SolarEast

Breathing New Life into Buildings

The Air Source Heat Pump Way

solareasthvac.com



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SolarEast

"Pure Air, Pure Heat -
Embrace Eco-Efficiency"

Our mission:

"To contribute to a green future by pioneering energy-efficient, air source heat pump technologies that lessen our carbon footprint."

Our vision for a sustainable future drives our mission. As a heat pump factory, we harness the power of innovation to develop energy-efficient technologies that minimize carbon footprint. We strive to lead by example, fostering a culture of environmental responsibility, and creating heating solutions that make a positive and lasting impact on our planet.

For a viable future

With over a decade's experience in air source heat pump technology, Solareast Heat Pump Ltd. stands as a pioneer in providing sustainable and efficient thermal energy solutions. Our innovative approach has touched more than 25 million households and over 20,000 engineering customers across 100 countries, underlining our extensive global reach and customer-centric strategy.

Our dedication to creating sustainable heating solutions forms the core of our operations, establishing us as a dependable partner in both residential and commercial sectors. Our energy-efficient, air-source heat pumps align seamlessly with our mission to contribute to a greener future, making heating more sustainable one installation at a time.

As we journey forward, we stay anchored in our guiding principles of innovation, sustainability, and customer satisfaction. We are committed to offering world-class, eco-friendly heating solutions, promoting a sustainable lifestyle while ensuring a warm and comfortable environment for our customers. We remain dedicated to transforming the global heating landscape and creating a healthier planet for future generations.

CE ErP heat pump KEYMARK Federal Office for Economic Affairs and Export Control

SG Ready Smart Heat Pumps MCS CERTIFIED ECO FRIENDLY R290 GAS

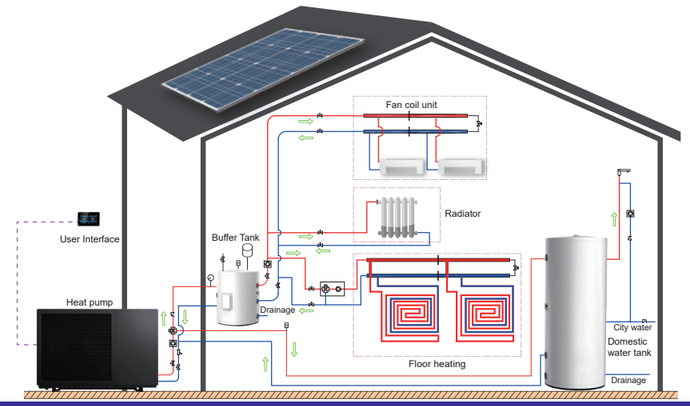
MONOBLOCK HEAT PUMP

Heating / Cooling / DHW / DC Inverter / Residential Type



Features

- R290 refrigerant,low GWP(GWP=3)
- Energy class: A+++
- Stable operation at -25°C
- Outlet water temperature up to 75 ℃
- Power Detection Function
- SG-READY Function
- 5-Inch TFT True Color Screen
- 5G/2.4G Compatible WIFI Module
- Dual Temperature Zone
- Reserved RS485 Communication Port
- Linkage Control with PV Function



Heat Pumps in Action: Various Application Scenarios

T E C H N I C A L D A T A

Model			BLN-006TC1	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
Nominal Heating (Max) (A7/6℃,W30/35℃)	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℃,W47/55℃)	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℃,W12/7℃)	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℃)		/	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		m^3/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		℃	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)		℃	-25~45				
Operating temperature range (cooling mode)		℃	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	115	139	139	200	200

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

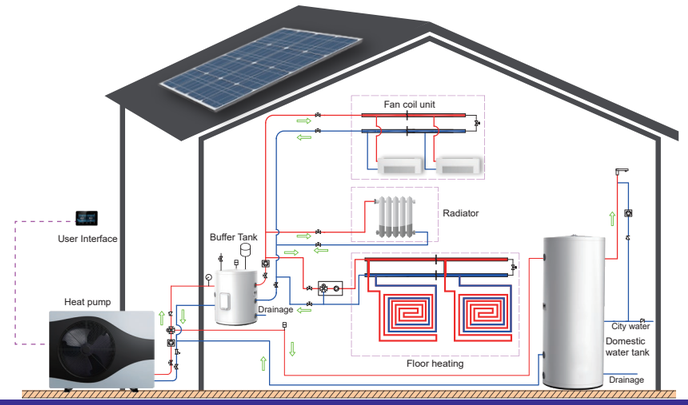
MONOBLOCK HEAT PUMP

Heating / Cooling / DHW / DC Inverter / Residential Type



Features

- R32 environmental refrigerant
- Energy class: A+++
- Full DC inverter Panasonic compressor and fan motor
- -25℃ inverter EVI
- Power Detection Function
- SG-READY Function
- 5-Inch TFT True Color Screen
- 5G/2.4G Compatible WIFI Module
- Dual Temperature Zone
- Reserved RS485 Communication Port
- Linkage Control with PV Function
- Outlet water temperature up to 60℃



Heat Pumps in Action: Various Application Scenarios

T E C H N I C A L D A T A

Model			BLN-006TB1	BLN-010TB1	BLN-010TB3	BLN-014TB1	BLN-014TB3	BLN-018TB1	BLN-018TB3	BLN-024TB3
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	380~415/3/50
Nominal Heating (Max) (A7/6℃,W30/35℃)	Heating Capacity	kW	2.50 ~ 8.30	4.20-12.20	4.20 ~ 12.20	5.30 ~ 16.50	5.30-16.60	6.20-20.50	6.20 ~ 20.50	6.50-26.10
	Power Input	kW	0.57 ~ 1.92	0.86 ~ 2.88	0.86 ~ 2.88	1.15 ~ 4.15	1.15 ~ 4.15	1.36 ~ 5.28	1.36 ~ 5.28	1.78 ~ 6.45
	Current input	A	2.53 ~ 8.52	3.82 ~ 12.77	1.46 ~ 4.89	5.10 ~ 18.41	1.86 ~ 6.70	6.10 ~ 23.67	2.31 ~ 8.96	2.87 ~ 10.35
	COP	W/W	4.32 ~ 5.86	4.23 ~ 5.39	4.23 ~ 5.39	3.97 ~ 5.43	3.97 ~ 5.43	3.88 ~ 5.21	3.88 ~ 5.21	4.04 ~ 5.43
Nominal Heating (Max) (A7/6℃,W47/55℃)	Heating Capacity	kW	2.30 ~ 7.62	3.85 ~ 11.20	3.85 ~ 11.20	4.90 ~ 15.10	4.90 ~ 15.10	6.30 ~ 19.90	6.30 ~ 19.90	6.90 ~ 26.10
	Power Input	kW	0.75 ~ 2.61	1.13 ~ 3.75	1.13 ~ 3.75	1.65 ~ 5.25	1.65 ~ 5.25	1.65 ~ 6.82	1.65 ~ 6.82	1.95 ~ 8.55
	Current input	A	3.32 ~ 11.58	5.01 ~ 16.6	1.92 ~ 6.37	7.32 ~ 23.30	1.67 ~ 8.47	7.40 ~ 30.56	2.80 ~ 11.58	3.15 ~ 13.80
	COP	W/W	2.92 ~ 3.33	2.99 ~ 3.46	2.99 ~ 3.46	2.87 ~ 3.38	2.87 ~ 3.38	2.91 ~ 3.34	2.91 ~ 3.34	3.05 ~ 3.42
Nominal Cooling (Max) (A35/24℃,W12/7℃)	Cooling Capacity	kW	1.80 ~ 7.10	2.60 ~ 10.30	2.60 ~ 10.30	4.50 ~ 13.50	4.50 ~ 13.50	5.50 ~ 17.50	5.50 ~ 17.50	5.20 ~ 21.30
	Power Input	kW	0.61 ~ 2.43	0.91 ~ 3.65	0.91 ~ 3.65	1.45 ~ 4.85	1.45 ~ 4.85	1.65 ~ 6.25	1.65 ~ 6.25	1.95 ~ 8.20
	Current input	A	2.71 ~ 10.78	4.03 ~ 16.19	1.55 ~ 6.20	6.43 ~ 21.52	2.34 ~ 7.82	7.40 ~ 28.02	2.80 ~ 10.61	3.15 ~ 13.23
	EER	W/W	3.04	3	3.00	2.87	2.87	2.96	2.96	2.92
ERP Level (Outlet water temp. at 35℃)		/	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
ERP Level (Outlet water temp. at 55℃)		/	A++	A++	A++	A++	A++	A++	A++	A++
Rated input power		kW	2.71	3.83	3.83	6.20	6.20	7.50	7.50	10.00
Rated input current		A	12	17	6.5	27.50	10.50	35.00	13.00	17.00
Refrigerant Type / Charge / GWP		... / kg	R32/1.25/675	R32/1.8/675	R32/1.8/675	R32/2.8/675	R32/2.8/675	R32/3.5/675	R32/3.5/675	R32/3.5/675
Rated water flow		m3/h	1.1	1.75	1.75	2.52	2.52	3.20	3.20	4.12
Fan quantity		/	1	1	1	1	1	2	2	2
Fan motor type		/	DC inverter							
Compressor		/	Panasonic / DC inverter / Rotary / EVI							
Circulating pump		/	Inverter type / Built-in							
IP Class		/	IPX4							
Sound pressure at 1m distance		dB(A)	49	52	52	53	54	56	55	58
Max outlet water temperature		℃	60	60	60	60	60	60	60	60
Water piping connections		inch	G1	G1	G1	G1-1/4	G1-1/4	G1-1/2	G1-1/2	G1-1/2
Pressure drop at rating water flow		kPa	25	27	27	30	30	32	32	35
Operating temperature range(Heating mode)		℃	-25~45							
Operating temperature range(Cooing mode)		℃	16~45							
Unpacked Dimensions (L*D*H)		mm	1100*445*850	1100*445*850	1100*445*850	1110*480*850	1110*480*850	1110*445*1450	1110*445*1450	1110*445*1450
Packed Dimensions (L*D*H)		mm	1160*530*1010	1160*530*1010	1160*530*1010	1160*565*1010	1160*565*1010	1170*530*1610	1170*530*1610	1170*530*1610
UnPacked Weight		kg	102	107	107	124	124	151	151	160
Packed Weight		kg	114	119	119	136	136	168	168	177

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

MONOBLOCK HEAT PUMP

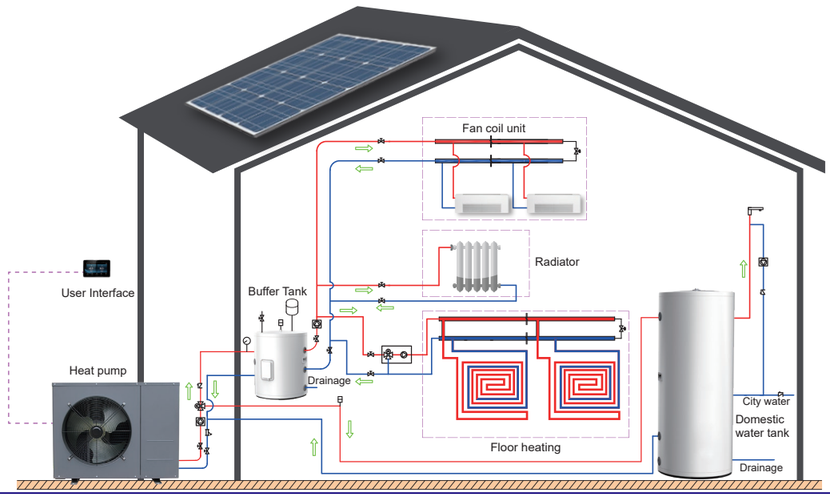
Heating / Cooling / DHW / DC Inverter / Residential Type



Features

- Energy class: A++
- Heating+Cooling+DHW
- Full DC inverter compressor and fan motor
- -30℃ inverter EVI
- WIFI smart control
- R32 refrigerant, environmental friendly
- Outlet water temperature up to 60℃





Heat Pumps in Action: Various Application Scenarios

T E C H N I C A L D A T A

Model			BLN-009TA1	BLN-012TA1	BLN-015TA1	BLN-018TA1	BLN-012TA3	BLN-015TA3	BLN-018TA3	BLN-026TA3	BLN-032TA3
Power supply		V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Performance Condition: Outdoor air 7℃ / 6℃, Inlet / Outlet water 30℃ / 35℃											
Heating	Capacity	kW	3.4 ~ 10.2	4.6 ~ 12.8	5.2 ~ 16.8	6.8 ~ 20.5	4.6 ~ 12.8	5.2 ~ 16.8	6.8 ~ 20.5	11.8 ~ 28.6	14.5 ~ 36.3
	Rated input	kW	0.7 ~ 3.2	0.8 ~ 3.9	1.0 ~ 5.1	1.5 ~ 5.9	0.8 ~ 3.9	1.0 ~ 5.1	1.5 ~ 5.9	2.9 ~ 6.2	3.8 ~ 7.6
	SCOP		4.29	4.31	4.26	4.21	4.31	4.26	4.21	4.36	4.20
Performance Condition: Outdoor air 7℃ / 6℃, Inlet / Outlet water 50℃ / 55℃											
Heating	Capacity	kW	3.6 ~ 10.3	4.7 ~ 12.9	5.3 ~ 16.8	6.9 ~ 20.8	4.7 ~ 12.9	5.3 ~ 16.8	6.9 ~ 20.8	11.8 ~ 28.8	14.7 ~ 36.6
	Rated input	kW	0.9 ~ 4.3	1.4 ~ 5.1	1.3 ~ 6.7	2.0 ~ 7.7	1.4 ~ 5.1	1.3 ~ 6.7	2.0 ~ 7.7	3.8 ~ 8.1	4.9 ~ 9.9
	SCOP		3.36	3.30	3.32	3.65	3.30	3.32	3.65	3.69	3.52
Performance Condition: Outdoor air 35℃ / 24℃, Inlet / Outlet water 12℃ / 7℃											
Cooling	Capacity	kW	2.1-8.2	2.6 ~ 9.1	3.6 ~ 11.5	4.2 ~ 16.8	2.6 ~ 9.1	3.6 ~ 11.5	4.2 ~ 16.8	5.2 ~ 19.5	6.2 ~24.5
	Rated input	kW	1.4 ~ 4.5	1.9 ~ 4.7	2.0 ~ 7.8	2.8 ~8.9	1.9 ~ 4.7	2.0 ~ 7.8	2.8 ~8.9	4.8 ~ 9.3	5.1 ~ 11.4
	EER		2.82	2.77	2.86	2.98	2.77	2.86	2.98	2.83	2.96
Energy class (SCOP)	Outlet water temp. at 35℃		A++								
	Outlet water temp. at 55℃		A++								
Refrigerant	Type		R32								
	Charged volume	kg	1.5	1.6	3.2	3.2	1.6	3.2	3.2	5.0	6.8
Noise level	Heating	dB(A)	45	45	48	48	45	48	48	50	50
	Cooling	dB(A)	46	46	49	49	46	49	49	51	51
Water flow volume		m^3/h	1.55	2.05	2.55	3.10	2.05	2.55	3.10	4.50	5.50
Water piping connections		mm	DN25 Male	DN25 Male	DN25 Male	DN32 Male	DN25 Male	DN25 Male	DN32 Male	DN32 Male	DN32 Male
Operating temperature range	Cooling	℃	16 ~ 48								
	Heating	℃	-30 ~ 48								
	DHW	℃	-30 ~ 48								
Net dimensions (W*D*H)		mm	1005*375*800	1005*375*800	1025*380*1320	1077*377*1460	1005*375*800	1025*380*1320	1077*377*1460	1127*427*1560	1127*427*1560
Packed dimensions (W*D*H)		mm	1080*455*960	1080*455*960	1076*440*1460	1150*450*1620	1080*455*960	1076*440*1460	1150*450*1620	1150*500*1720	1150*500*1720
Net/Gross weight		kg	70/80	75/85	124/140	147/165	75/85	124/140	147/165	160/178	200/218

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

SPLIT
HEAT PUMP

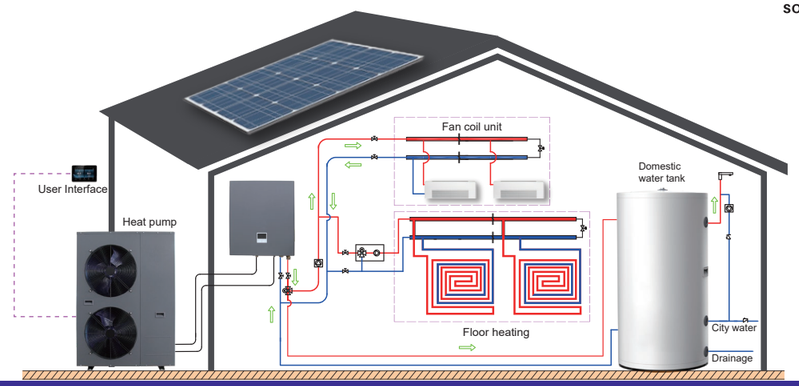
Heating / Cooling / DHW / DC Inverter / Residential Type



Features

- Energy class: A++
- Heating+Cooling+DHW
- Full DC inverter compressor and fan motor
- -30℃ inverter EVI
- WIFI smart control
- R410A refrigerant, environmental friendly
- Outlet water temperature up to 55℃





Heat Pumps in Action: Various Application Scenarios

T E C H N I C A L D A T A

Model			BLN-012TA1S	BLN-018TA1S	BLN-018TA3S
Power supply		V/Ph/Hz	220-240/1/50	220-240/1/50	380-415/3/50
Performance Condition: Outdoor air 7℃ / 6℃, Inlet / Outlet water 30℃ / 35℃					
Heating	Capacity	kW	4.3 ~ 12.3	6.7 ~ 20.5	6.7 ~ 20.5
	Rated input	kW	0.7 ~ 3.8	1.5 ~ 5.9	1.5 ~ 5.9
	SCOP		4.31	4.21	4.21
Performance Condition: Outdoor air 7℃ / 6℃, Inlet / Outlet water 50℃ / 55℃					
Heating	Capacity	kW	4.5 ~ 12.5	6.8 ~ 20.6	6.8 ~ 20.6
	Rated input	kW	1.4 ~ 5.1	2.0 ~ 7.7	2.0 ~ 7.7
	SCOP		3.30	3.65	3.65
Performance Condition: Outdoor air 35℃ / 24℃, Inlet / Outlet water 12℃ / 7℃					
Cooling	Capacity	kW	2.5 ~ 9.1	4.2 ~ 16.5	4.2 ~ 16.5
	Rated input	kW	1.9 ~ 6.1	2.8 ~8.9	2.8 ~8.9
	EER		2.71	2.78	2.78
Energy class (SCOP)	Outlet water temp. at 35℃			A++	
	Outlet water temp. at 55℃			A++	
Refrigerant	Type			R410A	
	Charged volume	kg	2.3	4.3	4.3
Noise level	Heating	dB(A)	45	48	48
	Cooling	dB(A)	46	49	49
Operating temperature range	Cooling	℃		16 ~ 48	
	Heating	℃		-30 ~ 48	
	DHW	℃		-30 ~ 48	
Net dimensions (W*D*H)		mm	1005*375*800	1077*377*1460	1077*377*1460
Packed dimensions (W*D*H)		mm	1080*455*960	1150*450*1620	1150*450*1620
Net/Gross weight		kg	66/76	125/138	125/138

Technical Data / Hydronic Box

Model		BLN-012TB3S-HB	BLN-018TB3S-HB
Power supply	V/Ph/Hz	380-415/3/50	380-415/3/50
Electrical Shockproof	/	I	I
IP Class	/	IPX0	IPX0
Operating Ambient Temperature	℃	-25 ~ 45	-25 ~ 45
Water Piping Connections	inch	G1-1/4	G1-1/4
Rated Water Flow	m^3/h	2.05	3.10
Water Pressure Drop	kPa	50	45
Min/Max water pressure	MPa	0.1/0.3	0.1/0.3
Noise Level	dB(A)	35	35
Net Dimensions (L×W×H)	mm	570*260*650	465×245×750
Net Weight	kg	38	49

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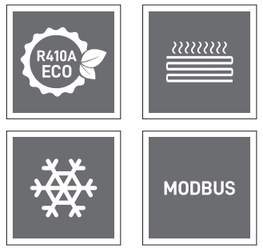
COMMERCIAL HEAT PUMP

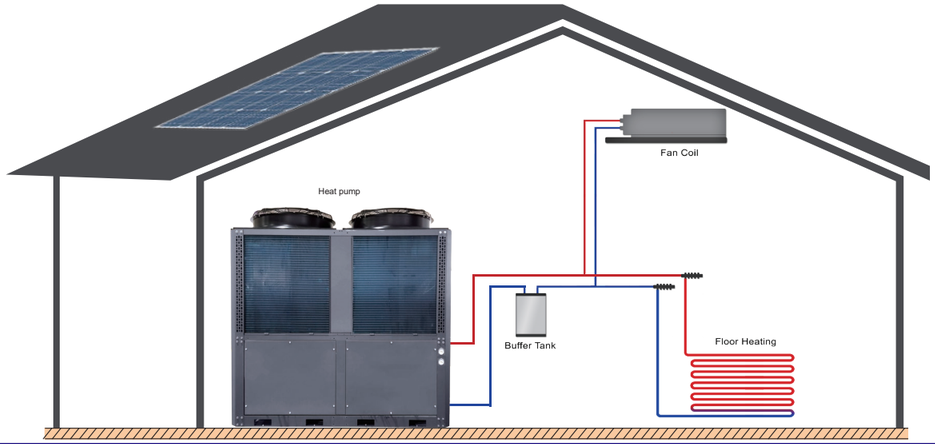
Heating / Cooling / DHW / DC Inverter / Commercial Type



Features

- R410A refrigerant, environmental friendly
- Higher water temperature output up to 55 ℃
- Adopt EVI technology, the operation ambient temperature can reach at -30 ℃
- High pressure protection
- Defrost automatically
- With MODBUS communication
- Adapt intelligent controller, full automatically operation
- Through different installation, the system can be used for cooling or heating





Heat Pumps in Action: Various Application Scenarios

T E C H N I C A L D A T A

Model		DLN-050TA1	DLN-100TA1	DLN-200TA1	DLN-400TA1
Power supply	V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Heating Capacity at Air 7℃/6℃, Water 30℃ in, 35℃ out					
Heating Capacity	kW	45	90	180	350
Power Input	kW	10.3	20.8	42	81.4
COP		4.36	4.32	4.25	4.30
Heating Capacity at Air 7℃/6℃, Water 50℃ in, 55℃ out					
Heating Capacity	kW	36	67	167	328
Power Input	kW	15.5	25.48	56.7	113.9
COP		2.32	2.63	2.95	2.88
Heating Capacity at Air -12℃/-14℃, Water 50℃ in, 55℃ out					
Heating Capacity	kW	24	40	107	205
Power Input	kW	15.4	25	54	104.6
COP		1.55	1.60	1.98	1.96
Cooling Capacity at Air 35℃/24℃, Water 12℃ in, 7℃ out					
Cooling Capacity	kW	30	60	140	268
Power Input	kW	11.9	22.9	43.8	87.9
EER		2.53	2.62	3.19	3.05
Max Power Input	kW	16.8	36.5	70.1	145.0
Max Current	A	31.5	63.3	132.5	260.0
Compressor quantity		1	2	2	4
Expansion Valve	mm	Saginomiya/EEV	Saginomiya/EEV	Danfoss/EEV	Danfoss/EEV
Air Flow Direction		Vertical	Vertical	Vertical	Vertical
Water Flow Volume	m^3/h	8	16	32	60
Water Pressure Drop	kPa	50	50	48	50
Dimensions(L*W*H)	mm	1252*1076*1870	2198*1096*2176	2300*1150*2400	2800*2200*2450
Working temperature range	℃	-30 ~ 48	-30 ~ 48	-30 ~ 48	-30 ~ 48
Noise	dB(A)	≤62	≤67	≤70	≤76
IP class		IPX4	IPX4	IPX4	IPX4
Net Weight	kg	450	800	1330	2186
Water connection	mm	DN 40	DN 50	Flange DN 80	Flange DN 100

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

Why choose Solareast

R290 Refrigerant: Eco-friendly

Choose R290 refrigerant for eco-friendlyand efficient cooling/heating. Low GWP of 3 reduces environmental impact and carbon emissions.iii

WIFI Module 5G/2.4G Compatible

Effortlessly control and monitor your heat pump from anywhere with our advanced 5G/2.4G compatible WIFI module.

Serene Climate Control

Experience tranquility with our silent air source heat pumps,offering whisper-quiet operation and advanced noise reduction technology.

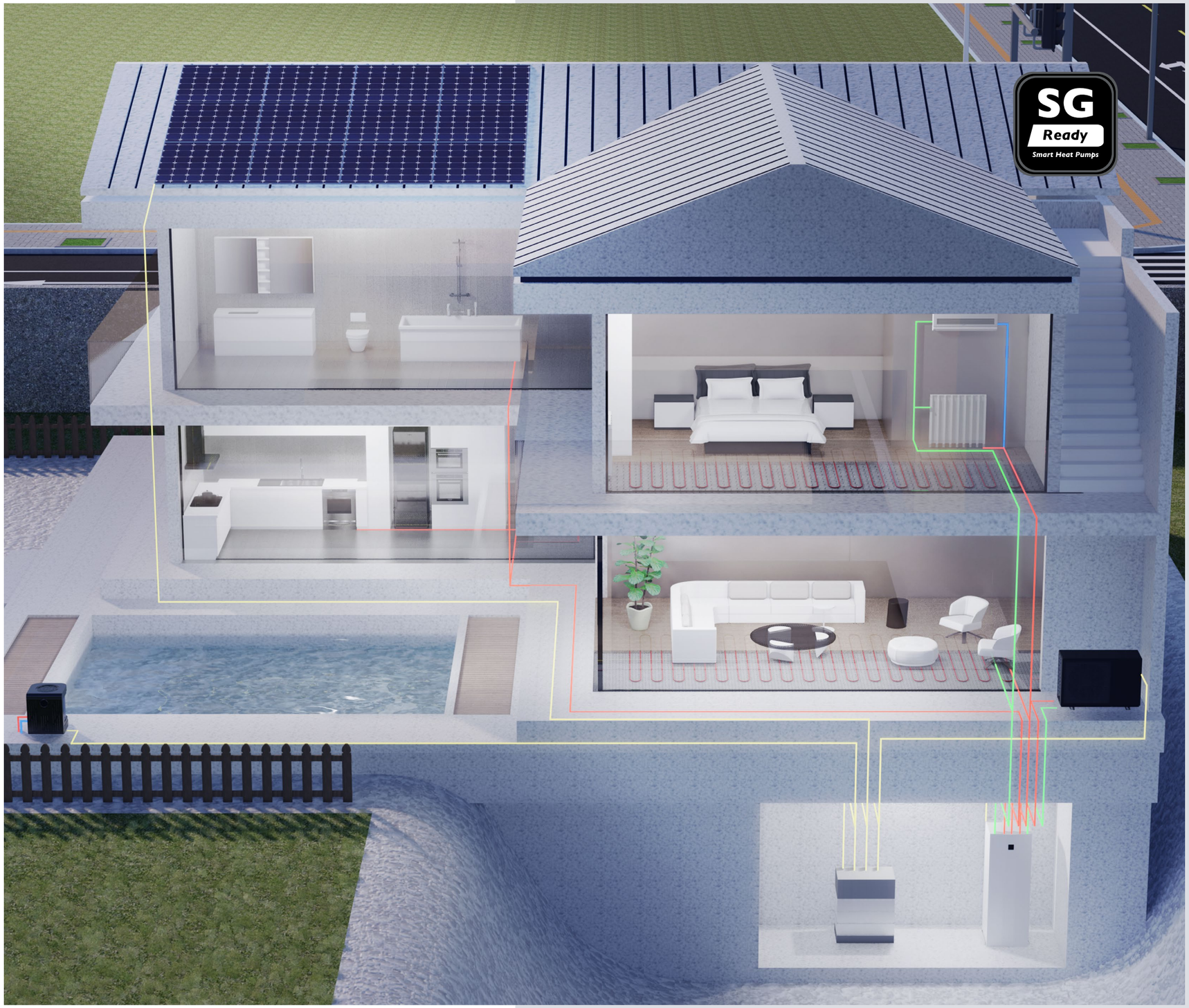
Five-inch Touch Screen Control

Effortlessly control your heat pump with a large touchscreen, intuitive menus, and precise adjustments.

Dual Temperature Zone

Customize your comfort with our air source heat pump's dual temperature zone

solareasthvac.com



SOLAREAST HEAT PUMPS

Smart Control:

Control your heat pump from anywhere with our mobile app. Adjust settings, monitor performance, and schedule temperature changes easily.



Can be Used with Solar Photovoltaic Panels:

Go green with our heat pump, seamlessly integrating with solar panels. Save energy and enjoy comfort.