

R290 Air Source Monoblock Heat Pump

solareasthvac.com



Solareast Heat Pump Ltd.

Address: No.73 Defu Road, Xingtan Town, Shunde Foshan, Guangdong, China
Tel: +86 757 29380616
E-mail: heatpump@solareast.com



Website



Facebook



LinkedIn



YouTube



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

09

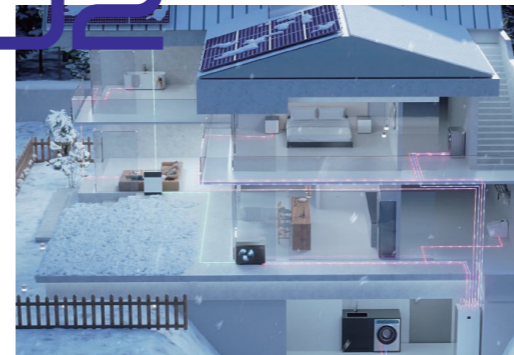
/01



"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.

/02



"Linkage Control With PV System"

This feature enables seamless integration with photovoltaic (PV) systems, allowing real-time optimization of energy use. By linking the heat pump with solar power, it maximizes energy efficiency, reduces operating costs, and enhances the overall sustainability of the system.

/03



"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.

/D4



"Powerful EVI Heating, Reliable To -25°C!"

Solareast air source heat pumps, with their EVI technology, operate consistently in temperatures as low as -25°C. Providing you with consistent and reliable heating performance, no matter how harsh the winter.

/D7



"Cascade System Up To 16 Heat Pumps"

The cascade system enables the connection of up to 16 heat pumps in a series, providing scalable and efficient heating solutions. This system ensures optimal performance, flexibility, and energy efficiency across large-scale applications, meeting diverse heating demands with precision.

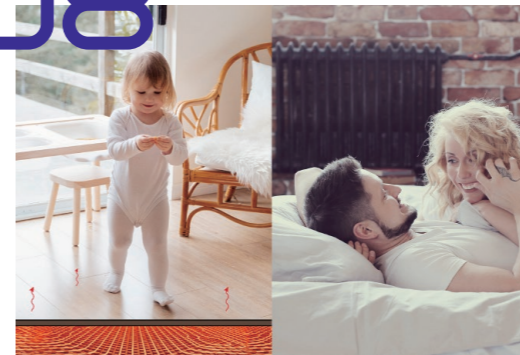
/D5



"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.

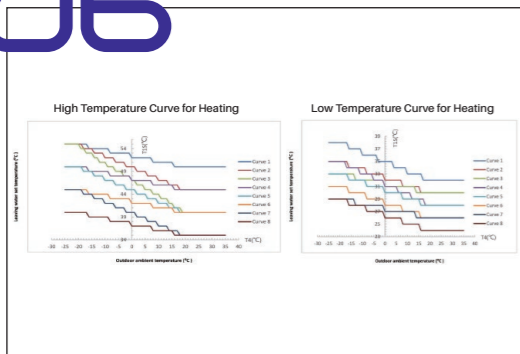
/D8



"Multi-temperature Zone"

The multi-temperature zone feature enables independent temperature control for different areas within a space, such as setting floor heating in the living room to a comfortable 35°C while maintaining a warmer 55°C in the room. This customizable approach ensures optimized comfort and energy efficiency across multiple zones, ideal for diverse heating needs in residential or commercial settings.

/D6



"Customizable Heating Curve"

The customizable heating curve feature enables precise control over the heating system, enhancing efficiency and adaptability. By adjusting heating curves to suit varying temperature ranges, users can optimize energy savings and ensure consistent indoor comfort. This advanced functionality seamlessly meets diverse environmental conditions and user-specific requirements, delivering tailored heating solutions.

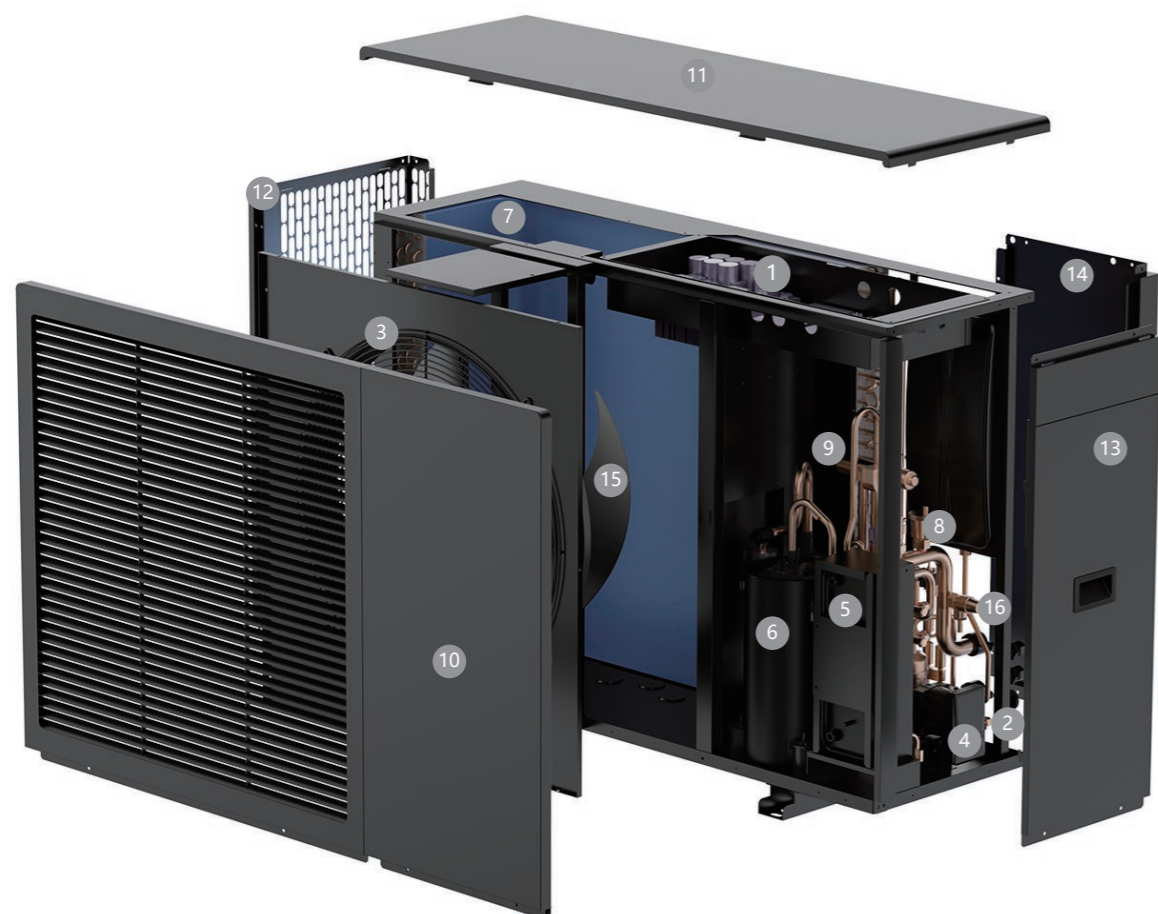
/D9



"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.

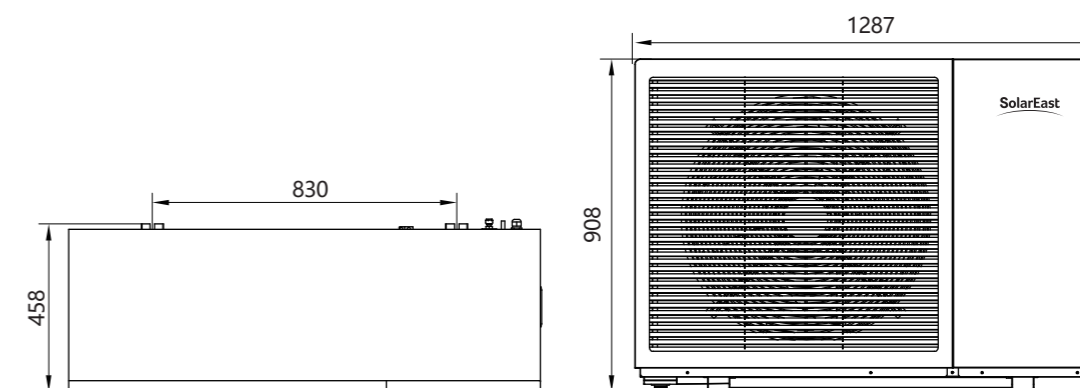
Exploded Diagram



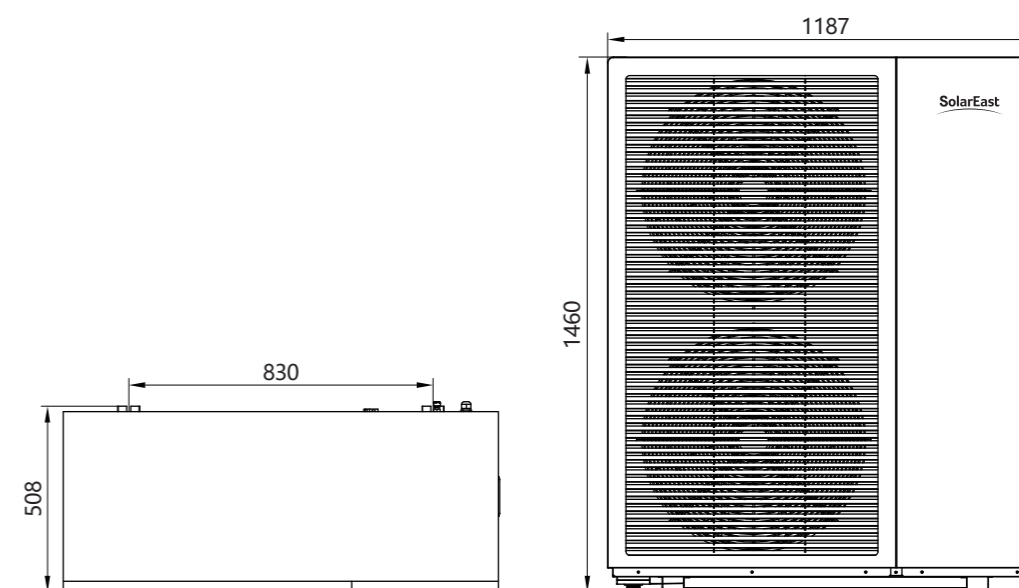
Components

- | | |
|---------------------------|---------------------|
| 1 Main board | 9 Four way valve |
| 2 Right rear support | 10 Front panel |
| 3 Front net of air outlet | 11 Top cover |
| 4 Water pump | 12 Side net |
| 5 Plate heat exchanger | 13 Right side panel |
| 6 Compressor | 14 Rear panel |
| 7 Evaporator | 15 Fan |
| 8 Exhaust valve | 16 Drain valve |

Product Dimensions



6kW



18kW

TECHNICAL DATA

Model		RGHT-09S	RGHT-15S	RGHT-15T	RGHT-22S	RGHT-22T	
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	
Nominal Heating (Max) (A7/6°C,W30/35°C)	Heating capacity	kW	2.92~9.10	4.30~15.20	4.30~15.20	7.24~21.90	7.24~21.90
	Power input	kW	0.61~2.11	0.87~3.73	0.87~3.73	1.50~5.88	1.50~5.88
	Current input	A	2.80~9.25	4.02~16.38	1.78~6.04	6.86~30.25	2.82~9.16
	COP	W/W	4.31~5.66	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	4.25~14.55	4.25~14.55	6.36~19.45	6.36~19.45
	Power input	kW	1.03~2.92	1.45~4.28	1.45~4.28	2.15~6.85	2.15~6.85
	Current input	A	4.57~12.79	6.71~18.80	2.84~6.78	9.84~30.12	3.71~10.60
	COP	W/W	2.79~3.46	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	3.65~11.04	3.65~11.04	4.55~17.20	4.55~17.20
	Power input	kW	0.67~2.44	1.12~3.97	1.12~3.97	1.85~7.31	1.85~7.31
	Current input	A	3.06~10.27	5.18~17.44	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+++	
Max. input power	kW	3.5	5.40	5.85	7.5	10.5	
Max. input current	A	15.0	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 / 1.4 / 3	R290 / 1.4 / 3	
Rated water flow	m³/h	1.00	2.06	2.06	3.1	3.1	
Fan quantity	/	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	53	54	56	56	
Max outlet water temperature	°C	75	75	75	75	75	
Water piping connections	/	G1	G1	G1	G1 - 1 / 4	G1 - 1 / 4	
Water Pressure drop	kPa	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	1187*488*1456	1187*488*1456	
Packed dimensions (L*D*H)	mm	1217*463*920	1317*493*1020	1317*493*1020	1217*538*1570	1217*538*1570	
UnPacked weight	kg	110	134	134	195	195	
Packed weight	kg	122	146	146	208	208	

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

