Foshan Suoher Electrical Appliance Co., ltd
Add: No. 8 of building, No. 2 of Nanyi street, Guangzhu road, Daliang, Foshan
Tel: 0757-22392085 Fax: 0757-22392085
Web: www.suoher.cn

SUOHER PRODUCT CATALOG

FOSHAN SUOHER ELECTRICAL APPLIANCE CO., LTD

Company profile

Foshan Suoher Electrical Appliance Co., ltd is a professional heat pump manufacturer in China, which was established by a professional team of HVAC. Our team which has more than 15 years' experience in heat pump business is the key to our creative and reliable company.

We have professional R&D team, professional production team, and equipped with professional production equipment and testing equipment, to ensure that every heat pump is qualified and reliable. We have a professional heat pump testing laboratory, can be used to simulate the running environment of minimum -25 degree, ensure new product development performance is reliable.

We have a full range of heat pumps, such as om/off air to water heat pump, DC inverter heat pump, geothermal heat pump, swimming pool heat pump, which can meet the demands from different markets all around the world. With customer-orientation as the highest principle, Suoher is your reliable OEM/ODM manufacturer in China.

Why choose Suoher Heat pump?

Economical

Suoher air source heat pump makes heating your house and domestic hot water much cheaper. It saves your 60% heating cost compared with the traditional heating elements like electrical heater, gas/fuel boiler and wood-fired boiler. The reason for this is that a heat pump uses free energy from natures.

Although the heat pump can not pay you back in the first month, you will notice the benefits soon since the heating bill is dramatically lower than before. The high efficiency of real power air source heat pump makes you get back the investment faster. In fact, it saves money for you as soon as you finish the installation and cycle it on.

Energy efficient and environment friendly

By absorbing free & green energy from nature to heat your house and sanitary hot water, it produces much lower CO_2 emissions than any traditional heating system such as gas boiler and wood-fired boiler.

Wherever you live, you can install an Real Power air source heat pump and enjoy the efficient, safe, problem-free heating and hot water at a fraction of the alternative cost and a fraction of the environmental impacts.

Powerful function

One Suoher heat pump can provide you with comfortable room temperature and 24 hours' hot water.

Safe and reliable

No risk of buring, explosion, electric shock and gas poison, Real Power heat pump works reliably with more than 10 years' life span and low maintenance cost.

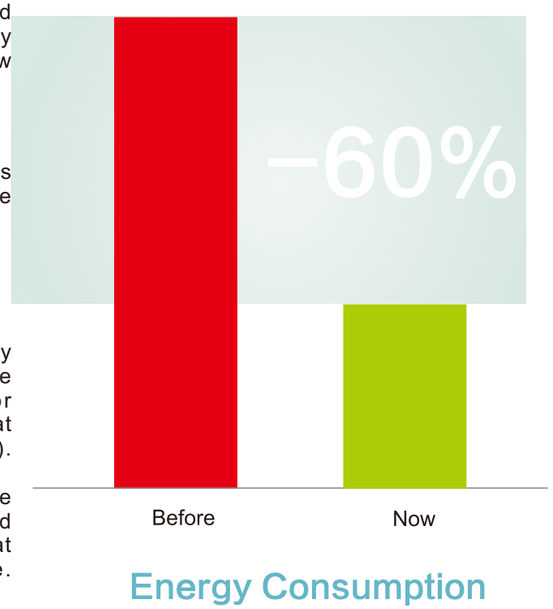
24 hours' running

Suoher heat pump can be in running for 24 hours all the year around without being affecting by the weather and varies of the season.

Exquisite workmanship and excellent quality

The main components are all from internationally famous brand (American Copelan or Japanese Panasonic compressor; Germany Wilo or Groundfos pump; Swedish SWEP plate heat exchanger;Germany Sika flow switch, etc.).

The key points are strictly monitored in the production and 100% running test is operated before the packing, to make sure that the heat pump is high quality and works reliable.



Energy Consumption

Comparisons between Real Power heat pump and other heating methods

heating methods	Suoher heat pump		Electrical heater		pipelined gas	Oil boiler	liquefied gas
Energy	Residential electricity	commercial electricity	Residential electricity	commercial electricity	pipelined gas	light diesel oil	liquefied gas
Energy calorific value	860Kcal/KW.h	860Kcal/KW.h	860Kcal/KW.h	860Kcal/KW.h	3800 Kcal/m3	10200Kcal/kg	10800Kcal/KW.h
Annual average thermal efficiency	380%	380%	95%	95%	65%	75%	70%
Actualheating value	3268Kcal/KW.h	3268Kcal/KW.h	817Kcal/KW.h	817Kcal/KW.h	2470 Kcal/m3	7650Kcal/kg	7560Kcal/KW.h
Energy consumption to heat 1000kg of water	12.24KW.h	12.24KW.h	48.96KW.h	48.96KW.h	16.19m3	5.23kg	5.29kg
Energy price	￥0.65/KWh	￥0.9/KWh	￥0.65/KWh	￥0.9/KWh	￥2.5/m3	￥4.8/kg	￥5.4/kg
cost of 1000kg of hot water	￥7. 96	￥11. 02	￥31.82	￥44.06	￥40.48	￥25.1	￥28.57

Air Source Heat Pump

How does the air source heat pump work?

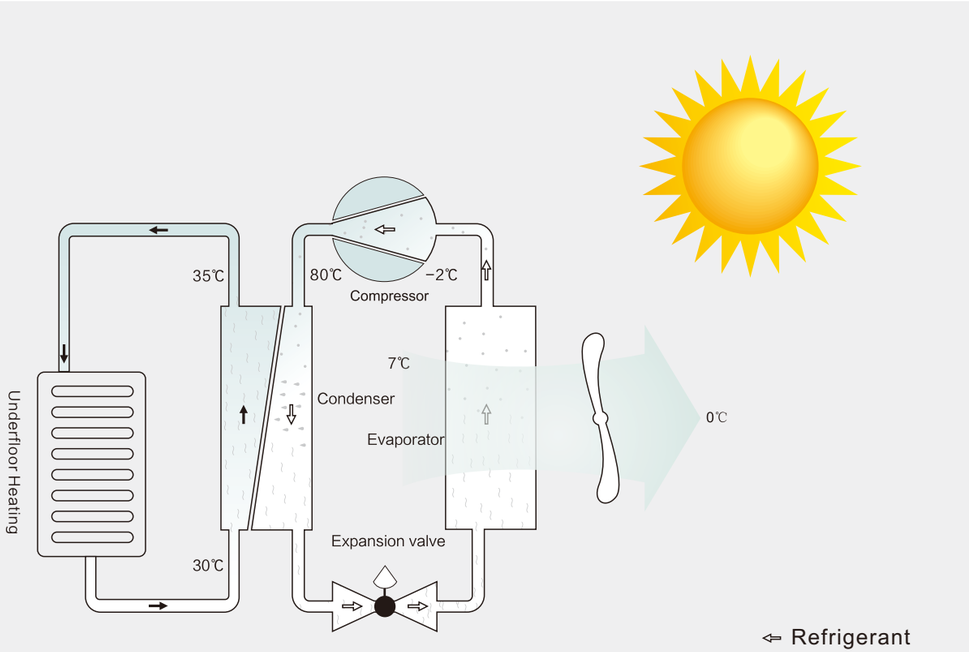
The heat from the sun is stored in the air year after year so that we can get a constant source of naturally renewed energy. This stored energy is ideal heat source for your daily domestic heating demand.

The air source heat pump collects heat from the solar energy stored in the air. The heat is collected and carried by refrigerant and then converts it into high grade heat to be released to your house by underfloor heating system or radiator and into your domestic hot water tank.

- The solar energy stored in the nature can be brought up by a heat exchanger called evaporator. Here the refrigerant absorbs the solar energy and turns into very low temperature gas.

- The gas refrigerant is compressed and turns into very hot and high pressure gas, then the heat is transferred to the water-based heating system in the house by a condenser.

- Then the refrigerant reverts to low pressure liquid and is ready to collect new solar energy.



MINI swimming pool heat pump

Great funny for your pool and kids
- Ultra compact
- Easy installation
- Suitable for steel frame pools and inflatable pools
- Simple operation controller
- RCD plug inculded
-32mm/38mm hose connector
- Water proof controller cover
- WIFI control function is optional

MINI Swimming Pool Heat Pump

MODEL			SHPH-3.5CH	SHPH-4CH	SHPH-4.5CH
POWER SUPPLY			220V/1/50Hz	220V/1/50Hz	220V/1/50Hz
Heating (Air 26 , Water 26)	Capacity	KW	3.50	4.10	4.60
	Power input	KW	0.59	0.69	0.78
	COP		5.93	5.94	5.90
Max. current		A	4.6	5.3	6.0
GAS			R32	R32	R32
SHELL			Metal	Metal	Metal
Water connection		mm	28	28	28
Water flow		m^3/h	1.5	1.5	1.5
Unit net dimensions		mm	410*290*400	410*290*400	410*290*400
Packing dimensions		mm	450*330*530	450*330*530	450*330*530
Net weight		kg	39	42	48
Noise at 1 m		dB(A)	≤ 42	≤ 42	≤ 42
Noise at 10m		dB(A)	≤ 26	≤ 26	≤ 26
Advised pool volume (with pool cover)		m^3	3~10	5~18	10~22

Swimming pool heat pump

- Easy to install and operate
- Low operating costs and high efficiency
- Environmentally friendly refrigerants
- Durability and long life expectancy
- Automatically maintains set temperature in all weather
- Quick and Easy temperature adjustment
- Quiet running

Specifications

Model	SHPH	4CH	6CH	9CH	13CH	16CH	21CH
Heating capacity*	KW	3.5	4.8	8	11.7	14.3	19
Heating power input*	KW	0.7	0.98	1.67	2.44	3.01	4.04
Heating capacity**	KW	4	5.5	8.8	13	15.8	21
Heating power input**	KW	0.7	0.99	1.68	2.46	3.02	4.05
Max. water temperature	℃	40					
Rated water temperature	℃	27					
Water flow	m^3/h	1.40	1.90	3.00	4.40	5.50	7.50
Noise	db	48	48	52	58	58	60
Water connections	inch	2"					
Power supply		220V/1PH/50Hz				380V/3PH/50Hz	
Net dimensions	mm	750*300*510	1000*350*620			1110*460*700	1110*460*1250
Advised pool volume	m^3	5~15	8~25	10~30	15~40	20~50	25~60

Specifications

Model	ESDPH	26CH	34CV	42CV	52CV	68CV	105CV
Heating capacity*	KW	23	30	38	47	61	95
Heating power input*	KW	4.96	6.45	8.10	9.97	13.10	20.28
Heating capacity**	KW	26	34	42	52	68	105
Heating power input**	KW	4.98	6.50	8.15	10.02	13.20	20.35
Max. water temperature		40					
Rated water temperature		27					
Water flow	m^3/h	9.00	14.50	18.00	22.00	29.00	45.00
Noise	db	62	62	65	68	68	70
Water connections	inch	2“	3"			3-1/2"	
Power supply		380V/3PH/50Hz					
Net dimensions	mm	1110*460*1250	1470*735*990			1660*960*1225	
Advised pool volume	m3	30~80	50~90	60~100	80~120	100~180	150~240

Full DC Inverter
Swimming pool heat pump

Full DC inverter swimming pool heat pump is power by full DC inverter technology which allows you to vary the speed of the compressor and fan motor speed.

- High COP 5.0~12.0 saves more energy and money
- Ultra-quiet running makes the life better
- Soft start
- DC inverter compressor
- DC inverter fan motor
- Full inverter technology
- WIFI control function

With our advanced inverter technology, DC inverter reaches extremely high COP inverter technology which saves energy and accelerates heating time. The DC inverter swimming pool heat pump features quiet operation and includes an IPX4 waterproof controller.

DC Inverter Swimming Pool Heat Pump

MODEL			SHPH-5DC	SHPH-7DC	SHPH-10DC	SHPH-12.5DC	SHPH-15DC	SHPH-18DC	SHPH-24DC	SHPH-28DC
POWER SUPPLY			220V/1/50Hz	220V/1/50Hz	220V/1/50Hz	220V/1/50Hz	220V/1/50Hz	220V/1/50Hz	220V/1/50Hz	220/1/50Hz
Heating (Air 26 , Water 26)	Capacity	KW	1.25 - 5.57	1.75 - 7.19	2.35 - 10.05	2.85 - 12.82	3.56 - 15.39	4.3 0- 18.46	6.31 - 24.34	6.27-28.2
	Power input	KW	0.09 - 0.91	0.126 - 1.17	0.18 - 1.60	0.21 - 1.83	0.28 - 2.43	0.34 - 2.91	0.51 - 3.93	0.46-4.05
	COP		6.1 - 12.2	6.1 - 12.4	6.3 - 12.3	6.4 - 12.1	6.3 - 13.4	6.3 - 12.3	6.2 - 12.4	6.3-12.1
Max. current		A	7.3	10.1	14.3	16.5	20.0	22.3	25.0	36.3
GAS			R32	R32	R32	R32	R32	R32	R32	R32
MINIMU WORKING OUTSIDE TEMP			-10	-10	-10	-10	-10	-10	-10	-10
WIFI			YES	YES	YES	YES	YES	YES	YES	YES
Water connection		mm	50	50	50	50	50	50	50	50
Water flow		m^3/h	1.9	2.5	3.4	4.2	5.1	5.9	7.1	8.5
Unit net dimensions		mm	875x351x590	875x351x590	875x351x590	903x390x641	903x390x641	903x390x641	1080x410x940	1080x410x1250
Packing dimensions		mm	925x370x720	925x370x720	925x370x720	950x410x770	950x410x770	950x410x770	1130x430x1070	1130x430x1380
Net weight		kg	39	43	50	55	60	65	73	82

Split air source heat pump

There is only refrigerant circulation inside the outdoor unit.

The indoor unit can be mounted in the bathroom, kitchen or utility room, then the heat pump will not be broken due to freezing even in the cold winter, so it works safely and reliably.

Specifications

MODEL	SHAW	4SH	6SH	8SH
Cooling Capacity	KW	3.7	5.1	7.6
Heating Capacity	KW	4.0	5.9	8.3
Compressor	type quantity	rotary 1	rotary 1	rotary 1
Cooling Power Input	KW	1.2	1.6	2.5
Heating Power Input	KW	1.1	1.6	2.3
Power Supply	V/Ph/Hz	220/1/50	220/1/50	220/1/50
Water Flow	m^3/h	0.8	1.0	1.4
Water Pressure Drop	kPa	18	20	22
Noise	dB(A)	48	48	52
Water Connections	Inch	3/4"	3/4"	3/4"
Outdoor Unit Dimensions	mm	780*258*540	840*285*610	830*310*710
Indoor Unit Dimensions	mm	400*170*580	400*170*580	400*170*580

Specifications

MODEL	SHAW	11SH	14SH	16SH
Cooling Capacity	KW	9.8	12.1	14.8
Heating Capacity	KW	11.0	13.7	15.9
Compressor	type quantity	scroll 1	scroll 1	scroll 1
Cooling Power Input	KW	3.3	4.0	4.9
Heating Power Input	KW	3.1	3.9	4.5
Power Supply	V/Ph/Hz	220/1/50	380/3/50	380/3/50
Water Flow	m^3/h	1.9	2.4	2.7
Water Pressure Drop	kPa	24	28	30
Noise	dB(A)	58	58	58
Water Connections	Inch	1	1	1
Outdoor Unit Dimensions	mm	880*360*800	830*310*1260	930*390*1270
Indoor Unit Dimensions	mm	400*170*580	400*170*820	400*170*820

Measurement Conditions:
Cooling: Ambient Temp.: 35℃/24℃, Water inlet/outlet Temp.: 12℃/7℃
Heating: Ambient Temp.: 7℃/6℃, Water inlet/outlet Temp.: 40℃/45℃

Integrated air source heat pump

Integrated design, Easy to install;

Only need to connect the water circulation;

Only need to be electrified to start running.

Specifications

MODEL	SHAW	4CH	6CH	8CH
Cooling Capacity	KW	3.7	5.1	7.6
Heating Capacity	KW	4.0	5.9	8.3
Compressor	Type	Rotary	Rotary	Rotary
	Quantity	1	1	1
Cooling Power Input	KW	1.2	1.6	2.5
Heating Power Input	KW	1.1	1.6	2.3
Power Supply	V/Ph/Hz	220/1/50	220/1/50	220/1/50
Water Flow	m^3/h	0.8	1.0	1.4
Water Pressure Drop	kPa	18	20	22
Noise	dB(A)	48	48	52
Water Connections	Inch	3/4"	3/4"	3/4"
Net Dimensions	mm	750*265*500	930*280*550	1000*300*620

Specifications

MODEL	SHAW	11CH	14CH	16CH
Cooling Capacity	KW	9.8	12.1	14.8
Heating Capacity	KW	11.0	13.7	15.9
Compressor	Type	Scroll	Scroll	Scroll
	Quantity	1	1	1
Cooling Power Input	KW	3.3	4.0	4.9
Heating Power Input	KW	3.1	3.9	4.5
Power Supply	V/Ph/Hz	220/1/50	380/3/50	380/3/50
Water Flow	m^3/h	1.9	2.4	2.7
Water Pressure Drop	kPa	24	28	30
Noise	dB(A)	58	58	58
Water Connections	Inch	1	1	1
Net Dimensions	mm	1108*460*690	1108*460*1250	1108*460*1250

Modular air source heat pump

Strong capacity;

Modular installation;

Applicable to the industrial and commercial buildings, such as hospital, school, office building, living quarters etc.

Specifications

MODEL	SHAW	21CV	27CV	34CV	42CV
Cooling Capacity	KW	19.8	25.1	31.0	40.0
Heating Capacity	KW	21.0	27.0	33.5	42.0
Compressor	type quantity	scroll 2	scroll 2	scroll 2	scroll 2
Cooling Power Input	KW	6.6	8.4	10.3	13.0
Heating Power Input	KW	6.0	7.7	9.6	12.3
Power Supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50
Water Flow	m^3/h	3.6	4.6	5.8	7.2
Water Pressure Drop	kPa	33	35	40	42
Noise	dB(A)	60	60	60	60
Water Connections	Inch	1	1	1-1/4"	1-1/4"
Net Dimensions	mm	1470*735*990	1470*735*990	1470*735*990	1660*960*1225

Specifications

MODEL	SHAW	55CV	65CV	80CV	110CV
Cooling Capacity	KW	52	61	76	102
Heating Capacity	KW	55	65	80	110
Compressor	type quantity	scroll 2	scroll 2	scroll 3	scroll 3
Cooling Power Input	KW	17.3	21.1	25.3	34.0
Heating Power Input	KW	15.7	18.8	22.9	31.4
Power Supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50
Water Flow	m^3/h	9.5	11.2	13.8	18.9
Water Pressure Drop	kPa	44	46	50	55
Noise	dB(A)	60	62	68	71
Water Connections	Inch	1-1/2"	1-1/2"	2	2.5
Net Dimensions	mm	1660*960*1225	1660*960*1225	2190*1437*2056	2190*1437*2056

Measurement Conditions:
Cooling: Ambient Temp.: 35℃/24℃, Water inlet/outlet Temp.: 12℃/7℃
Heating: Ambient Temp.: 7℃/6℃, Water inlet/outlet Temp.: 40℃/45℃

Snowland

——Low temperature air source heat pump

The low temperature (EVI:Enhanced Vapor Injection) air source heat pump is specially designed for the cold region in the North part. The snowland series heat pump is equipped with international famous brand Copeland compressor, they can work at minimum -25°C for house heating and domestic hot water.

Low temperature ASHP

Super Wide working temp range:
Heaing ambinet temp -25°C~21°C
Cooling ambinet temp 21°C~43°C
It gives you comfortable experience all the year around no matter where you are.

Super high water temperature:
Outlet water temp. 65°C
The hot water temp can get up to 50°C even in cold winter.

Super high COP
The COP can get to 3.8 (based on the internal standards test condition)
The cooling efficiency EER can also get to 3.1

Split design, safe and reliable
The unit is designed as split type. The outside unit is with compressor and evaporator etc., and the indoor unit is with water heat exchanger etc. in order to protec the water circuit from frosting in winter.

VS

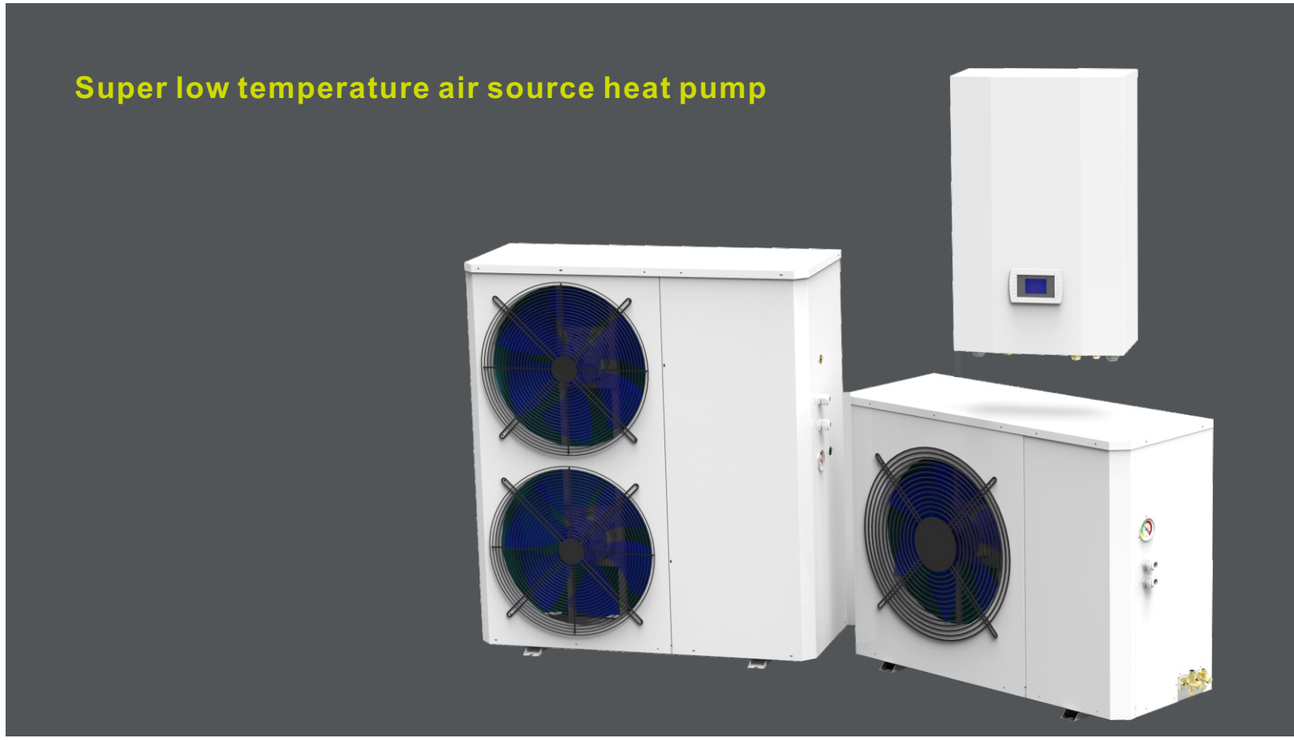
Conventional ASHP

Limited working temp range:
Heaing: ambinet temp -5°C~21°C, when the ambient is low than -5°C, the heat capacity will greatly decay, the working capacity of the compressor decreases and is unable to provide hot water normally.

When the air temp decreases a lot in winter, the capacity of the heat pump decreases and is unable to heat up water effectively.

The COP in winter is only around 1.5, the power consumption increases but the heat capacity greatly decreases.

The condenser is put inside the main unit, when the air temp is low in winter, it is easy to be freezed and so causes the damage on the system.



Parameter Table

Model		SHAW-11EVIM	SHAW-12EVIM	SHAW-16EVIM	SHAW-25EVIM
Heating capacity *	KW	9.2	11.6	15.9	24.6
Heating power input *	KW	2.5	3.2	4.4	6.8
Heating capacity **	KW	7.5	9.4	13.4	20.6
Heating power input **	KW	2.4	3.0	4.3	6.6
Heating capacity ***	KW	5.3	6.4	9.3	14.1
Heating power input ***	KW	2.4	2.9	4.2	6.4
COP*	/	3.68	3.63	3.61	3.62
COP**	/	3.13	3.13	3.12	3.12
COP***	/	2.21	2.21	2.21	2.20
Max. water temperature	¡ æ	60	60	60	60
Rated water temperature	¡ æ	55	55	55	55
Water flow	m3/h	1.58	1.99	2.73	4.23
Water pressure drop	Kpa	22	24	28	30
Water connections	Inch	1	1	1	1
Noise	dB(A)	52	52	55	58
Compressor	Brand	Copeland (EVI)	Copeland (EVI)	Copeland (EVI)	Copeland (EVI)
	Quantity	1	1	1	1
Power supply	/	220V/1PH/50Hz	220V/1PH/50Hz	380V/3PH/50Hz	380V/3PH/50Hz
Refrigerant	/	R407C	R407C	R407C	
Type of defrosting	/	Reverse circulation	Reverse circulation	Reverse circulation	Reverse circulation
Net weight	kg	100	110	150	240
Gross weight	kg	115	125	165	265
Net dimensions	mm	1110*460*850	1110*460*850	1110*460*1655	1110*460*1655
Packing dimensions	mm	1175*530*1010	1175*530*1010	1180*530*1800	1360*625*1800

1. Unit working temperature : -25℃ to 43℃
2. *Test condition: ambient temp: 7℃/6℃, water inlet/outlet: 30℃/35℃
** Test condition: ambient temp: -2℃, water inlet/outlet: 30℃/35℃
*** Test condition: ambient temp: -20℃, water inlet/outlet: 30℃/35℃

All in one air source hot water heat pump

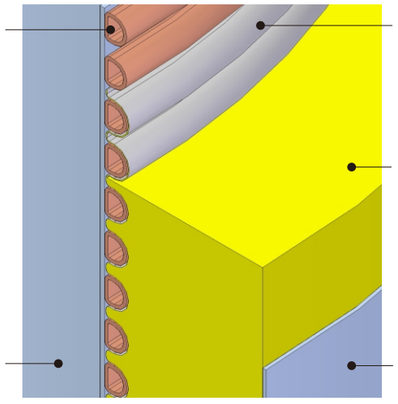
Easy to supply hot water, Spa at home

SUOHER all in one air source hot water heat pump can completely replace the traditional domestic water heater. It is highly efficient, produce large capacity hot water, it could run for 24 hours reliably and safely. It will provide you with comfortable hot water experience.

More energy efficient: save 75% electricity;
More comfortable: Super large capacity hot water, stable water temp.
More safe: water and electricity are separated, safe and reliable;
More considerate: operate all the day around

Advantages:

D type heating pipe, close to the tank surface to enlarge the heat exchange area in order to increase the heat exchange efficiency.



The thermal conductive silicone is coated between the copper pipes and the inner contact part. Heat-insulating film is wrapped around the copper pipes to reduce the heat loss, thus to increase the heat transfer efficiency.

Thermal insulation 50mm to reduce the heat loss

Stainless steel 304 inner tank, thickness 1.5mm, anti-corrosive, high pressure-bearing;
safe and reliable;

The outside tank is processed by electrostatic powder spraying, beautiful and durable.

150L All in one hot water heat pump

Model	SHHW-3/150			
Working mode	Standards	Quick heating mode		Electric heating mode
Rated heating capacity	3000W	heat pump 3000W	electric heater 2000W	2000W
Power consumption	810W	810W	2000W	2000W
Operating current	3.68A	12.77A		9.09A
Power supply	220¡ ¢240V/1Ph/50Hz			
COP A20/W55	3.75	…		…
Compressor brand/ type	Hitachi / Rotary			
Refrigerant	R407c/R410a			
Controller	lcd digital			
Type of defrosting	Reverse circulation			
Max.water temperature	60 ℃			
Rated water temperature	55 ℃			
Water tank	150 L			
Refrigerant design pressure	3.0 MPa			
Tank desgin pressure	0.8 Mpa (Max.1.2 MPa)			
Water connection (inlet/outlet)	DN 15			
Water drainange pipe	DN 15			
Sound power level	45 dB(A)			
Net weight	61 kg			
Shipping weight	76 kg			
Net dimensions	510*510*1660 mm			
Test condition	Ambient temp.: 20℃/15℃			

200L All in one hot water heat pump

Model	SHHW-3/200			
Working mode	Standards	Quick heating mode		Electric heating mode
Rated heating capacity	3000W	heat pump 3000W	electric heater 2000W	2000W
Power consumption	810W	810W	2000W	2000W
Operating current	3.68A	12.77A		9.09A
Power supply	220～240V/1Ph/50Hz			
COP A20/W55	3.7	…		…
Compressor brand/ type	Hitachi / Rotary			
Refrigerant	R407C/R410a			
Controller	lcd digital			
Type of defrosting	Reverse circulation			
Max.water temperature	60 ℃			
Rated water temperature	55 ℃			
Water tank	200 L			
Refrigerant design pressure	3.0 MPa			
Tank desgin pressure	0.8 Mpa (Max.1.2 MPa)			
Water connection (inlet/outlet)	DN 15			
Water drainange pipe	DN 15			
Sound power level	45 dB(A)			
Net weight	71 kg			
Shipping weight	86 kg			
Net dimensions	570*570*1750 mm			
Testing condition	Ambient temp.:20℃/15℃			

200L-300L All in one hot water heat pump

Multiple function in one machine

It provides hot water meanwhile sends the cold air through the air duct to the place where needs cold air or dehumidification. With hot water+cold air, it brings you the heathy and conformable life experience.

Benefits:

Environmentally friendly

Hot water heat pump utilizes the free energy stored in the air to heat the water. It does not emit harmful gases because there is no combustion.

Economical

It is 3 times higher efficient than gas boiler or electrical heater and can save a lot of heating cost for the user.

Simplicity

It is simple to regulate the program with LCD displaying controller. The water temperature and heat pump working parameters can be easily regulated.

Multi-function

With different ways of installation, the hot water heat pump could act as not only a heat pump but also an air conditioner, a dehumidifier, or an energy recovery equipment… Various functions bring you more than a heat pump.

Performance:

Ambient temperature 20℃/19℃; water temperature 55℃(R410a), 65℃(R134a)

Waste Heat Recovery

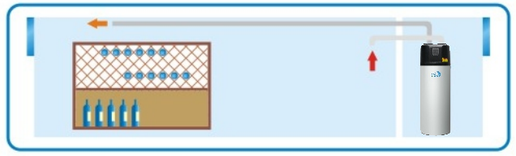
The heat pump could be installed outside the kitchen, by the fireplace or in the garage where existing a great deal of waste heat. This makes sure that the unit can keep COP at a high level when ambient temperature is low in winter.

Domestic Hot Water Heating and Dehumidification

The heat pump could be placed in laundry room and used for sanitary hot water heating. At the same time, its cooling and dehumidification functions can be performed for the room, especially in high humidity season, its advantages will be more obvious and the results will be more satisfactory.

Domestic Hot Water Heating and Storeroom Cooling

The heat pump can be placed in the storeroom where wine, beverages and fruit, etc. are in store. When it is used for sanitary hot water heating, cooling function for food fresh-keeping will be carried out at the same time. One unit, several applications. It's totally worthwhile.



Domestic Hot Water Heating and Fresh Air Exchange

The heat pump can be placed in the garage, gymnasium, basement and so on. It could be used for domestic hot water heating, meanwhile, cooling and fresh air exchange functions for the room can be achieved.

Specification

Model	SHHW-3T200DF	SHHW-3T250DF	SHHW-3T300DF
Heating capacity	3kw	3kw	3kw
Water tank capacity	200 L	250 L	300 L
Heating power input	0.8kw	0.8kw	0.8kw
Operating current	3.68A	3.68A	3.68A
COP A20/W55	3.75	3.75	3.75
Power supply	220～240V/1Ph/50Hz		
Compressor brand/style	Hitachi / Rotary		
Refrigerant	R410a / R407c		
Controller	lcd digital		
Type of defrosting	Reverse circulation		
Max.water temperature	60 ℃		
Rated water temperature	55 ℃		
Electrical heater	1.5kw	1.5kw	1.5kw
Hot water supply(from 15°C to 55°C)	75L/h	75L/h	75L/h
Sound level	47 dB(A)	47 dB(A)	47 dB(A)
Net weight	80 kg	88 kg	95 kg
Shipping weight	92 kg	101 kg	109 kg
Net dimensions (mm)	560*560*1730	640*640*1620	640*640*1840
Shipping dimensions (mm)	670*670*1860	750*750*1740	750*750*1970

Ground Source Heat Pump

Ground source covers four different heat sources such as rock, surface soil, ground water and lake.Several factors such as the energy need, the existing heating system and the topographic conditions etc. decide that which heat source is the most suitable for your house. Through any of the 4 heat sources, the heat pump system gathers the heat stored under the ground to heat water, providing house heating and domestic hot water.

Install SUOHER heat pump for your house

Triple Function

Heating, cooling, hot water
With Real Power heat pump, all three functions can be realized.
The house heating is realized via underfloor heating system or radiator;
The house cooling is realized via fan coil or underfloor system.

No affect on vision

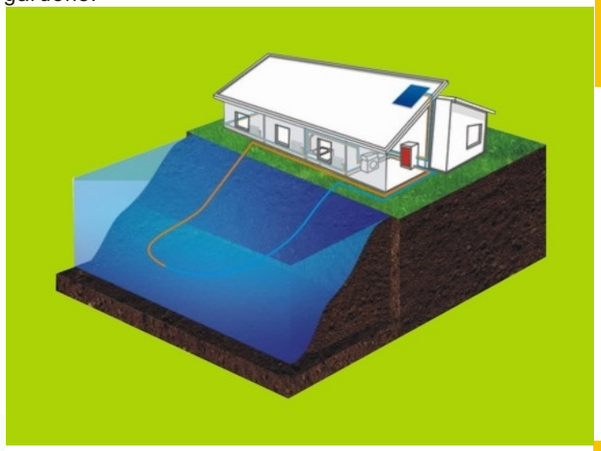
Because all the parts are buried under the ground, so you can see nothing trace of the heat pump from outside.

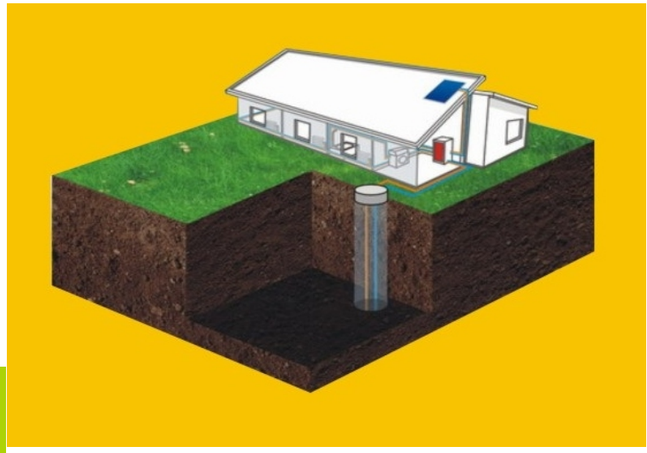
Comfortable and reliable

Antifreeze can be added in the ground source heat pump, with the mixed solution of the antifreeze and water, the heat energy of the heat pump can be continuously transferred to your house, so even in the very clod winter, there is no worry about the running of the ground source heat pump.

Rock

There is a heat source with almost constant temperature in the shallowsoil layer of the earth.
Ground source heat pump can use this heat sourceall the year around. The heat pump collect heat from the collector drilled into the rock.
The depth of the well can be from 90-200 meters depending on the heat pump capacity and the local regulation.
This system applies to all kinds of buildings, large or small, public or private.It takes up ess space since the ground probe can be even drilled in the smallest gardens.



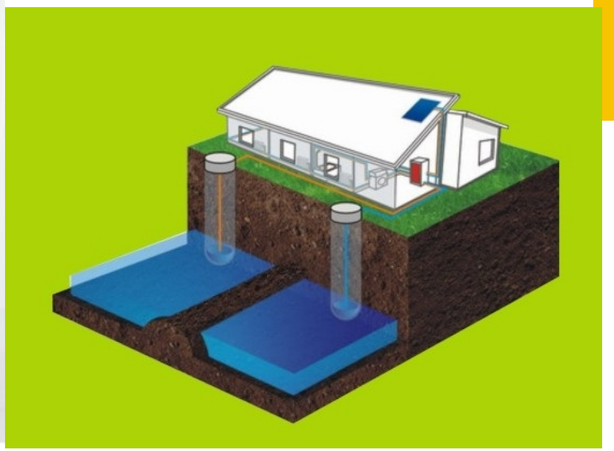


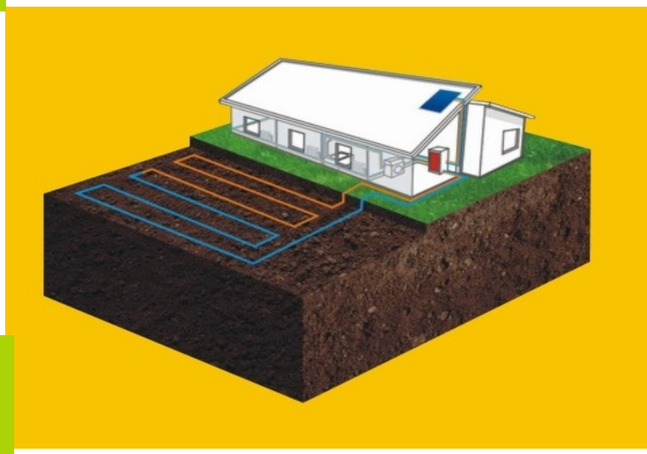
Lake

The heat stored in the lake water can also be used as heat source for ground source heat pump if your house is built near to the lake.
The heat is extracted by a collector anchored to the bottom of the lake.

Surface soil

The solar energy is stored in the shallowsoil layer in summer.
It is directly absorbed by the soil from the sun or from the rain and air. The ground source heat pump ollect this stored energy via the collector filled with antifreeze and buried in the soil.
The collector is buried at the depth of 80-100cm with lengthen between 250m and 400m depending on the heat pump capacity.





Ground water

Ground water is also an ideal heat source for the heat pump since it has a constant water temperature between 4 and12 .
Normally, the ground source heat pump collects stored energy from the ground water in one well and returns the ground water to another.

Ground source heat pump

Small shape, compact structure;

Save installation space, strong capacity;

Ensure the heating demand in the coldest winter;

High COP, energy saving and environment friendly;

Specifications

MODEL	SHWW	4X	7X	11X	13X	17X
Cooling Capacity	KW	3.0	6.0	9.0	11.5	15.0
Heating Capacity	KW	3.4	6.8	10.2	13.0	17.0
Compressor	Type Quantity	Rotary 1	Rotary 1	Rotary 1	Scroll 1	Scroll 1
Cooling Power Input	KW	0.73	1.46	2.25	2.88	3.75
Heating Power Input	KW	0.67	1.36	2.04	2.60	3.40
Power Supply	V/PH/Hz	220/1/50	220/1/50	220/1/50	220/1/50	380/3/50
Water Flow (Hot Water Side)	m^3/h	0.5	1.0	1.5	2.0	2.7
Water Flow (Ground Side)	m^3/h	0.5	0.9	1.4	1.8	2.4
Water Pressure Drop	kPa	20	22	22	24	28
Noise	dB(A)	38	40	40	41	41
Water Connections	Inch	3/4"	3/4"	3/4"	1	1
Net Dimensions	mm	500*385*440	500*385*440	600*430*670	600*560*670	600*560*670

Measurement Condition:
Heating: Ground Source Temp. 15℃, Hot Water Temp. 35℃
Cooling: Ground Source Temp. 20℃, Chilled Water Temp. 12℃
Remarks:Heat recovery is available (optional) for all models.

MODEL	SHWW	20X	25X	34X	41X	55X
Cooling Capacity	KW	17.5	22.0	30.5	36.0	49.0
Heating Capacity	KW	20.0	25.0	34.0	41.0	55.0
Compressor	Type Quantity	Scroll 1	Scroll 2	Scroll 2	Scroll 2	Scroll 3
Cooling Power Input	KW	4.38	5.50	7.63	9.00	12.25
Heating Power Input	KW	4.00	5.00	6.80	8.20	11.00
Power Supply	V/PH/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
Water Flow (Hot Water Side)	m^3/h	3.0	4.0	5.2	6.2	7.5
Water Flow (Ground Side)	m^3/h	2.7	3.6	4.7	5.6	6.8
Water Pressure Drop	kPa	30	33	35	40	50
Noise	dB(A)	42	43	43	43	45
Water Connections	Inch	1	1	1	1-1/2"	2"
Net Dimensions	mm	600*560*670	900*680*670	900*680*670	900*680*670	1200*760*750

Measurement Condition:
Heating: Ground Source Temp. 15℃, Hot Water Temp. 35℃
Cooling: Ground Source Temp. 20℃, Chilled Water Temp. 12℃
Remarks:Heat recovery is available (optional) for all models.

Ground source heat pump

Commercial ground source heat pump

Specifications

MODEL	SHWW	90L	130L	170L	210L	250L
Cooling Capacity	KW	72	108	144	180	216
Heating Capacity	KW	83	125	165	207	249
Compressor	Type Quantity	Scroll 2	Scroll 3	Scroll 4	Scroll 5	Scroll 6
Cooling Power Input	KW	20.6	30.9	41.1	51.4	61.7
Heating Power Input	KW	18.4	27.8	36.7	46.0	55.3
Power Supply	V/PH/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
Water Flow (Hot Water Side)	m^3/h	14.3	21.5	25.8	29.7	35.7
Water Flow (Ground Side)	m^3/h	11.4	17.2	20.6	23.7	28.5
Water Pressure Drop	kPa	48	55	58	63	65
Noise	dB(A)	55	55	56	56	58
Water Connections	Inch	2-1/2"	2-1/2"	2-1/2"	3"	3-1/2"
Net Dimensions	mm	1600*600*1310	2200*600*1310	2500*650*1360	2200*1200*1450	2200*1200*1450

DC Inverter Heat Pump

The DC inverter heat pump can adjust its running frequency according to the ambient temperature and water temperature. It consumes the less electricity and provide the most comfortable heating environment. DC inverter heat pump will make your life more comfortable.

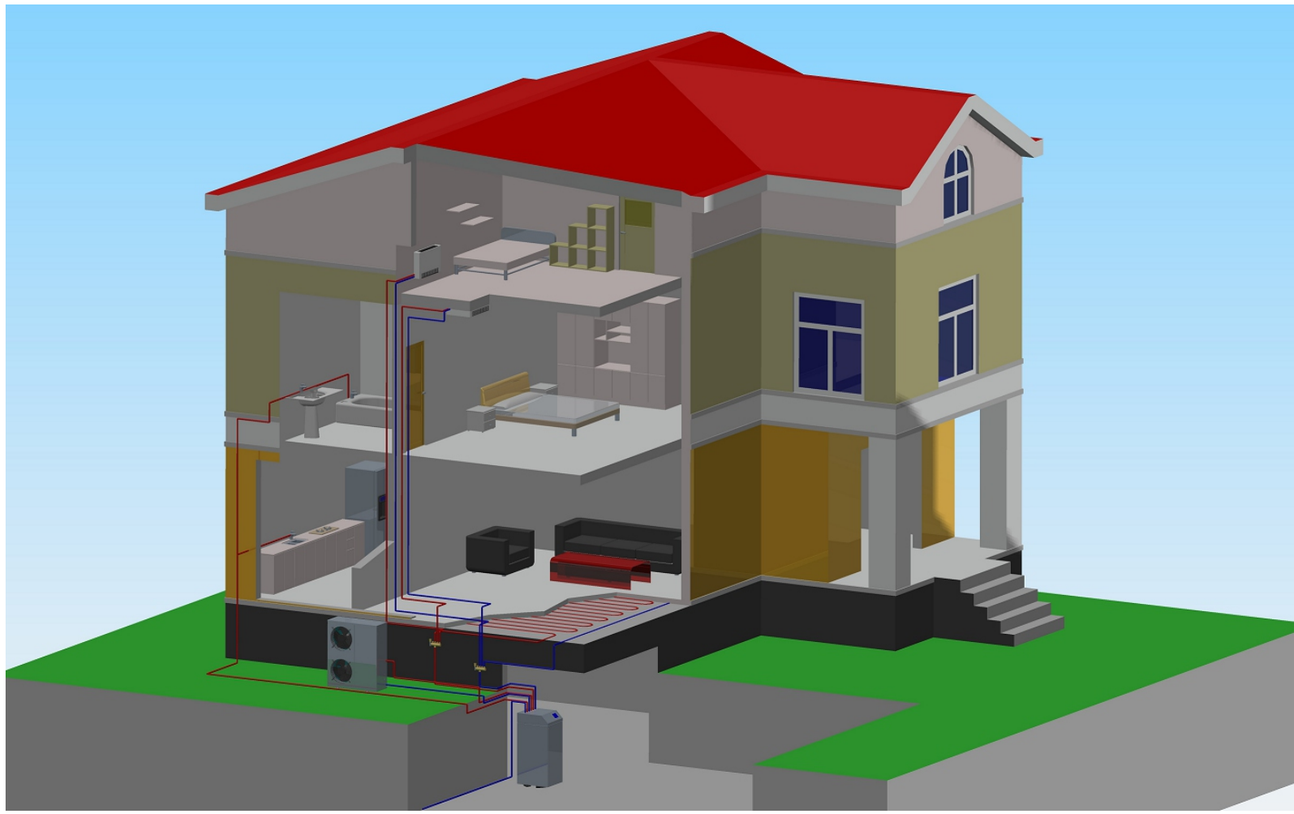
Advantages

Energy efficient

DC inverter heat pump adjusts the compressor running speed via the built-in inverter and outputs the heating capacity most suitable for the current environment. As the compressor doesn't frequently turn on and turn off, it can always keep the most stable working status, thus the heat pump can save more than 30% energy.

Precise temperature control

With 180° sine wave DC inverter drive technology and precise smart control system, the water temperature can be precisely controlled to keep the house warm and comfortable.



Rapid thermoregulation

When there is big difference between the current temperature and the set temperature, the DC inverter heat pump will run at the largest frequency to make the current temperature increase or decrease to the set temperature. The heating/cooling effect is very obvious.

Wide range of running voltage

DC inverter heat pump has strong adaptability on the voltage. It can start with a wide range of voltage and start smoothly, without impact on the power grid.

Cryogenic operation

DC inverter heat pump has strong adaptability on the environment, it can run normally at very low ambient temperature. It can run at minimum -15℃.

Safe and environment friendly

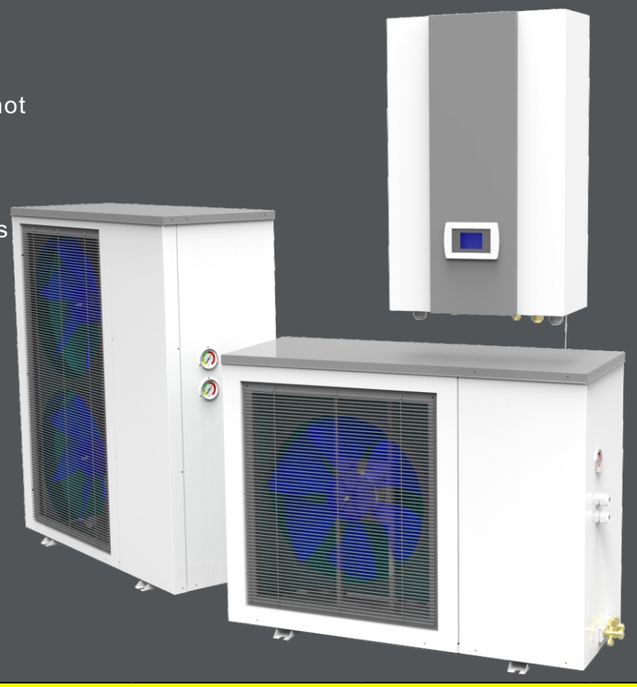
With environment friendly refrigerant R410a and built-in complete protection function, Real Power DC inverter heat pump can make sure its safe and reliable operation.

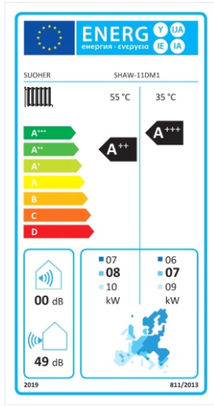
DC Inverter air source heat pump

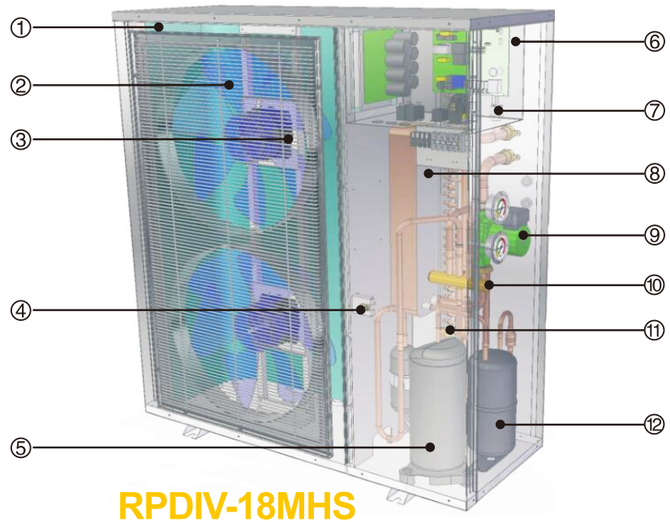
There are three modes: heating, cooling and hot water.

The combination of the modes extends the utilization of SUOHER DC inverter heat pumps to the whole year. Users can choose the following modes:

- Heating
- Cooling
- Hot water
- Heating + hot water
- Cooling + hot water







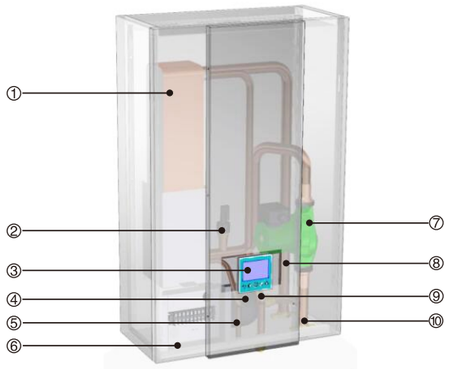
RPDIV-18MHS

1–Evaporator	5–Compressor	9–Circulation pump
2–Axial fan blade	6–Electric box	10–4–way valve
3–Axial fan motor	7–Water flow switch	11–Electronic expansion valve
4–Check valve	8–Condenser	12–Gas–liquid separator

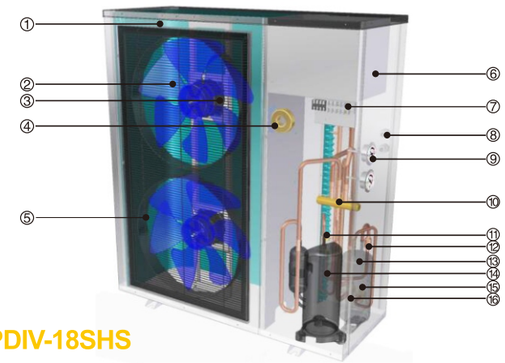
DC Inverter Air to Water heat pump

Model		SHAW-6DM1	SHAW-9DM1	SHAW-11DM1	SHAW-13DM1	SHAW-15DM1	SHAW-15DM1	SHAW-18DM1	SHAW-20DM1	SHAW-25DM1
Max. heating capacity	kW	7.2	10.8	14.3	16.8	19.8	20.2	23	26	31
Min. heating capacity	kW	2.5	4.1	4.9	5.8	6.5	6.5	8.1	9	11.3
Rated heating capacity	kW	6	9	11	13	15	15	18	20	25
Rated heating power input	kW	1.35	2.1	2.58	3.05	3.53	3.51	4.26	4.74	5.94
COP		4.44	4.29	4.26	4.26	4.25	4.27	4.23	4.22	4.21
Rated cooling capacity	kW	4.8	6.5	7.8	9.1	10.8	10.9	13.5	15	17.8
Rated cooling power input	kW	1.65	2.25	2.68	3.25	3.83	3.82	4.81	5.25	6.32
EER		2.91	2.89	2.91	2.80	2.82	2.85	2.81	2.86	2.82
Max. water temp.	℃	60								
Rated water temp.	℃	55								
water flow	m3/h	1	1.50	1.90	2.20	2.60	2.60	3.10	3.40	4.30
pressure drop	Kpa	18	22	24	26	28	28	30	31	34
Net weight	kg	72	90	96	105	124	126	168	190	210
Gross weight	kg	84	105	111	120	142	144	186	210	230
Noise	dB(A)	50	52					58	58	58
Pipe connection	mm	DN20	DN25							
Power supply		220V/1PH/50Hz	220V/1PH/50Hz	220V/1PH/50Hz	220V/1PH/50Hz	220V/1PH/50Hz	380V/3PH/50Hz	380V/3PH/50Hz	380V/3PH/50Hz	380V/3PH/50Hz
Net size	mm	1110*450*700	1110*450*850	1110*450*850	1080*430*940	1110*450*1250	1110*450*1250	1110*450*1250	1110*450*1250	1110*450*1250
Package size	mm	1200*520*850	1200*520*990	1200*520*990	1180*500*1080	1200*520*1390	1200*520*1390	1200*520*1390	1200*520*1390	1200*520*1390

Split type DC inverter



1–Heat exchanger
2–Water flow switch
3–Controller
4–Expansion tank
5–Liquid pipe
6–Electric box
7–Circulation pump
8–Water outlet pipe
9–Gas pipe
10–Water inlet pipe



RPDIV-18SHS

1–Evaporator
2–Axial fan blade
3–Axial fan motor
4–Electric reactor
5–Wind net
6–Electric box
7–Power supply
8–Through hole
9–Pressure gauge
10–4–way valve
11–Expansion valve
12–Filter
13–Gas–liquid seperator
14–Compressor
15–Liquid valve
16–Gas valve

Model	SHAW-7DS1	SHAW-10DS1	SHAW-18DS1	SHAW-18DS3
Power supply	220~240V/1Ph/50Hz	220~240V/1Ph/50Hz	220~240V/1Ph/50Hz	380~400V/3Ph/50Hz
Max. heating capacity (A7/W35)	7.0 KW	10.2 KW	17.2 KW	17.2 KW
Min. heating capacity (A7/W35)	2.8 KW	3.2 KW	6.5 KW	6.5 KW
Rated heating capacity (A7/W35)	5.6 KW	8.4 KW	15.8 KW	15.8 KW
COP	2.9~4.5	2.9~4.5	2.9~4.5	2.9~4.5
Max. cooling capacity (A35/W7)	6.2 KW	9.1 KW	12.2 KW	12.2 KW
Min. cooling capacity (A35/W7)	0.7 KW	1.2 KW	2.3 KW	2.3 KW
Rated Cooling capacity (A35/W7)	5.0 KW	7.5 KW	14.5 KW	14.5 KW
EER	2.4~3.5	2.4~3.5	2.4~3.5	2.4~3.5
Controller	LCD Wire controller	LCD Wire controller	LCD Wire controller	LCD Wire controller
Refrigerant	R410A	R410A	R410A	R410A
Compressor/Type	Mitsubishi / Inverter rotary	Mitsubishi / Inverter rotary	Mitsubishi / Inverter rotary	Mitsubishi / Inverter rotary
Compressor quantity	1	1	1	1
Condenser	Plate heat exchanger	Plate heat exchanger	Plate heat exchanger	Plate heat exchanger
Evaporater	Louvered & hydrophilic fin–tubes	Louvered & hydrophilic fin–tubes	Louvered & hydrophilic fin–tubes	Louvered & hydrophilic fin–tubes
Evaporater layer	Double	Double	Double	Double
Electronic expansion valve	SANHUA EEV	SANHUA EEV	SANHUA EEV	SANHUA EEV
Housing	Galvanized steel& powder painting	Galvanized steel& powder painting	Galvanized steel& powder painting	Galvanized steel& powder painting
Fan system	Horizontal fan dischage	Horizontal fan dischage	Horizontal fan dischage	Horizontal fan dischage
Fan speed	Variable	Variable	Variable	Variable
Water flow switch	Built–in	Built–in	Built–in	Built–in
Circulation pump	Built–in Energy Class A water pump	Built–in Energy Class A water pump	Built–in Energy Class A water pump	Built–in Energy Class A water pump
Water flow (m^3/h)	1	1.35	2.3	2.3
Water connection	DN 25	DN 25	DN 25	DN 25
Ingress protection	IPX4	IPX4	IPX4	IPX4
Net dimension (mm) – Outdoor unit	1110*460*850	1110*460*850	1110*460*1250	1110*460*1250
Packing dimension (mm) – Outdoor unit	1190*540*980	1190*540*980	1210*530*1385	1210*530*1385
Net/packing weight(kg) –Outdoor unit	82/97	90/106	122/142	122/142
Net dimension (mm) – Indoor unit	500*220*840	500*220*840	500*220*840	500*220*840
Packing dimension (mm) – Indoor unit	520*240*870	520*240*870	520*240*870	520*240*870
Net/packing weight(kg) –Indoor unit	24/26	25/27	30/32	30/32

DC Inverter ground source heat pump

1.Low Noise

Quality sound-muffling spongia and low noise components to make sure the super-low noise operation

2. Multiple protection and safe running system

The heat pump is along with multiple protection function in the whole running process.If the heat pump abnormally runs, the control system will automatically stop the heat pump to avoid further damage.

3. Integrated smart controller

Set the parameters after the heat pump is installed, the controller can automatically manage all the functions of the heat pump, such as defrosting, on-off after reaching the set temp., compressor crankshaft heater ....

Specifications

Model	SHWW	6CH	9CH	18CH
Heating Capacity	KW	6	9.3	18
Cooling Capacity	KW	5.5	8.5	16.5
Heating Power Input	KW	1.2	1.85	3.7
Cooling PowerInput	KW	1.28	1.98	4.1
COP/EER		5.0/4.3	5.0/4.3	4.8/4.0
Compressor	Type Quantity	1	Rotary 1	2
Power Supply	V/Ph/Hz		220/1/50	
Water Flow(using side) (	m^3/h	1.0	1.6	3.1
Water Flow (ground source)	m^3/h	0.9	1.5	2.8
Water Pressure Drop	kPa	20	22	30
Noise	dB(A)	42	45	48
Water Connections	Inch	3/4"	1"	1"
Net Dimensions	mm	600×430×740	600×430×740	710×460×550