hot water with greater energy efficiency.



How It Delivers Greater Efficiency

- ✓ High COP of up to 5.46 for outstanding heating efficiency.
- ✓ Variable-speed DC inverter compressor adjusts output based on hot water demand.
- ✓ Microchannel heat exchanger improves heat transfer efficiency by up to 30% while requiring less refrigerant.
- ✓ Larger evaporator and optimized DC fan motor enhance heating performance with lower energy consumption.
- ✓ Fast thermal response delivers hot water quickly while reducing unnecessary power use.
- ✓ Smart Wi-Fi scheduling helps optimize operating times for maximum efficiency.

Comfort and Easy

Smart Home Integrated

Control Panel



Simple and Intuitive:
Target and current
Tank Temp. at a glance

Weekly Schedule



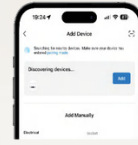
Customization to
Lifestyle, Lower carbon
emissions

OTA Upgradable



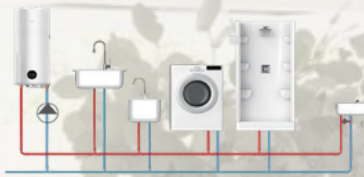
Convenience, efficiency,
and enhanced service
for both the supply
chain and end users

One Button Connection, Plug & Play



Nearby devices can be
automatically discovered,
and with just one click,
the WLAN setup is
completed

Reserved Recirculation Pump Port



Optimized Wall Hanging Accessory

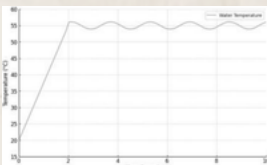


- Safe and reliable
- Verified with real life installation tests
- Fast and easy installation
- Space saving, invisible from front
- Compatible with 80L

Reliable Protection, Peaceful Warmth

LEVEL 1

Temperature Control



LEVEL 2

Resettable Thermal Protector

Thermal Protection Switch



LEVEL 3

Temperature and Pressure Relief Value

P/T Value

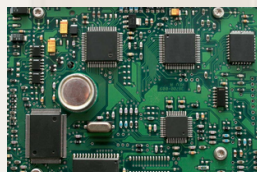


Safety-enhanced E-components



Sealed Relay

- Spark Free
- Protection against dust and moisture
- Longer Lifespan



Electronic Scallant on PCB

- High and low temperature resistance, with a temperature range of -50 to 200°C
- Excellent sealing and adhesive properties, moisture-proof and shock-resistant
- Outstanding weather and aging resistance



Ceramic Fuse

- High temperature endurance
- Better mechanical strength
- Better arc suppression
- Enhanced safety



Incoloy 825 Anti-corrosion E-heater

- High temperature endurance
- Better mechanical strength
- Better arc suppression
- Enhanced safety



Your Energy Solutions Experts

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