



# Solax Heat Pump

R290 Series



# One System, Four Seasons — 3 Zones with Smart Control

Enjoy year-round comfort with three operating modes:

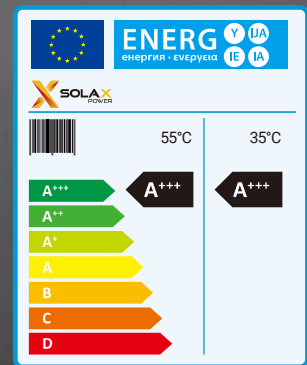
- Domestic hot water throughout the year
- Heating in winter
- Cooling in summer



## Superior Eco-Performance

Highest ERP rating

- $\eta$  s. Seasonal space heating energy efficiency
- $\eta$  s. average up to A+++ at 35°C
- $\eta$  s. average up to A+++ at 55°C



**SolaX**

**Others(A++)**

**Other Brand(A+)**

Prated

**10 kW**

9.96 kW

9.96 kW

55°C Application

Energy Efficiency(%)

**163%**

126%

105%

Annual Power

Consumption(kWh)

**4978**

6390

7659

**Savings Percentage :**

**22%**

**35%**

Environmental Friendly

R290

NATURAL REFRIGERANT

GWP=3

ODP=0



< 39 dBA

In every quiet moment,  
we fulfill our promise to your home.



# Silence, By Design — Comfort, By Intention

Inside and out, with total noise control from every angle

**Wind Noise Optimization**

**1.5° Dual-Sided** Slope for Airflow  
Reducing Wind Noise

**700 mm** Biomimetic Fan Blades  
**50%** Larger Swan-Inspired Biomimetic Fan Blades

**Compressor Acoustic Enclosure**

**Soundproofing Optimization**

**Vibration Noise Optimization**

**Low** Deflection Rotor

**Dual** Shock Absorption

Steel plate ●  
Damping material ●  
Steel plate ●

**Ultra-Quiet** Material Design

## Three Indoor Configurations, Suitable For Any Home Setting



### Control Unit:

With centralized control designed for households with existing or self-installed hydraulic circuits and domestic hot water tanks



### Hydraulic Unit:

Built-in an additional hydraulic distribution module (vs. Control Unit) for easy installation



### Hydraulic Integrated Unit:

Fully integrated all-in-one system, ideal for new installations or households requiring an upgrade in hot water tank capacity



# Comfort In Your Hands — Anytime, Anywhere

## 360-Degree Observability

### Status

### Energy Data Display

### Mode Control

### Temperature Adjustment



## Real-time Data Acquisition

helps users optimize energy efficiency, reduce costs, prevent faults, and enhance user comfort.

### Monitoring

- Real-time Status Monitoring
- Real-time Energy Data
- Real-time Temperature Display

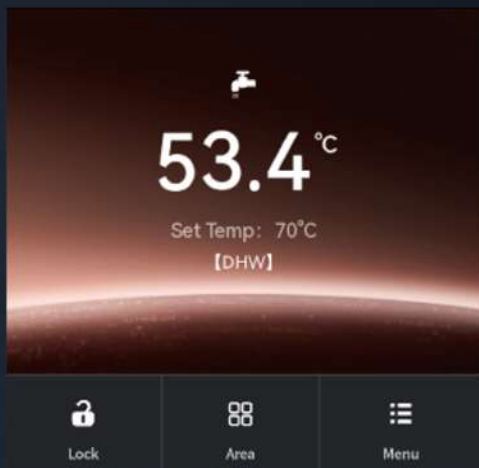
### Control

- Operation Mode Settings
- Power Mode Settings
- Mode Temperature Control

### Scheduling

- Schedule On/Off
- Holiday Scheduling
- Mute Scheduling

# USER FRIENDLY Local Human-Machine Interaction



## Supports Status Display

- Real-time Temperature Display
- Supports Multi-language Display

## Supports Local Control

- Mode Settings
- Temperature Settings
- Scheduling Settings

## Supports Monitoring Status



Power supply		220 ~ 240 V / 1N~ / 50 Hz					380 ~ 415 V / 3N~ / 50 Hz				
Heating (A: 7/6°C W: 30/35°C)	Capacity	8.5 kW	10 kW	12.5 kW	14 kW	15.5 kW	8.5 kW	10 kW	12.5 kW	14kW	15.5 kW
	Rated input power	1.65 kW	2.02 kW	2.55 kW	2.95 kW	3.41 kW	1.65 kW	2.02 kW	2.55 kW	2.95 kW	3.41 kW
	COP	5.15	4.95	4.90	4.75	4.55	5.15	4.95	4.90	4.75	4.55
Heating (A: 7/6°C W: 47/55°C)	Capacity	8kW	10 kW	12 kW	14 kW	16 kW	8 kW	10 kW	12 kW	14 kW	16 kW
	Rated input power	2.32 kW	3.08 kW	3.69 kW	4.44 kW	5.16 kW	2.32 kW	3.08 kW	3.69 kW	4.44 kW	5.16 kW
	COP	3.45	3.25	3.25	3.15	3.1	3.45	3.25	3.25	3.15	3.1
Cooling (A: 35°C W: 23/18°C)	Capacity	8.5 kW	10 kW	12 kW	14 kW	15.5 kW	8.5 kW	10 kW	12 kW	14 kW	15.5 kW
	Rated input power	1.63	2.13 kW	2.55 kW	3.11 kW	3.56 kW	1.63 kW	2.13 kW	2.55 kW	3.11 kW	3.56 kW
	EER	5.20	4.70	4.70	4.50	4.35	5.20	4.70	4.70	4.50	4.35
Cooling (A: 35°C W: 12/7°C)	Capacity	8 kW	9kW	12 kW	13 kW	14 kW	8 kW	9 kW	12 kW	13 kW	14 kW
	Rated input power	2.35 kW	2.81 kW	3.87 kW	4.26 kW	5.09 kW	2.35 kW	2.81 kW	3.87 kW	4.26 kW	5.09 kW
	EER	3.40	3.20	3.10	3.05	2.75	3.40	3.20	3.10	3.05	2.75
Seasonal space heating energy efficiency class <sup>①</sup>	LWT at 35°C	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
	LWT at 55°C	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
SCOP <sup>②</sup>	LWT at 35°C	5.44	5.30	5.07	4.94	4.90	5.44	5.30	5.07	4.94	4.90
	LWT at 55°C	4.12	4.07	3.89	3.84	3.83	4.12	4.07	3.89	3.84	3.83
Compressor	Type	Rotary DC inverter									
Outdoor fan	Motor type	Brushless DC motor									
	Number of fans	1									
Throttle type		Electronic expansion valve									
Air side heat exchanger	Type	Finned tube									
Water side heat exchanger	Type	Plate type									
Refrigerant	Type/GWP	R290/3									
	Charged volume	1.2 kg	1.2 kg	1.5 kg	1.5 kg	1.5 kg	1.2 kg	1.2 kg	1.5 kg	1.5 kg	1.5 kg
CO2 Equivalent		0.0036 t	0.0036 t	0.0045 t	0.0045 t	0.0045 t	0.0036 t	0.0036 t	0.0045 t	0.0045 t	0.0045 t
Sound power level <sup>③</sup>		49 dB(A)	49 dB(A)	51 dB(A)	52 dB(A)	52 dB(A)	49 dB(A)	49 dB(A)	51 dB(A)	52 dB(A)	52 dB(A)
Sound pressure level at 1m <sup>④</sup>		35 dB(A)	35 dB(A)	37 dB(A)	38 dB(A)	38 dB(A)	35 dB(A)	35 dB(A)	37 dB(A)	38 dB(A)	38 dB(A)
Sound pressure level at 3m <sup>⑤</sup>		32 dB(A)	32 dB(A)	34 dB(A)	35 dB(A)	35 dB(A)	32 dB(A)	32 dB(A)	34 dB(A)	35 dB(A)	35 dB(A)
Dimensions(W x H x D)		1310 × 1050 × 465 mm									
Weight		140kg	140kg	154kg	154kg	154kg	151kg	151kg	165kg	165kg	165kg
Piping connection		G 1-1/4"									
Operation range	Heating	-25 ~ 35 °C									
	Cooling	5 ~ 48 °C									
	DHW	-25 ~ 46 °C									
Water outlet	Heating	25~80 °C									
	Cooling	5~25 °C									
	DHW	25~70 °C									

① Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811/2013; (EU) No 813/2013; OJ 2014/C 207/02

② Seasonal space heating energy efficiency class tests in average climate conditions

③ Sound power level test condition: EN12102-1

④ Sound pressure level at 1m is the maximum value tested under the condition of A7W55

⑤ Sound pressure level at 3m is the maximum value tested under the condition of A7W55

# Indoor Unit



STN1-C01



STN1/3-C02



STN1/3-C03

Component	Control Unit	Hydraulic Unit	Hydraulic Integrated Unit
Indoor unit control board	●	●	●
4 inch touch panel	●	●	●
Back up heater		●	●
Expansion tank (8L)		●	●
Solenoid three way valve		●	●
190L hot water tank			●
Hot water tank expansion tank (18L)			●
Hot water tank circulation pump			●
Check valve			●
Application Scenario	Suitable for households with existing or self-installed hydraulic circuits and domestic hot water tanks.	Suitable for households with existing or self installed domestic hot water tanks	Ideal for new installations or households requiring an upgrade in domestic hot water tank capacity

## Control Unit

### STN1-C01

Power Supply	220 ~ 240 V / 1N~ / 50 Hz
Rated Current	0.1 A
User Interface	4 inch high-resolution touch panel
Communication	WiFi/Ethernet/RS485
Installation	Wall mounting
Sound power level <sup>①</sup>	30 dB(A)
Sound pressure level <sup>②</sup>	16 dB(A)
Dimensions(W x H x D)	340 x 400 x 80 mm
Weight	6.5 kg

## Hydraulic Unit

### STN1-C02

### STN3-C02

Power Supply	220~240 V / 1N~ / 50 Hz	380 ~ 415 V / 3N~ / 50 Hz
Rated Current	39.5 A	13.5 A
User Interface	4 inch high-resolution touch panel	
Communication	WiFi / Ethernet / RS485	
Back up heater	Capacity combination	3.0 kW + 6.0 kW
	Power supply	220~240 V / 1N~ / 50 Hz
	Rated running current	39.5 A
Expansion tank size <sup>③</sup>	8L	
Piping connections (water) <sup>④</sup>	(G1") / (G1-1/4")	
Recommend circuit breaker	60 A	20 A
Installation	Wall mounting	
Sound power level <sup>①</sup>	33 dB(A)	
Sound pressure level <sup>②</sup>	19 dB(A)	
Dimensions(WxHxD)	420 x 700 x 265 mm	
Weight(Empty)	33 kg	

① Sound power level test condition: EN12102-1

② Sound pressure level is tested under the condition of A7W55

③ The 18L expansion tank is for the DHW, while the 8L one is for the floor heating side

④ G1 connects to indoor water pipe, G1-1/4 connects to outdoor unit water outlet&inlet

## Hydraulic Integrated Unit

## STN1-C03

## STN3-C03

Power Supply	220 ~ 240 V / 1N~ / 50 Hz		380 ~ 415 V / 3N~ / 50 Hz	
Rated Current	52.3 A		17.5 A	
User Interface	4 inch high-resolution touch panel			
Communication	WiFi / Ethernet / RS485			
Back up heater	Capacity combination	3.0 kW + 6.0 kW		
	Power supply	220~240 V / 1N~ / 50 Hz		380 ~ 415 V / 3N~ / 50 Hz
	Rated running current	39.5 A		13.1 A
Expansion tank size <sup>①</sup>	18 L+8 L			
DHW tank size	190 L			
Piping connections (water) <sup>③</sup>	(G1") / (G1-1/4")			
Recommend circuit breaker	80 A		25 A	
Installation	Floor stand			
Sound power level <sup>①</sup>	33 dB(A)			
Sound pressure level <sup>②</sup>	19 dB(A)			
Dimensions(W x H x D)	595 x 1875 x 700 mm			
Weight(empty)	186 kg			

① Sound power level test condition: EN12102-1

② Sound pressure level is tested under the condition of A7W55

③ The 18L expansion tank is for the DHW, while the 8L one is for the floor heating side

④ G1 connects to indoor water pipe, G1-1/4 connects to outdoor unit water outlet&inlet

## Solution Diagram

