

Modern heating technology

HEAT PUMPS



SOL AIRPOWER Series

Heat pumps are an innovative and environmentally friendly solution that utilizes the physical properties of the refrigerant to transport heat from the environment into the building.

Solplanet heat pumps of the SOL AIRPOWER series are highly aesthetic and efficient heating and cooling devices. With a wide range of available models, we can select the appropriate power of the pump that best suits a given type of building. This may be either a new energy-efficient structure or a building that has been retrofitted to adjust it to low-temperature heating.

The most important functionalities:

- Panasonic Inverter compressor
- The highest level of energy efficiency:
 A+++
- EVI technology enables operation at lower temperatures without the need for electric heaters
- Maximum supply water temperature of 60°C

- High COP values
- WiFi module enables remote control of the device
- Operating range as low as -25°C thanks to EVI technology
- Elegant and modern design



Intelligent defrost function

Advanced operating algorithms use the heat contained in the hydraulic system and an electric heater to effectively and quickly defrost the external heat exchanger components



Modern refrigerant R32

- High efficiency in heat transfer
- Low CO₂ emissions
- Much lower GWP (Global Warming Potential) coefficient
- No need to report the heat pump to the Central Register of Equipment (CRO)



High efficiency in heat transfer

- Optimizing the cost of power consumption
- Lower energy bills
- Care for the environment
- The devices are eligible for all local government subsidies



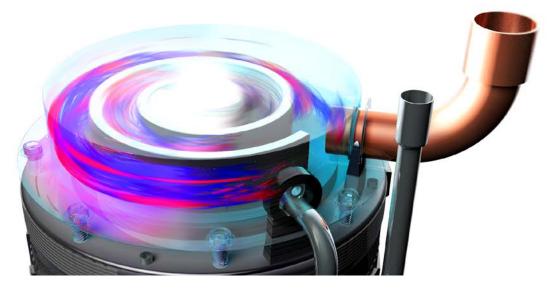


Panasonic EVI compressor

Panasonic compressor with EVI technology is at the heart of the entire heating system of the Solplanet SOL AIRPOWER series heat pumps. This device operates at variable rotational speeds, adapting to the momentary energy demand. Thanks to the direct current DC inverter sine wave control, high efficiency in a wide operation range has been achieved while keeping the noise level low to ensure the best possible user experience.

EVI technology

The EVI (Enhanced Vapor Injection) system is an additional injection of steam into the compressor head integrated with a smaller heat exchanger called an economizer. The purpose of this system is to increase efficiency of the entire heating system at low temperatures by cooling the refrigerant and utilizing an additional injection of cold steam. Efficiency of the heat pump with EVI technology may improve by up to 30%.



Heating efficiency of SOL AIRPOWER heat pumps

		SOL-006HC1		SOL-010HC3		SOL-014HC3		SOL-018HC3	
Outdoor temperature in °C	Water temperature in °C	Heating capacity in kW	COP	Heating capacity in kW	COP	Heating capacity in kW	СОР	Heating capacity in kW	COP
27	Inlet: 30°C Outlet: 35°C	7,55	7,57	12,36	7,09	17,24	7,06	21,93	6,92
20		7,12	6,43	11,66	6,02	16,26	5,99	20,69	5,88
12		6,72	5,46	11,00	5,11	15,34	5,09	19,52	4,99
7		6,46	4,93	10,58	4,62	14,75	4,60	18,77	4,51
2		5,62	4,50	9,20	4,22	12,83	4,20	16,32	4,12
-2		5,45	4,15	8,93	3,89	12,45	3,87	15,85	3,80
-7		5,24	3,67	8,59	3,44	11,97	3,43	15,24	3,36
-10		4,95	3,43	8,10	3,21	11,30	3,20	14,37	3,14
-15		4,42	3,09	7,23	2,90	10,09	2,89	12,83	2,83
-20		3,78	2,70	6,18	2,53	8,62	2,52	10,97	2,47
-25		3,25	2,37	5,33	2,22	7,43	2,21	9,46	2,17
27	Inlet: 47°C Outlet: 55°C	6,92	4,87	10,84	4,79	16,96	4,65	21,58	4,56
20		6,53	4,13	10,23	4,07	16,00	3,95	20,36	3,87
12		6,16	3,51	9,65	3,45	15,09	3,35	19,21	3,29
7		5,92	3,17	9,28	3,12	14,51	3,03	18,47	2,97
2		5,15	2,89	8,07	2,85	12,62	2,77	16,06	2,71
-2		5,00	2,67	7,83	2,63	12,25	2,55	15,59	2,50
-7		4,81	2,36	7,53	2,32	11,78	2,26	14,99	2,21
-10		4,53	2,21	7,11	2,17	11,11	2,11	14,14	2,07
-15		4,05	1,99	6,35	1,96	9,92	1,90	12,63	1,86
-20		3,46	1,73	5,42	1,71	8,48	1,66	10,79	1,62
-25		2,98	1,52	4,68	1,50	7,31	1,46	9,31	1,43

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