

# R290 Air Source Monoblock Heat Pump





## Eco-Smart Comfort: R290 Air Source Heat Pump

Solareast R290 air source heat pump offers eco-friendly and energy-efficient heating and cooling solutions. Utilizing propane (R290) as the refrigerant, it ensures exceptional efficiency while reducing environmental impact. With its advanced technology, it achieves significant energy savings, making it a cost-effective choice for both residential and commercial spaces. The ultra-low Global Warming Potential (GWP) of 3 minimizes greenhouse gas emissions, contributing to a greener planet. Designed for silent operation and easy installation, it provides reliable and hassle-free comfort. Embrace the future of sustainable heating and cooling with our R290 air source heat pump, enjoying the eco-smart performance, energy savings, and superior comfort.



BLN-006|012 TC1  
BLN-012 TC3



BLN-018 TC1  
BLN-018TC3



# Advantages of R290 Monoblock Heat Pump

# DS

## /D1



### "Advantages of R290 Refrigerant: Eco-friendly "

R290 refrigerant offers numerous advantages. With a low Global Warming Potential (GWP) of 3, it significantly reduces environmental impact. It is energy efficient, safe, and reliable, making it an eco-friendly choice. R290 is also cost-effective, compatible with existing systems, and helps reduce carbon emissions, making it ideal for sustainable cooling and heating solutions.

## /D2



### "Silent Comfort: Serene Climate Control"

Our products offer a whisper-quiet operation, ensuring a serene environment. With advanced noise reduction technology, you can enjoy the perfect temperature without any disturbance. Experience tranquility at its best with our silent air source heat pumps.

## /D3



### "Power Consumption Module"

The power consumption module provides users with direct access to daily electricity consumption data, as well as long-term consumption trends. This functionality empowers customers to understand the energy efficiency of our products compared to traditional boilers, highlighting substantial electricity savings and contributing significantly to the preservation of the ecological environment. The 5" color screen has an intuitive interface for simple navigation and accurate temperature changes.

04



### "Freezing Conditions? No Problem!"

Solareast air source heat pump thrives in frigid temperatures, operating flawlessly even at -25°C. Experience uninterrupted heating performance when you need it most. With our reliable technology, winter chills are no match for our resilient air source heat pump.

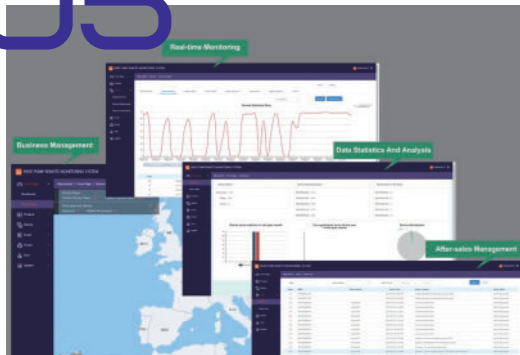
07



### "SG Ready"

Solareast heat pump company proudly holds the SG Ready certification, developed by the German Heat Pump Association and 17 manufacturers. This seal confirms that our smart grid-capable heat pumps seamlessly communicate with "smart grids." Experience the benefits of utilizing surplus electricity for efficient heating, hot water, and mild summer cooling, ensuring an advantage in energy optimization and sustainability.

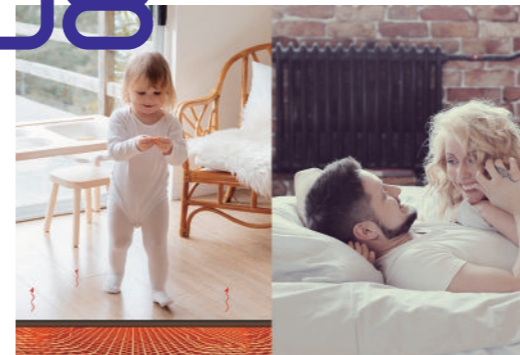
05



### "Efficient IoT Solution"

SOLAREAST's IoT customer management platform can effectively save labor costs for dealers. It can be connected with WIFI or DUT to realize remote monitoring of data and record all the operating parameters of the units and synchronize it to the management background of dealers and manufacturers. If the heat pump has an error report, the dealer can quickly provide users with the best solutions according to this report.

08



### "Dual Temperature Zone"

The air source heat pump has a dual temperature zone, allowing you to adjust your living room floor heating to a comfortable 35°C and your room heater to a warm 55°C. With our novel dual temperature zone function, you may enjoy tailored comfort at its best.

06



### "Cut Costs, Conserve Energy"

The range of R290 air-to-water heat pumps is designed to deliver exceptional energy-saving benefits for heating and domestic hot water production. These pumps effectively harness the ambient air to transfer heat to the water system, resulting in reduced energy consumption and substantial cost savings. With our air-to-water heat pumps, you can enjoy eco-friendly and cost-effective heating solutions.

09



### "WIFI Module 5G/2.4G Compatible"

Stay connected with our innovative air energy heat pump, which includes a 5G/2.4G Compatible WIFI Module. Using your smartphone or tablet, you can operate and monitor your heat pump system from anywhere. For maximum comfort and energy efficiency, enjoy the simplicity of altering settings, scheduling temperature adjustments, and getting real-time notifications.

# TECHNICAL DATA

Model		BLN-006TC1	BLN-008TC1	BLN-008TC3	BLN-012TC1	BLN-012TC3	BLN-018TC1	BLN-018TC3
Power supply	V/Ph/Hz	220~240/1/50	220~240/1/50	380~415/3/50	220~240/1/50	380~415/3/50	220~240/1/50	380~415/3/50
Nominal Heating (Max) (A7/6°C,W30/35°C)	Heating capacity	kW 2.92 ~ 9.10	4.10 -12.10	4.10 -12.10	4.30 ~ 15.20	4.30 ~ 15.20	7.24 ~ 21.90	7.24 ~ 21.90
	Power input	kW 0.61 ~ 2.11	0.79 -2.85	0.79 -2.85	0.87 ~ 3.73	0.87 ~ 3.73	1.50 ~ 5.88	1.50 ~ 5.88
	Current input	A 2.80 ~ 9.25	3.45-13.04	1.62-4.57	4.02 ~ 16.38	1.78 ~ 6.04	6.86 ~ 30.25	2.82 ~ 9.16
	COP	W/W 4.31 ~ 5.66	4.24 - 5.57	4.24 - 5.57	4.07 ~ 5.57	4.07 ~ 5.57	3.82 ~ 5.59	3.82 ~ 5.59
Nominal Heating (Max) (A7/6°C,W47/55°C)	Heating capacity	kW 2.99~8.16	4.05-12.15	4.05-12.15	4.25 ~ 14.55	4.25 ~ 14.55	6.36 ~ 19.45	6.36 ~ 19.45
	Power input	kW 1.03~2.92	1.38-4.06	1.38-4.06	1.45 ~ 4.28	1.45 ~ 4.28	2.15 ~ 6.85	2.15 ~ 6.85
	Current input	A 4.57~12.79	5.73-17.70	2.70-6.43	6.71 ~ 18.80	2.84 ~ 6.78	9.84 ~ 30.12	3.71 ~ 10.60
	COP	W/W 2.79 ~ 3.46	2.99 - 3.45	2.99- 3.45	2.83 ~ 3.45	2.83 ~ 3.45	2.84 ~ 3.57	2.84 ~ 3.57
Nominal Cooling (Max) (A35/24°C,W12/7°C)	Cooling capacity	kW 1.38~5.70	3.65-8.59	3.65-8.59	3.65 ~ 11.04	3.65 ~ 11.04	4.55 ~ 17.20	4.55 ~ 17.20
	Power input	kW 0.67~2.44	1.12-3.31	1.12-3.31	1.12~3.97	1.12 ~ 3.97	1.85 ~ 7.31	1.85 ~ 7.31
	Current input	A 3.06~10.27	5.18-14.47	1.97-5.25	5.18~17.44	1.97 ~ 6.30	8.47 ~ 32.1	2.99 ~ 11.26
ERP level (outlet water temp. at 35°C)	/	A+++	A+++	A+++	A+++	A+++	A+++	A+++
Max. input power	kW	3.5	5.40	5.85	5.40	5.85	7.5	10.5
Max. input current	A	15.0	25.0	10.0	25.0	10.0	35.0	17.0
Refrigerant Type / Charge / GWP	... / kg	R290 / 0.55 / 3	R290 / 1.05 / 3	R290 / 1.05 / 3	R290 / 1.05 / 3	R290 / 1.05 / 3	R290 / 1.4 / 3	R290 / 1.4 / 3
Rated water flow	m³/h	1.00	1.4	1.4	2.06	2.06	3.1	3.1
Fan quantity	/	1	1	1	1	1	2	2
Fan motor type	/	DC inverter						
Compressor	/	DC inverter						
Circulating pump	/	Inverter type / Built-in						
IP class	/	IPX4						
Sound pressure at 1m distance	dB(A)	46	43	43	53	54	56	56
Max outlet water temperature	°C	75	75	75	75	75	75	75
Water piping connections	/	G1	G1	G1	G1	G1	G1 - 1 / 4	G1 - 1 / 4
Water Pressure drop	kPa	20	20	20	20	20	55	55
Operating temperature range (heating mode)	°C	-25~45						
Operating temperature range (cooling mode)	°C	16~45						
Unpacked dimensions (L*D*H)	mm	1187*418*805	1287*448*904	1287*448*904	1287*448*904	1287*448*904	1187*488*1456	1187*488*1456
Packed dimensions (L*D*H)	mm	1217*463*920	1317*493*1020	1317*493*1020	1317*493*1020	1317*493*1020	1217*538*1570	1217*538*1570
UnPacked weight	kg	110	134	134	134	134	195	195
Packed weight	kg	122	146	146	146	146	208	208

\* Please refer to the nameplate for product upgrades or changes in specifications without prior notice.

