



HEAT PUMP CATALOGUE

WATER HEATER / HEATING & COOLING HEAT PUMP MANUFACTURER



Global quality standard

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FOSHAN AIROSD THERMAL TECHNOLOGY CO., LTD.



About AIR SD



Foshan Airosd Thermal Technology Co., Ltd. is a professional heat pump manufacturer. We are specialized in research, production and sales of air source heat pump and providing a solution for the residential and commercial heat pump systems.

AIROSD were awarded as the National New High-tech enterprises Product Certificate, and has obtained the certificate for ISO9001 quality management system, ISO 14001 environment management system, OHSAS18001 occupational health and safety management system, China compulsory product certification, energy conservation product etc. We have 2 production bases and the production output up to annual 1,000,000 sets of heat pump.

Our company has successfully obtained most of the world well know certificates, including CE, CB, ERP, RoHs, UL etc. Through several years R&D, AIROSD marketing net have covered more than 30 countries and regions all over the world.

AIROSD is trying hard to be global customer's favorite brand. Through continuous improvement in the quality of products and the standing with the global partners, we are committed to promote low-carbon lifestyle, improve the environment and people's lives.



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Honors and Certificates

$\ensuremath{\mathsf{AIR}}\ensuremath{\cap}\ensuremath{\mathsf{SD}}$ opens a new era of high speed heat pump



- National New and High-tech **Enterprise Certificate**
- New and High-tech Product Certificate System
- The Most Growing Brand of Heat Pump Industry in China
- Asian Brand Management Institute "European Heating Heat Pump Technology Innovation Leading Brand"
- Emerson Cup Best Residential Heat Pump Award

- China Certificate for Energy **Conservation Product**
- ISO9001 Certificate of Quality Management System
- ISO14001 Certificate of Environment Management System
- OHSAS18001 Occupational Health and Safety Management System Certificate
- National Industrial Production License





New and High-tech Product Certificate







Certificate for China Compulsory Product Certification

Certificate for China Compulsory Product Certification



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Emerson Cup Best **Residential Heat Pump** Award

2016 Top Ten Most Growing Brands in China's Heat Pump Industry





New and High-tech Enterprise

Production License



Qualifications and patents



ISO9001 Certificate of Quality Management System



CE Certification



OHSAS18001 Occupational Health and Safety Management System



CE Certification



Asian Brand Management Institute "European Heating Heat Pump Technology Innovation Leading Brand"



The Most Growing Brand of Heat Pump Industry in China

Over 40 Patents



Water from 15°C to 55°C comparison of cost

How does heat pump work?



The heat pump is an energy moving device

- The refrigerant absorbs the free air source energy Q3 from the air by the evaporator.
- The compressor compress the refrigerant into high temperature and pressure refrigerant via electric energy Q1.
- The heat energy Q4 transmit to water in the heat exchanger.
- According to the law of conservation of energy, heat energy Q4 =air energy Q3+ electric energy Q1



AIR SOURCE HEAT PUMP ADVANTAGE



Safely

Comfort

life

Adopt air source heat pump technology ,not use hidden troubles created by electric heating and combustible gas for heating, separate water and electrics, safety is the greatest wealth for our life.

Energy saving up to 80%



Air source heat pump heats by absorbing the free energy surrounding air, without any waste emission, high efficiency and energy saving up to 80% compared with the traditional electric heating mode.

Environmental protection



Heat comes from air for free of charge, no exhaust gas produced, use air source heat pump water heater and reduce CO₂ emission and save the liquid gas and electricity source. Protecting ecological sustainable development heat pump technology

Convenient installation



The installation site of the heat pump is convenient, so long as the air is fully flowing, such as the external wall, the roof or indoor is suitable.



AIROSD air source heat pump energy saving advantages

	Oil/Gas water heater	Electric water heater	Heat pump water heater
Heating mode	Liquefied gas combustion	Electric energy heating	Air source Heat pump (AIROSD)
Heating efficiency	≥80%	≥95%	≤400%
Energy calorific value	24000	860	860
Energy consumption	6000/(80%X860)=0.31m ³	6000/(400%X860)=1.74 KW	6000/(400%X860)=1.74 KW
Energy/price	18.8 RMB/m ³	0.7 RMB/KW	0.7 RMB/KW
The cost/day	5.8 RMB	5.1 RMB	1.2 RMB
Annual hot water cost of 350 days	2030 RMB	1785 RMB	420 RMB

ture, and the unit price of energy is based on the local price. The above datas are used for calculation only.

AIROSD 16 intelligent protection functions







Ground Overvoltage protection

Leakage protection protection Temp differential protection







Over-current protection

Water flow Intelligent fault protection automatic detection

High/low voltage protection

Intelligent control without special maintenance

Airosd, 24 hour unlimited central hot water

system and floor radiant heating more comfort-

able for human body to supply a high quality



The heat pump equipment can realize automatic control without special maintenance, which saves the extra cost of manual maintenance.

Air Source heat pump energy saving advantages

Note: In above table, 150 L water is heated from 15 C to 55 C per day. Energy consumption varies slightly depending on the ambient tempera-



High temp protection



Automatic monitorina



Losting-phase protection



Communication line fault protection



Low-voltage protection



Frost protection



Dry heat protection



Temp sensor fault protection



AIR

AIROSD heat pump technology advantages



High efficiency heat exchanger

Inner-grooved tube, Compact structure, small volume. low water resistance enhance the heat exchanger efficiency.



Adopts famous compressor with high reliable Emerson Copeland or Panasonic, HIGHLY, Mitsubishi compressor used in the system,

working with high reliable and stably in -30 $^\circ$ C ambient.



Fast and poweful heating

Adopts EVI and DC inverter technology, the compressor and fan are combined precisely, the electronic expansion valve can adjust the flow accurately, realizes rapid heating and Cooling, the working temperature range is up to -30~46°C.



Standby freezing protection

In order to prevent the water system from freezing, the system has its own intelligent mode. When the water temp. is measured below 4 C, the system starts the circulating water pump, carries out the first stage anti-freezing protection, when the water temp. rises to more than 4 °C, the system performs the second stage anti-freezing, start compressor low water temp. heating mode until 12 °C to stop operation.



WAR

Environment-friendly refrigerant

R407C or R410a new environment-friendly refrigerant and ROHS directive are fully adopted. It does not contain any ozone depleting elements, and the ODP is zero.

Innovative W-A-R technology

Water-Air-Refrigerant flow converter technology, with high efficiency special compressor, optimized matching between components at the same time, energy saving up to 75%, save electricity by more than half.



Fast defrosting

Real time monitoring outdoor and evaporator temp change, determine automatically enter defrosting mode, high efficiency defrosting within 2 minutes, ensure 90 minutes of long time heating.

Quiet and comfort



Airosd heat pump has 4 noise reduction design and mute mode function to provide a quiet living environment for the user.

Main part suppliers and strategic Cooperation partners





Efficient blades optimized

air duct design

World famous

scroll compressor

High-efficiency tank or

plate heat exchanger

Intelligent controller display

- Human intelligent control
- Long wired distant control
- Multiple timing function
- Internet control support



Main parts



Fully automatic four-way valve EEV, precise flow control

- Automatic power-off memory function
- Automatic diagnose, error code for trouble
- Available to inquiry any parameter
- Convenient maintenance

Airosd air source heat pump EVI technology

Enhance vapor injection (EVI) is the lastest scroll compressor technology. Base on EVI compressor, the refrigerant in the EVI circuit enters the compressor again, and after the secondary compression, it enters the system, increasing the enthalpy of the refrigerant. AIROSD EVI heat pump can increase over 30% heating capacity even though works under severe cold climate.

In right chart, the difference between the standard refrigerant cycle and the refrigeration cycle with EVI is visible, during the compression, a portion of wet vapor gets injected. The main difference is:

The compressor is also pressure-side cooled with effect of higher end temperature 25-30% higher power, comparable to a turbo charge. Slightly better coefficient performance (COP), when EVI is activated.

EVI compressor internal structure diagram





DC inverter technology

AIROSD three core inverter subversive technologies, adopts international brand and high-efficiency DC inverter compressor and brushless DC motor, which combined with full DC controlling, assures the motor speed and refrigerant flow can be adjusted in real time according to the changes of the environment and ensures the system can also provide powerful heating under servere cold climate of -30 °C.

Three core inverter technology

- 4 advantages of Dual-rotor DC inverter compressor
- Low noise: Smooth operation, low vibration, low noise
- long life: Accurate process of various parts, stable performance and longer service life
- Efficient: DC inverter dual-rotor compressor with higher efficiency
- Ultra wideband operation: Compressor operating frequency 10~120Hz
- difference, more comfortable.



- New Intelligent Inverter Control System Adopting advanced microcomputer intelligent DC inverter control, low-frequency start, save 1/3 time, soft start which will not produce the peak current of the boot, water temperature fluctuations are small, ensure the operation of the heating system is stable and reliable under the ultra temperature of -30°C.
- EVI compressor special designed to get high outlet water temperature at ultra temperature working stably at -30°C ambient temperature with only little capacity recession.
- Using EEV(electronic expansion valve) to achieving accurate, stable and high efficiency throttling.
- Outdoor Fin-coil heat exchanger is hydrophilic coated, blue fin is optional for more anti-rust for seaside area.
- Compressor preheated to protect compressor in cold winter.
- Automatic defrosting function with bottom hot piping tech enable our EVI heat pump to work without capacity concession even not necessary to defrost in a long time.

Advanced DC inverter technology



Dual-rotor inverter compressor, 10-120 Hz ultra wideband working with energy saving and powerful heating.

• Stepless Frequency Technology PAM Inverter, constant temperature controlling, small temperature

AIR

Leading intelligent cloud technology

AIROSD heat pump application diagram

The AIROSD WIFI SMART heat pump uses intelligent cloud technology, user can control their heat pump via cloud data centre, and know all things about heat pump anytime and anywhere. User can only control on phone or computer to operate or monitor heat pump working and prepare a comfortable condition for household in advance. The Monitoring and controlling function includes on/off, water inlet, outlet, ambient temperature controlled, failure prompt. It is also easy to read the working status information. Using Smart heat pump the heat pump can be monitored in real time. The Working diagram as below:



Features:

- Help the user to turn on/off the heat pump or set different target water temp in advance and check the heat pump working status or there is any error.
- Help the service person to know the current error code and the whole working parameters, he can take corresponding tools to repair the machine, this save great time and trouble for the service.
- More functions such as complex timer setting, set different working mode and different target temp. at different time to save the cost mostly.









AIROSD heat pump can heating through & cooling through the Fan Coil, provide the





Water circle split heat pump water heater

Description:

The water circle split water heater adopts higher heating exchanger to provide you the most energy saving solution for sanitary hot water supply. With built-in water pump inside the outdoor unit, it is easy installation, just simply connect the water pipe and power, you can enjoy the constantly hot water supply for shower and bath.Suitable for villa, school, hotel, family, Spa and office.

Features:

- Mitsubishi or Panasonic Rotary type compressor, low vibration, low noise and high reliability.
- Polyurethane insulated water tank.
- Intelligent EE valve, excellent efficiency at different ambient temperature.
- Built-in famous water pump.
- Innovative W-A-R(Water, Air, Refrigerant) technology, higher efficiency up to COP 4.5.
- Energy saving up to 80% than traditional electric heater.
- Automatically defrosting.



Household circulating water system installation diagram



Optional:

· Galvanized metal cabinet or stainless steel.

• R410a, R22, R407c refrigerant is available.

• Water tank volume options: 150/200/250/300/400/500L.

MODEL KFXR °C -15-Ambient temp. range Rated heating capacity kw COP w/w Rated power input kw Max. running current А Power supply IP code 1 Safety function High and lo 1 Refrigerant type 1 Compressor QTY pcs Compressor type / Max. temp. outlet water °C Condenser type / G3/4" Int Waterpipe nozzle size inch Circulating water quantity m³/h Air out type 1 Fan motor QTY pcs Noise dB/(A) Machine dimension (W×D×H) mm 750×2 Packing dimension (W×D×H) mm 785×3 Net weight kg Gross weight kg 150L Water tank volume L

Remarks:

Test conditions: dry bulb temperature 20°C/wet bulb temperature 15°C, initial water temperature 15°C/stop water temperature 55°C.
Models, parameters will be changed due to product improvements without notice. The specific parameters are based on the nameplate.

Water circle si



lit water heater									
-003SPCI	KFXR-005SPCI	KFXR-007SPCI							
~+43℃	-15~+43℃	-15~+43℃							
3.7	5	7.5							
1.25	4.35	4.38							
).87	1.15	1.71							
5.5	8.5	13.1							
	220V 1N~50Hz								
	IPX4								
w pressure pro	otection, Overload protectio	n, Temperature protection							
	R407c / R410a / R22								
	1								
	Scroll								
	60℃								
	High efficiency tank								
ernal thread	G3/4" Internal thread	G3/4" Internal thread							
0.6	0.84	1.3							
	Sideward								
1	1	1							
51	53	54							
264×505	930×282×550	1000×300×620							
355×550	1050×380×600	1120×390×660							
41	57	65							
46	63	72							
/ 200L	150L / 250L / 300L	300L / 400L / 500L							



Refrigerant circle split heat pump water heater

Description:

The refrigerant circle domestic split heat pump adopts refrigerant circle the water tank to heat water, outdoor and indoor split design, no water system outside, any freezing and damage to water system. The compact design with small dimension makes the heat pump convenient to be delivered, stored and installed at any place.

Widely application place: ordinary family, villa, office, and restaurant and hotel. 24 hours apply shower or washing hands.

Features:

- Fast water heating at temperatures up to 60°C.
- Mitsubishi or Panasonic Rotary type compressor, low vibration, low noise and high reliability.
- Multifunction LCD wired controller.
- High efficiency up to COP 4.5, saving 75% energy compare to tradition electric heater.

- Automatically defrosting.
- Simple installation: Rooftop, balcony, yard or basement can be suitable places for the installation.
- Durable, long life span up to 15 years, extremely low maintenance cost.
- Heating capacity: 3.7kw-7.2 kw, Tank volume: 150L-500L.
- Working temperature range of outdoor -15° to 43° C.









Optional:

steel.

available.

Galvanized metal cabinet or stainless

• R410a, R22, R407c refrigerant is

• Water tank volume options:

150/200/250/300/400/500L

Refrigerant circle split water heater									
MODEL		KF80-NW KF120-NW KF160-NW							
Working temp. range	°C	-15∼+43°C	-15~+43°C	-15~+43°C					
Rated heating capacity	kw	3.7	5.5	7.2					
Hot water water output	L/h	80	120	160					
COP	w/w	4	4	4					
Heating input power	kw	0.93	1.38	1.80					
Maximum current	А	5.75	7.1	9.5					
Power supply	1	220V 1N~50Hz							
IP code	1	IPX4							
Safety function	1	High and low pressure protection, Overload protection, Temperature protection							
Refrigerant type	1	R407c / R410a / R22							
Compressor QTY	pcs	1							
Compressor type	1		Scroll						
Maximum outlet temp.	°C		60						
Noise	dB(A)	32	34	48					
Dimension (W×D×H)	mm	920×335×585	920×335×585	840×310×730					
Connecting pipe spec.	inch	1/4", 3/8"	1/4", 3/8"	1/4", 3/8"					
Net weight	kg	41	54	58					
Packing weight	kg	50	65	68					
let and outlet pipe interface	inch	G 5/8" Internal thread	G 5/8" Internal thread	G 5/8"Internal thread					
Safety valve specification	Мра	1.2	1.2	1.2					
Water tank volume	L	150L / 200L	150L / 250L / 300L	300L / 400L / 500L					

Remarks:

In

1. Test conditions: (DB/WB) 20°C/15°C, inlet water temperature 15°C, outlet water temperature 55°C.

2. Due to product improvement, above data are subject to change without prior notice, please take the nameplate on the heat pump as standard.





This commercial heat pump water heater is the best solution for hot water supply of commercial project, and can work with advantages of high safety, stability, much convenience, energy saving, and environment friendly, which assures 24 hours comfortable hot water supplying. It is widely used in hot water project of school, hotel, hospital, supper market and other large building, which needs large water volume supply.



Features:

- · Copeland scroll compressor, quiet and high efficiency.
- High efficiency heat exchanger.
- Schneider electrical components.
- Intelligent controlling system.
- Intelligent EE valve, excellent efficiency at different ambient temp.
- Automatically defrosting.
- Easy installation and LCD operation.

Optional:

Galvanized metal cabinet or stainless steel.

 • R410a, R22, R407c refrigerant is available.



Circulating Heating Hydraulic System Diagram



Commercial heat pump water heater										
MODEL		KFXR-010UCI	KFXR-018UCII	KFXR-023UCII	KFXR-036UCII	KFXR-045UCII	KFXR-070UCII	KFXR-090UCII		
Heating mode		Circulating	Circulating	Circulating	Circulating	Circulating	Circulating	Circulating		
Ambient temp. range	°C	-15~+43℃	-15~+43℃	-15~+43℃	-15~+43℃	-15~+43℃	-15~+43℃	-15~+43℃		
Rated heating capacity	kw	10	18	23	36	45	70	90		
COP	w/w	4.17	4.3	4	4.2	4.2	4.1	4.1		
Rated power input	kw	2.4	4.2	5.75	8.57	10.7	17	21.9		
Max. running current	А	17	14	16	24.8	30	45	58		
Power supply	1	220V 1N~50Hz	220V 1N~50Hz 380v 3N~50Hz							
IP code	1		IPX4							
Safety function	1		High and low pressure	protection, Overload pro	tection, Temperature pro	otection Power phase se	quence protection, etc.			
Refrigerant type	1		R407c / R410a / R22							
Compressor QTY	pcs	1	1	1	2	2	2	2		
Compressor type	1	Scroll								
Max. temp. outlet water	°C		60							
Water side heat exchanger type	1		High Efficiency Tube-in-Shell Heat Exchanger Tube-in-Tube Heat Exchanger							
Air side heat exchanger type	1				Finned heat exchanger					
Circulating waterpipe nozzle	inch	G3/4" Internal thread	G1" Internal thread	G1.2" Internal thread	G1.5" Internal thread	G1.5" Internal thread	DN100	DN100		
Outlet nozzle	inch	G3/4" Internal thread	G1" Internal thread	G1.2" Internal thread	G1.5" Internal thread	G1.5" Internal thread	DN100	DN100		
Circulating water flow	inch	1.72	3.1	3.95	6.2	7.74	12.04	15.48		
Air out type	1				Top discharge					
Fan motor QTY	pcs	1	1	1	2	2	2	2		
Noise	dB/(A)	56	56	57	59	65	69	72		
Machine dimension (W×D×H)	mm	750×690×870	750×690×1070	830×793×1084	1500×690×1070	1500×690×1270	2100×1100×2000	2100×1100×2000		
Packing dimension (W×D×H)	mm	800×740×1000	800×740×1200	900×930×1200	1550×740×1200	1550×740×1400	2140×1200×2040	2140×1200×2040		
Net weight	kg	110	130	150	290	350	700	800		
Gross weight	kg	130	150	170	330	390	750	860		

Remarks:

1. Test conditions: (DB/WB) 20°C/15°C, inlet water temperature 15°C, outlet water temperature 55°C. 2. Due to product improvement, above datas are subject to change without prior notice, please take the rating plate as standard.



Commercial heat pump water heater







-30°C Low temperature heat pump water heater

This series water heater can work in very low temp. down to -30 °C. The heat pump is equipped with EVI compressor and high efficiency in low cold conditions, its heating performance is higher by 50%-80% than normal water heater heat pump. It is widely used in cold climate and even work well at -30 C, supply the hot water for villa, hotel, office, hospital etc.





Features:

- Copeland EVI compressor and Schneider electrical components.
- Working ambient temperature down to -30 °C.
- Automatically defrosting.
- Intelligent controller and adjustment by microprocessor.
- High efficiency tube in shell heat exchanger.
- Easy installation and operation.



EVI heat pump schematic



Optional:

· Galvanized metal cabinet or stainless steel cabinet.

• Refrigerant: R22 and R407C and R410a.

-30℃ Low ten	nperature co	mmercial heat pu	Imp water heater					
MODEL		DKFXR-017SCII	DKFXR-033UCII	DKFXR-060UCII				
Ambient temp. range	°C	-30~+43℃	-30~+43℃	-30~+43°C				
Rated heating capacity	kw	16.5	33	60				
COP	w/w	3.7	3.8	3.8				
Rated power input	kw	4.45	8.7	15.6				
Max. running current	А	12.5	26	48				
Power supply	/		380V 3N~50Hz					
IP code	/		IPX4					
Safety function	/	High and low pressure protection; Overload protection; Temperature protection; Power phase sequence protection, etc.						
Refrigerant type	/		R407c / R410a / R22					
Compressor QTY	pcs	1	2	2				
Compressor type	/	EVI Scroll Compressor						
Max. temp. outlet water	°C	60						
Water side heat exchanger type	/		Shell heat exchanger					
Air side heat exchanger type	/		Finned heat exchanger					
Waterpipe nozzle size	/	G1" Internal thread	G1.5" Internal thread	DN100				
Rated water flow	m³/h	2.8	5.7	10.3				
Air out type	/	Sideward	Top discharge	Top discharge				
Fan motor QTY	pcs	1	1	2				
Noise	dB/(A)	56	62	69				
Machine dimension (W×D×H)	mm	1120×405×1355	1500×690×1270	2100×1100×2000				
Packing dimension (W×D×H)	mm	1200×540×1530	1550×740×1400	2140×1200×2040				
Net weight	kg	155	350	700				
Gross weight	kg	165	370	750				

Remarks:

1. Test conditions: (DB/WB) 7°C/6°C, inlet water temperature 9°C, outlet water temperature 55°C. 2. Due to product improvement, above datas are subject to change without prior notice, please take the rating plate as standard.

AIR

High temperature industrial heat pump water heater

Description :

AIROSD High Temperature Hot Water Heat Pump adopts EVI scroll compressor and capable producing hot water with a maximum temperature up to 85 °C, which is ideal for both commercial and industrial applications to kill legionellae and some other bacteria. It uses R134A refrigerant, which is not only eco-friendly but also reliable and stable especially for the system producing high temperature hot water. Suitable: satisfy most water demand for high temperature water in industrial production.



Features:

- Intelligent control: Micro processor based digital controller with LCD display.
- Durable-more than 15 years life span.
- Adjustable water temperature setting: 25 C -85 C.
- EVI Scroll compressor specially designed for high water temperature heat pump.
- ECO-friendly refrigerant R134a.
- High efficiency tube-in- shell water heat exchanger.
- Easy installation and operation.

Optional:

· Galvanized metal cabinet or stainless steel cabinet.

AIR () SOUX E FI

- Direct heating / Circulation heating type.
- R134a, XP140 refrigerant is available.



high temperature water heaters schematic



High temperature Industrial hot water heater									
MODEL		KFXG-013UAII	KFXG-026UAII	KFXG-052UAII					
Ambient temp. range	°C	-7~+45 ℃							
Rated heating capacity	kw	13	26	52					
COP	w/w	2.9	3	3					
Heating input power	kw	4.48	8.67	17.3					
Max. running current	А	12.5	26	48					
Power supply	1		380V 3N~50Hz						
IP code	1		IPX4						
Safety function	1	High and low pressure protection, Overload protection, Temperature protection Power phase sequence protection, etc.							
Refrigerant type/weight	-/kg	R134a/4.25	R134a/4.5×2	R134a/7.5×2					
Compressor QTY	pcs	1	2	2					
Compressor type	1	Scroll							
Max.temp.outlet water	°C	80							
Water side heat exchanger type	1	Hig	High efficiency tank/stainless steel/Casing						
Air side heat exchanger type	1		Finned heat exchanger						
Waterpipe Nozzle size	inch	G1" Internal thread	G1 1/2" Internal thread	DN80					
Rated water flow	m³/h	2.2	4.5	8.9					
Air out type	1		Top discharge						
Fan motor QTY	pcs	1	2	2					
Noise	dB/(A)	56	65	69					
Machine dimension (W×D×H)	mm	750×690×1070	1500×690×1070	2100×1100×2000					
Packing dimension (W×D×H)	mm	800×740×1200	1550×740×1200	2140×1200×2040					
Net weight	kg	130	320	700					
Gross weight	kg	150	370	800					

Remarks:

1. Test conditions: (DB/WB) 20°C/15°C, inlet water temperature 60°C, outlet water temperature 65°C.

2. Due to product improvement, above datas are subject to change without prior notice, please take the rating plate as standard.







AIROSD Commercial Swimming Pool Heat pump are specially designed and engineered for commercial pool or spa water temperature control. The V-shape design condensers airflow direction and intelligent control system are let the units high efficiency and stable working performance. The COP of this type heat pump could be as high as 5.4 at working condition of 20/15(DB/WB), which saves you at least 80% energy compared with traditional electric swimming pool heating equipments.Suitable for large pools in hotel, public parks, schools, sport center, gyms etc.



Features:

- PVC Titanium heat exchanger with full resistance against corrosion, more durable.
- Compact structure, easy demountable for access.
- · High efficiency compressor, saving energy.
- Flow switch for water flow protection.
- Intelligent controller and adjustment by quick mind microprocessor.
- Intelligent LCD display wired controller.
- Air exchanger (fins-coil)with hydrophilic coating.
- Automatic defrosting function included.

Optional:

- Galvanized metal cabinet or stainless steel cabinet.
- R410a, R22, R407c refrigerant is available.
- Titanium Tube Heat Exchanger / Stainless Steel Heat Exchanger.



Commercial swimming pool heat pump										
MODEL		KFXY-010UCI	KFXY-018UCII	KFXY-023UCII	KFXY-036UCII	KFXY-045UCII	KFXY-070UCII	KFXY-090UCII		
Heating mode	/				Circulating					
Ambient temp. range	°C				-15~+43℃					
Rated heating capacity	kw	11	19	23	38	45	70	90		
COP	w/w	5.2	5.2	5.4	5.2	5.4	5.2	5.4		
Rated power input	kw	2.12	3.65	4.25	7.31	8.3	13.46	16.7		
Max. running current	А	10	13	14.5	13.06	26	50	48		
Power supply	/	220V 1N~50Hz			380V 3N~50H	Ηz				
IP code	/				IPX4					
Safety function	/	Hig	High and low pressure protection, Overload protection, Temperature protection, Power phase sequence protection, etc.							
Refrigerant type	/	R407c / R410a / R22								
Compressor QTY	pcs	1	1	1	2	2	2	2		
Compressor type	/	Scroll								
Max.temp.outlet water	°C	40								
Vater side heat exchanger type	/	Titanium tube heat exchanger								
Air side heat exchanger type	/			F	inned heat exchanger					
Circulating waterpipe nozzle	inch	G1" Internal thread	G1.5" Internal thread	G1.5" Internal thread	G1.5" Internal thread	G1.5" Internal thread	G2" Internal thread	G2" Internal thread		
Outlet nozzle	inch	G1" Internal thread	G1.5" Internal thread	G1.5" Internal thread	G1.5" Internal thread	G1.5" Internal thread	G2" Internal thread	G2" Internal thread		
Rated water flow	m³/h	4.73	8.17	9.89		19		39		
Air out type	/				Top discharge					
Fan motor QTY	pcs	1	1	1	2	2	3	2		
Noise	dB/(A)	56	56	56	59	68	68	69		
Machine dimension (W×D×H)	mm	750×690×870	750×690×1070	820×790×1080	1500×690×1070	1500×690×1380	2095×10	05×1855		
Packing dimension (W×D×H)	mm	800×740×1000	800×740×1200	920×840×1210	1580×800×1200	1580×740×1550	2195×11	05×1955		
Net weight	kg	110	130	150	230	330	700	800		
Gross weight	kg	130	160	170	260	360	750	850		

Remarks:

1. Test conditions: (DB/WB) 24°C/19°C, inlet water temperature 27°C, outlet water temperature 29°C. 2. Due to product improvement, above datas are subject to change without prior notice, please take the rating plate as standard.





Commercial swimming pool heat pump





This series heat pump can work in very low climate area down to -30 C. The heat pump is equipped with EVI compressor and high efficiency in low temperature conditions, its heating performance is higher by 50%-80% than normal heat pump. It is widely used in cold area and even work well at -30 C, can be matched with fan coil, floor radiator heating, it is suitable for villa, hotel, office etc.





Features:

- Heating Capacity range: 9KW, 14KW,17KW, 32KW, 45KW, 65kW, 75kW, 90KW,150KW
- Copeland EVI compressor and Schneider electrical components.
- Working ambient temperature down to -30°C.
- Automatically defrosting.
- Intelligent controller and adjustment by microprocessor.
- High efficiency tube in shell heat exchanger.
- Match with floor heating, fan coils, and Central AC function.



Household Heating+Cooling Installation Diagram



Optional:

• Galvanized metal cabinet or stainless steel cabinet.

• R410a, R22, R407c refrigerant is available.

• Only heating function is optional.

EVI heating & cooling heat pump									
	MODEL		KFXFC-009SEI	KFXFC-014SCI	KFXFC-017SCII	DKFXFC-032UCII	KFXFC-065UCII	KFXFC-090UCI	KFXFC-150UCII
Ambien	t temp. range	°C				-30~+43			
Pov	ver supply	1	220V 11	N~50Hz			380V 3N~50Hz		
Electric sh	nock proof grade	/				Class I			
Prote	ction grade	1				IPX4			
Cooling	capacity/COP	kw/-	7.3/2.8	12.0/3.0	14.0/3.0	27.0/2.8	53.0/3.0	70.0/2.8	130.0/2.8
Low-temp (A-12	erature heating 2W41)/COP	kw/-	5.1/2.2	9.2/2.4	11.0/2.4	20.0/2.3	37.5/2.5	55.0/2.4	82.0/2.5
Normal ten (A7	nperature heating W45)/COP	kw/-	8.8/3.3	14.4/3.7	16.3/3.6	32.0/3.6	63.0/3.9	90.0/3.6	146.0/3.9
	A7W35a/COP	kw/-	9.4/4.1	14.5/4.5	16.5/4.3	33.0/4.3	65.0/4.5	92.0/4.3	150.0/4.5
Heating	A-7W45/COP	kw/-	5.8/2.3	9.4/2.6	11.3/2.7	23.5/2.6	41.0/2.6	62.0/2.6	90.0/2.6
capacity	A-15W45/COP	kw/-	4.5/2.2	8.0/2.2	9.6/2.2	19.5/2.2	34.0/2.2	50.0/2.2	76.0/2.2
	A-20W45/COP	kw/-	4.2/1.9	6.5/1.9	7.9/2.0	16.5/2.0	30.2/2.0	43.0/2.0	66.0/2.0
Rated coo	ling input power	kw	2.61	4	4.67	9.6	17.7	25	46.4
Low tempera	ature heating input power	kw	2.32	3.83	4.58	8.7	15	22.9	32.8
lormal temperature heating input power kw		kw	2.5	4	4.5	1	16.2	25	37.4
Max wo	Max working current A		20	32	14.5	25	47	65	110
omproppor	Туре	1				Scroll			
ompressor	Quantity	pcs		1			2		4
Fan motor	Quantity	psc	1			2			4
Max. wat	er temperature	°C		60				60	
W	ater yield	L/h	1600	2500	2800	4600	9100	12000	22400
Refri	gerant type	/	R404a / 2.2	R407c / 4.4	R407c / 4.5		R407c /	R410a / R22	
Dimens	ion (W×D×H)	mm	1087×435×901	1052×362×1346	1082×362×1346	1530×750×1370	2100×11	00×2000	2100×2060×2250
Packing dim	nension (W×D×H)	mm	1230×500×1050	1160×540×1460	1230×500×1500	1650×850×1470	2260×13	60×2270	2230×2250×2400
	Noise	dB(A)	54	58	56	65	68	68	69
Ne	et weight	kg	70	140	140	350	850	950	1900
Gro	ss weight	kg	80	150	150	380	900	1000	2000
Circulatin	g pipe diameter	inch	G1" external thread	G1 1/4" external thread	G1 1/4"external thread	G1.5"external thread	DN50 flange	DN65 flange	DN65 external thread
emarks:									

1. Test conditions: (DB/WB) 7°C/6°C, inlet water temperature 30°C, outlet water temperature 35°C.

25 New Era of High Speed Heat Pump

2. Due to product improvement, above datas are subject to change without prior notice, please take the nameplate as standard.

EVI heating & cooling heat pump





EVI Split Heat pump adopts advanced EVI technology to achieve high efficiency with a COP of up to 4.5. The intelligent control system means everyone in the family can control the unit. Due to the split design, the units are cost effective, quiet to run outside. All of the features work together to give you a more comfortable household.

Suitable for villa, school, hotel, family, and office.

Features:

- Can be used for floor heating, fan coils, water heater and also modern radiators.
- Split design with water system indoor, preventing water frozen problem.
- Copeland EVI compressor and Schneider electrical components.
- Working ambient temperature down to -30°C.
- With controller interface, plate heat exchange, circle water pump, flow switch, water pressure gauge in indoor unit.

3 way valve

• Automatic defrosting function.



Central heating / cooling inlet

Optional:	0	pt	ior	าล	Ŀ.	
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- Allows absence of buffer tank.
- R410a, R22, R407c refrigerant is available.

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	Residential EVI split heating heat pump										
1	Model (Whole)			KFXFC-009SMI/WG	KFXFC-014SMI/WG	KFXFC-018SMI/WG	KFXFC-033SMI/WG	KFXFC-040SMI/WG			
Outdoo	or Model			KFXFC-009SMI/W	KFXFC-007SMI/W*2	KFXFC-009SMI/W*2	KFXFC-017SMI/W*2	KFXFC-020SMI/W*2			
Ambient t	emp. range	°C				-30∼ + 43 °C					
Power	r supply	1			220V~/50Hz						
Electric shoe	ck proof grade	1				Class I					
Protect	ion grade	1				IPX4					
Rated coolir	ng input power	kw		2.68	4.29	5.00	8.93	10.00			
Low temperature	heating input power	kw		2.50	3.83	4.38	8.70	9.58			
Max. work	king current	А		20	18×2	20×2	32×2	40×2			
Refrigerant type						R407c / R410a / R22					
Compressor	Туре					EVI Compressor					
Compressor	Quantity			1	1×2	1×2	1×2	1×2			
Fan motor	Quantity	pcs		1	1×2	1×2	2×2	2×2			
Heat exchanger	Heat source side	Туре	1			Finned heat exchanger					
near exchanger	Tieat source side	Air way	1			Sideward					
The outdoor unit dimension (W×D×H)		mm		1060×370×900	1060×370×900×2	1060×370×900×2	1030×370×1345	1030×370×1345			
N	dB(A)	58	58	58	62	62				
Net weight		kg		88	80	88	150	150			
Internal and external machine connection specifications		1		3/8, 5/8	3/8×2, 5/8×2	3/8×2, 5/8×2	3/8×2, 5/8×2	3/8×2, 5/8×2			
Indoor u	unit model	1		KFXFC-009SMI/G	KFXFC-0014SMI/G	KFXFC-018SMI/G	KFXFC-033SMI/G	KFXFC-040SMI/G			
Indoor un	it (W×D×H)	mm		400×367×786	550×367×786	550×367×786	645×492×979	645×492×979			
Rate	ed flow	m³/h		1.3	2	2.5	4.3	4.8			
The residual pressu	reof machine outside	kPa		180	170	200	230	230			
Net	weight	kg		40	50	60	70	75			
Rated cooling	g capacity/COP	kw/-		7.5/2.8	12.0/2.8	14.0/2.8	25.0/2.8	28.0/2.8			
ow-temperature he	ating (A-12W41)/COP	kw/-		6.0/2.4	9.2/2.4	10.5/2.4	20.0/2.3	23.0/2.4			
ormal temperature	heating (A7W45)/COP	kw/-		10.3/3.5	14.4/3.7	16.2/3.6	32.0/3.6	38.4/3.7			
	A7W35 ^a /COP	kw/-		10.6/4.3	14.5/4.5	16.5/4.3	33.0/4.3	39.2/4.5			
COP	A-7W45/COP	kw/-		7.2/2.7	9.4/2.6	11.3/2.7	23.5/2.6	28.4/2.6			
CO	A-15W45/COP	kw/-		5.5/2.2	8.0/2.2	9.6/2.2	19.5/2.2	22.0/2.2			
	A-20W45/COP	kw/-		4.8/1.9	6.5/1.9	7.9/2.0	16.5/2.0	20.0/1.9			

Residential EVI split heating heat pump







DC+EVI inverter heating & cooling heat pump

Description:

This series heat pump with advanced DC inverter and EVI technology, can save you 80% heating cost compare with the traditional heating device like gas/fuel boiler and electrical heater. It heats fast and works perfectly with the radiator and floor heater to provide you a comfortable living environment even in very cold winter. It is one of the best heating devices available today.



Ma



Features:

- Twin rotary compressor with inverter control - DC inverter technology control the heat pump output according to the household's energy requirements. Low waste of the power.
- R410a refrigerant, environmentally friendly and no CO2 emissions
- Intelligent controller and LCD display.
- Safely operation with multi-protections.

• Electronic Expansion Value allows the accurate refrigerant go through under different working conditions. So it ensures that the heat pump can work with high efficiency to provide enough cooling/heating capacity in any conditions.

- Hydrophilic coating air exchanger and SWEP plate heat exchanger all available.
- Auto defrosting function.
- Convenient for installation and maintenance.



Quick start and high ener

or or Radiant Floor Heating

Household Heating & Cooling Solutions



ndlv and 100% safely new generation





Optional:

• available.

• available.

· Galvanized metal cabinet or

stainless steel cabinet all

R410a, R22, R407c refrigerant is

Only heating function is optional.

MODEL BKFXFC-009SMI BKFXFC-014SMI BKFXFC-018SI Ambient temp. range °C -30~+43°C -30~+43°C Power supply / 220V 1N~50Hz -30~+43°C	
Ambient temp. range °C -30~+43°C Power supply / 220V 1N~50Hz	
Power supply / 220V 1N~50Hz	
Electric shock proof grade / Class I	
Protection grade / IPX4 IPX4 IPX4	
Rated cooling capacity A7W35 kw/- 7.5/2.81 11.5/2.82 14.5/2.82	
Rated heating capacity A-12W41 kw/- 5.3/2.31 9.1/2.35 11.0/2.35	
A7W45 kw/- 8.8/3.60 14.5/3.56 17.5/3.40	
A7W55 kw/- 8.1/2.74 14.2/2.92 16.8/2.70	
A2W35 kw/- 7.3/3.45 12.0/3.54 14.0/3.54	
A-15W45 kw/- 4.2/1.82 8.1/2.04 9.5/2.0	
Compressor Type Scroll Scroll Scroll	
ated refrigerating input power/current kw/A 2.6/12.2 4.1/18.6 5.16/23.5	
Rated heating input power/current. kw/A 2.30/11.1 3.87/17.6 4.68/21.2	
Max. working current kw/A 4.40/20 6.6/30 7.5/34	
x. working pressure of heat exchanger Mpa 4.2 4.2 4.2 4.2	
mperature range of refrigeration outlet °C 5~15 5~15 5~15	
Heat outlet temperature range °C 25~58 25~58 25~58	
Water yield L/h 1300 2000 2500	
Refrigerant type/Weight -/kg R410a / 3.3 R410a / 4.4 R410a / 4.4	
Noise dB/(A) ≤58 ≤59 ≤59	
Dimension (W×D×H) mm 1090×435×900 1120×440×1360 1120×440×136	1
Net weight kg 80 150 150	

1: A7W35: ambient temperature 35°C, inlet water temperature 12°C, outlet water temperature 7°C; 2: A7W45: environmental dry bulb temperature 7°C, wet bulb temperature 6°C, inlet water temperature 40°C, outlet water temperature 45°C; 3: A-12W41: environmental dry bulb temperature -12°C, wet bulb temperature -14°C, outlet water temperature 41°C; 4: A7W45: inlet air temperature 7°C, outlet air temperature 45°C. Due to product improvement, above datas are subject to change without prior notice, please take the nameplate as standard.





This heat pump dryer is used for drying different materials, it adopts heat pump working heat dissipation principle to form airflow to dry industry and agriculture materials, this type of heat pump with the features of intelligent, low cost, temperature controllable and so on.

Wide application, can be used in agricultural products, seafood, fruits and vegetables, fish, meat, nut, herb, wood drying systems.



Features:

- Energy saving & Environmental protection
- Running Stable, operating easily
- Exactly control temperature between 20-80°C.
- Safe and reliable operation, automatic intelligent control, 24-hour continuous.
- Low cost, No any waste and CO2 emission
- Easy installation.



Heat pump drying and dehumidification process diagram



Heat pump dryer								
Outdoor machine		KFXH-013SCII	KFXH-016SCII	KFXH-026SCII	KFXH-032SCII	KFXH-060SCII		
Ambient temp. range	°C			-7~43℃				
Rated heating capacity	kw	13	16	26	32	64		
Rated input power	kw	4.33	5.33	8.67	10.67	21.35		
Max. working current	А	12	14	25	30	60		
Power supply	/	380V 3N~50Hz						
Protection grade	1	IPX4						
Safety function	1	High and low pressure protection; Overload protection; Temperature protection; Power phase sequence protection.						
Refrigerant type	/			R407c / R410a / R22				
Compressor quantity	pcs	1	1	2	2	4		
Compressor type	/	Scroll						
Heat exchanger type	/	Finned heat exchanger						
Connecting pipe spec.	inch	3/8", 5/8"	3/8", 5/8"×2	3/8", 5/8"×2	3/8", 5/8"×2	3/8", 5/8"×4		
Air out type	1			Sideward				
Fan motor QTY	pcs	1	1	2	2	4		
Noise	dB/(A)	65	66	65 65 68				
Machine dimension (W×D×H)	mm	1080×1040×1100	1080×1040×1100	1720×1060×1100	1720×1060×1100	1570×1150×1705		
Packing dimension (W×D×H)	mm	1150×1100×1200	1150×1100×1200	1800×1110×1200	1800×1110×1200	1670×1250×1905		
Net weight	kg	130	140	230	300	600		
Gross weight	kg	140	150	250	330	650		
Indoor machine		KFXH-013SAII	KFXH-016SAII	KFXH-026SAII	KFXH-032SAII	KFXH-060SAII		
Power supply	/	220V 1N~50Hz						
Heat exchanger type	/	Finned heat exchanger						
Max. air outlet temp.	°C	75						
Circulating air volume	m³/h							
Machine dimension (W×D×H)	mm							
Packing dimension (W×D×H)	mm	Customizable according to customer needed						
Net weight	kg							
Gross weight	ka							

Remarks:

1. Test conditions: (DB/WB) 20°C/15°C, return air temperature 55°C, air outlet temperature 60°C. 2. Due to product improvement, above datas are subject to change without prior notice, please take the nameplate as standard.

Optional:

- Galvanized metal cabinet or stainless steel
- cabinet.R410a, R22, R407c refrigerant is available.

Dryer heat pump





AIROSD water to water geothermal heat pump, offer high-performance heating convenience in a compact design requiring very little floor space. Practically all different classes of ground water qualities can be regulated to achieve a heat output of up to 150KW. An innovative coil heat exchange made of corrosion-resistant stainless steel with sealed, welded seams ensures that the unit operates reliably



Features:

- International famous brand hermetic scroll compressors.
- Multi-purpose: with cooling, heating, central hot water three function.
- High efficiency up to 5.0, low maintenance cost.
- Quiet, no exposed equipment outdoors, No open flame, no Noise.
- Adopts advanced microcomputer control system and advance thorough security system to ensure the efficient operation all year round.

Optional:

- Galvanized metal cabinet or stainless steel cabinet all available
- R410a, R22, R407c refrigerant is available.







HolDEL Barbin terp ang Power supply0°SPXK-001/CIISPXK-002/CII<					Geotheri	mal water to wat	er heat pump				
Ambient temp, range C :-:::::::::::::::::::::::::::::::::::	MODEL		SFXKR-017CII	SFXKR-032CII	SFXK-040CII	SFXK-060CII	SFXK-080CII	SFXK-0150CII			
Power supp/ Electric block proof grade / 3807 3N-50Hz Electric block proof grade / Class I Class I Floor heating capacity/COP kw/ 174.8 324.8 404.8 604.6 804.8 1504.5 Relet beging capacity/COP kw/ 164.1 314.1 355.41 55.61 122.55 135.4 Domestic water heating capacity/COP kw/ 165.44 22.54.4 1 / / / / Domestic water heating capacity/COP kw/ 16.54.4 22.54.4 1 / / / / / //		Ambient temp. range °C			-30~+50°C						
Image: I		Power s	upply	1	380V 3N-50Hz						
Protection grade/ Fior heating capacity/COP kw/- 174.8 324.8 404.8 604.8 804.8 804.8 804.8 Rated heating capacity/COP kw/- 1156 22.55 34/5 51/5 65/5 12.55 Domesici water heating capacity/COP kw/- 1156 22.55 34/5 51/5 65/5 12.55 Domesici water heating capacity/COP kw/- 0.56/4 1/ 1/ 1/ 1/ Rated heating input power kw 3.3 6.7 8.3 12.5 16.7 31.3 Rated cooling input power kw 3.3 5.7 6.8 10.2 13.6 25 Domesici water heating apoer kw 3.8 6.5 / / // // // Rated cooling input power kw 3.8 2.28 2.0 13.6 2.5 60 10.0 Compresion working current / A 11.8 2.3 2.8 60 10.0 10.0 10.0 10.0 </td <td>Ele</td> <td>ectric shock</td> <td>proof grade</td> <td>1</td> <td colspan="7">Class I</td>	Ele	ectric shock	proof grade	1	Class I						
Floor heating capacity/COP kw/- 1174.8 324.8 404.8 604.8 604.8 604.8 1504.8 Rated cooling capacity/COP kw/- 155 28.55 345 51/5 65/5 125/5 Domestic water heating input prover kw/- 15/5 28.55 34/5 51/5 65/5 125/5 Domestic water heating input prover kw 3.5 6.7 8.8 12.5 16.7 31.3 Rated heating input prover kw 3.8 5.7 6.8 10.2 13.6 25 Domestic water heating input prover kw 3.8 6.5 // // // // // // // /// /// /// /// //// //// ///// ///// ///// ///// ///// ////// ///// ////// ////// ////// ////// ////// ////// ////// /////// /////// /////// /////// ///////// //////// ///////// /////		Protection	grade	1			IPX	K4			
Rated heating capacity/COP kw/- 1164,1 314,1 36,54,1 554,1 72,54,1 1354,1 Rated cooling capacity/COP kw/- 165,5 28,55 34/5 51/5 65/5 125/5 Domestic water heating capacity/COP kw/- 16,5/4,4 28,5/4,4 / / / / Floor heating input power kw 3,5 6,7 8,3 12,5 16,7 31,3 Rated cooling input power kw 3,8 6,5 / // // // 29 Domestic water heating power Kw 3,8 6,5 / // // // // Max.working current A 11,8 2,3 28 45 60 100 Max.working current Y // 12,2 2 2 4 4 Compressor Type // 140,0 20,00 32,00 400,010,100 160,5 110,0 20,0 110,0 20,0 20,0	Flo	or heating ca	apacity/COP	kw/-	17/4.8	32/4.8	40/4.8	60/4.8 80/4.8 150/4.8 55/4.1 72.5/4.1 135/4.1			
Rated cooling capacity/COP kw/- 15/5 28.5/5 34/5 51/5 66/5 125/5 Domestic water heating input power kw/ 16.5/4.4 28.5/4.4 / / / / / Ried final input power kw 3.5 6.7 8.3 12.5 16.7 3.1.3 Rated fielding input power kw 3.9 7.6 8.9 13.4 17.7 32.9 Domestic water heating power kw 3.9 7.6 8.9 13.4 17.7 32.9 Domestic water heating power kw 3.8 6.5 / // // // Max. working ournert A 11.8 2.3 2.8 4.5 6.0 100 Compresson Type / 2.2 2 4 100 Compresson Vater Vet Lh 1400 2.00 1400×750×60 1605×1100×1010 1605×1100×1010 2100×110×1010 2100×110×1010 2100×110×1010 2200×120×110×100	Rate	ed heating c	apacity/COP	kw/-	16/4.1	31/4.1	36.5/4.1	55/4.1	72.5/4.1	135/4.1	
$ \begin{array}{ c c c c } \hline $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $	Rated cooling capacity/COP		kw/-	15/5	28.5/5	34/5	51/5	65/5	125/5		
Floor heating input power kw 3.5 6.7 8.3 12.5 16.7 31.3 Rated heating input power kw 3.9 7.6 8.9 13.4 17.7 32.9 Rated coling input power kw 3.8 6.5 7 6.8 10.2 13.6 25 Domestic water heating power kw 3.8 6.5 7	Domesti	c water heat	ing capacity/COP	kw/-	16.5/4.4	28.5/4.4	1	1	1	1	
Rated heating input power kw 3.9 7.6 8.9 13.4 17.7 32.9 Rated cooling input power kw 3 5.7 6.8 10.2 13.6 25 Domestic water heating power kw 3.8 6.5 / // // // Max. working current A 11.8 2.3 2.8 4.5 6.0 100 Refige=rat // Compression Refige=rat // // Quantity Dos 1 2 2 2 2 4 Compression Vact yiel Lh 1400 2600 3200 4700 6300 11600 Dimension (W-D+H) mm 805×700×1020 1460×810×1020 1400×750×960 1400×750×960 1400×750×960 1600×1210×1150 1800×1210×1150 2260×1200×1200×120×10 Page // // // // // // // // // //	Flo	oor heating i	nput power	kw	3.5	6.7	8.3	12.5	16.7	31.3	
Rated cooling input power kw 3 5.7 6.8 10.2 13.6 25 Dom=sice water hearing power kw 3.8 6.5 / / / // // Max: working current A 11.8 23 28 45 60 100 Compressor // Second colspan="4">Second colspan= 400 Colspan= 400 Colspan="4">Second colspan= 400 C	Ra	ted heating i	nput power	kw	3.9	7.6	8.9	13.4	17.7	32.9	
$\begin{tabular}{ c c c c c c } \hline $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$	Ra	ted cooling i	nput power	kw	3	5.7	6.8	10.2	13.6	25	
$\begin{split} \hline \begin{tabular}{ c c } \hline \hline \begin{tabular}{ c c } \hline \begin{tabular}{ c c c } \hline \hline \begin{tabular}{ c c c } \hline \hline \begin{tabular}{ c c c c } \hline \hline \begin{tabular}{ c c } \hline \hline \begin{tabular}{ c c c c } \hline \hline \begin{tabular}{ c c c } \hline \hline \begin{tabular}{ c c c c } \hline \hline \begin{tabular}{ c c c c c c } \hline \hline \ \begin{tabular}{ c c c c } \hline \hline \begin{tabular}{ c c c c c } \hline \hline \begin{tabular}{ c c c c c c c c c } \hline \hline \begin{tabular}{ c c c c c } \hline \hline \begin{tabular}{ c c c c c c c c c c } \hline \hline \begin{tabular}{ c c c c c c } \hline \hline \begin{tabular}{ c c c c c c c c } \hline \hline tabular$	Dom	estic water h	neating power	kw	3.8	6.5	1	1	1	1	
$ \begin{tabular}{ c $		Max. working	g current	А	11.8	23	28	45	60	100	
Type / Scroll Compression Uantity pcs 1 2 2 2 2 4 U Uantity pcs 1 2600 3200 4700 6300 11600 Dimension (W×D×H) mm 745×650×960 1400×750×960 1605×1100×1010 1605×1100×1010 2100×120×1150 2260×1200×1200 Packing dimension (W×D×H) mm 805×700×1020 1460×810×1020 1800×1210×1150 1800×1210×1150 2260×1200×1200×1200×1200×1200×1200×120×1150 Packing size freperstative / C		Refrige	rant	1			R407c / F	R407c / R410a / R22			
$\begin{tabular}{ c c c c c c } \hline Q uantity $$pcs $$1$ $$2$ $$2$ $$2$ $$2$ $$2$ $$4$ $$4$$	Compressor		Туре /		Scroll						
$ \begin{array}{ c c c } \hline \label{eq:product} \end{tabular} tabu$	Compressor		Quantity	pcs	1	2	2	2	60 2 6300 0 1605×1100×1010 0 1800×1210×1150 hanger	4	
$ \begin{array}{ c c c c } \hline \line nsion (W+D+H) & mm & 745\times650\times960 & 1400\times750\times960 & 1400\times750\times960 & 1400\times750\times960 & 1605\times1100\times1010 & 1605\times1100\times1010 & 2100\times1020 & 2260\times1200\times1200 & 1200\times120\times1150 & 2260\times1200\times1200 & 1200\times1210\times1150 & 2260\times1200\times1200 & 1200\times1200\times120 & 1200\times120\times120\times120\times120\times120\times120\times120\times120\times120$		Watery	ield	L/h	1400	2600	3200	4700	6300	11600	
Packing dimension (W×D×H) mm 805×700×1020 1460×810×1020 1460×810×1020 1800×1210×1150 1800×1210×1150 1800×1210×1150 1200×1200×1200×1200 Key Leve Leve Leve Leve Leve Leve Leve Le	I	Dimension (W×D×H)	mm	745×650×960	1400×750×960	1400×750×960	1605×1100×1010 1605×1100×1010 2100×1100×10		2100×1100×1080	
Heat Heat Source sideType/Plate heat exchanger or Tube in shell heat exchangerHeat source sideMax/low outlet temperature $\columber \columber \co$	Pack	king dimensi	on (W×D×H)	mm	805×700×1020	1460×810×1020	1460×810×1020	1800×1210×1150	1800×1210×1150	2260×1200×1200	
Heat source sideMaxilow outlet imperature ∞ $+25 - 5$ (Antifreeze soluti-with 25% ethylene glycu- 			Туре	1		P	ate heat exchanger or Tu	be in shell heat exchange	-060CII SFXK-080CII SF //4.8 80/4.8 //4.1 72.5/4.1 1/5 66/5 / / / 2.5 16.7 3.4 17.7 0 0.2 13.6 / // 45 60 22 2 700 6300 100×1010 1605×1100×1010 2100 210×1150 1800×1210×1150 2260 reat exchanger 22 2 700 6.3 1800×1210×1150 2260 reat exchanger 23 6.3 1800×1210×1150 2260 1800×1210×1150 2260 1900×100×100×100×100×100×100×100×100×100		
Note source sideWater inlet sizeinchG1"A internal threadG1 1/2" internal threadDN40DN50DN80DN100Water flow volumem³/h1.42.63.24.76.311.6Water pressure loss(Max.)kPa 225 230 230 230 230 230 230 Use sideType/Plate heat exchanger or Tube in shell +at exchangerPlate heat exchangerPlate heat exchanger $88/5$ $58/$		Heat	Max/low outlet temperature	°C		+	25~-5 (Antifreeze solution	with 25% ethylene glyco			
$ \begin{array}{c c c c c c c } Note: Integration of the integral o$		source	Water inlet size	inch	G1"A internal thread	G1 1/2" internal thread	DN40	DN50	DN80	DN100	
Heat exchangerWater pressure loss(Max.)kPa ≤ 25 ≤ 30 ≤ 30 ≤ 30 ≤ 30 ≤ 30 ≤ 30 Heat exchangerType/Plate heat $= xchanger$ or Tube in shell $= texchanger$ Plate heat $exchanger$ or Tube in shell $= texchanger$ Plate heat $exchanger$ or Tube in shell $= texchanger$ Use sideMaximum/low outlet temperature $\[Colored]$ $\[Solored]$ $\[Solored]$ $\[Solored]$ $\[Solored]$ Nozzle sizeinchG1"A internal threadG1 1/2" internal threadDN40DN50DN80DN100Nozzle sizeinchG1"A internal threadG1 1/2" internal thread $\[Solored]$ $\[Solored]$ $\[Solored]$ $\[Solored]$ Nozzle sizeinchG1" internal threadG1 1/2" internal thread $\[Solored]$ $\[Solored]$ $\[Solored]$ $\[Solored]$ Nozzle sizeinchG1" internal threadG1 1/2" internal threadG1 1/2" internal thread $\[Solored]$ $\[Solored]$ $\[Solored]$ $\[Solored]$ Nozzle sizeinchG1" internal threadG1 1/2" internal thread $\[Solored]$ $\[Solored]$ $\[Solored]$ $\[Solored]$ $\[Solored]$ Nozzle sizeinchG1" internal threadG1 1/2" internal thread $\[Solored]$ $\[Solored]$ $\[Solored]$ $\[Solored]$ $\[Solored]$		side	Water flow volume	m³/h	1.4	2.6	3.2	4.7	SFXK-080CII 80/4.8 72.5/4.1 65/5 / 16.7 17.7 13.6 0 60 2 6300 1605×1100×1010 1800×1210×1150 1800×1210×1150 1800×1210×1150 1800×1210×1150 1800×1210×1150 1800×1210×1150 1800×1210×1150 1900 60 12.9 DN85 flange	11.6	
Heat exchanger Type / Plate heat exchanger or Tube in shell b=t exchanger Plate heat exchanger or Tube in shell b=t exchanger Use side Maximum/low outlet temperature $\[max]^{C}$ 58/5 58/5			Water pressure loss(Max.)	kPa	≤25	≤30	≤30	≤30	≤30	≤30	
exchanger Use side Maximum/low outlet temperature °C 58/5 58/5 58/5 58/5 58/5 58/5 Nozzle size inch G1"A internal thread G11/2" internal thread DN40 DN50 DN80 DN100 Nozzle size inch G1"A internal thread G11/2" internal thread DN40 DN50 DN80 DN100 Maximum/low outlet water side Type /	Heat		Туре	1	Plate heat exc	hanger or Tube in shell h	eat exchanger	Plate heat exc	changer or Tube in shell heat exchanger		
Nozzle size inch G1"A internal thread G1 1/2" internal thread DN40 DN50 DN80 DN100 Type / // // High-efficiency task heat exchanger High-efficiency task heat exchanger Image: task he	exchanger	Use side	Maximum/low outlet temperature	ĉ	58/5	58/5	58/5	58/5	58/5	58/5	
Type / High-efficiency tark heat exchanger Maximum/low outlet remperature °c 60 60 60 60 60 Rate flow Nozzle size m³/h 2.84 4.9 6.5 9.7 12.9 23.7 Nozzle size inch G11/2" internal thread G11/2" internal thread DN50 flange DN65 flange DN100 flange			Nozzle size	inch	G1"A internal thread	G1 1/2" internal thread	DN40	DN50	DN80	DN100	
Maximum/low outlet temperature *C 60 60 60 60 60 water side Rate flow m³/h 2.84 4.9 6.5 9.7 12.9 23.7 Nozzle size inch G1" internal thread G1 1/2" internal thread G1 1/2" internal thread DN50 flange DN65 flange DN100 flange			Туре	1	High-efficiency tank heat exchanger						
water side Rate flow m³/h 2.84 4.9 6.5 9.7 12.9 23.7 Nozzle size inch G1" internal thread G1 1/2" internal thread G1 1/2" internal thread DN50 flange DN65 flange DN100 flange		Domestic water side	Maximum/low outlet temperature	°C	60	60	60	60	60	60	
Nozzle size inch G1" internal thread G1 1/2" internal thread G1 1/2" internal thread DN50 flange DN65 flange DN100 flange			Rate flow	m³/h	2.84	4.9	6.5	9.7	12.9	23.7	
			Nozzle size	inch	G1" internal thread	G1 1/2" internal thread	G1 1/2" internal thread	DN50 flange	DN65 flange	DN100 flange	

1: Floor heating condition: Heat source side inlet temperature 0 °C and use side inlet water temperature 30 °C;

2: Rated heating condition: Heat source side inlet temperature 0 C and use side inlet water temperature 30 C;

3: Rated cooling condition: Heat source side inletwater temperature is 25 °C and outlet water temperature is 30 °C ,

use side inlet water temperature is 12°C and outlet water temperature is 7°C;

4. Due to product improvement, above datas are subject to change without prior notice, please take the nameplate as standard.

33 lew Era of High Speed Heat Pump

Geothermal water to water heat pump



This air heater adopts EVI compressor and full-DC inverter technology achieves stable heating operation at -30°C in ultra-low temperature, and stable heating at -20°C without attenuation. Suitable for residential ,office where needs powerfull heating.

Features:

- · Rapid heating, Instantly warming.
- Multi-speed adjustment, there is always a file for you.
- Long heating time, warm without interruption.
- Easy to install and save worry.
- Wind up and down, fully enjoyment.
- Warm heating enjoyment.

Optional:

• R410a, R22, R407c refrigerant is available.





Powerful heating in low temperature -30°C, better than air conditioning.

AIROSD low-temperature air heater 100 Customer demand Ordinary air-conditioner 80 60 The lower the temperature, the more heat needs. AIROSD 40 ultra-low temperature air heater heating capacity does not attenuate at -20°C, perfectly solve the user required; ordinary 20 air conditioning with low ambient temperature, heating significantly reduced.



Ultra-low temperature air heater								
	MODEL		BFFR-30LW	BFFR-40LW				
	Ambient temp. range	C°	-30~+46°C					
	Rated voltage /frequency		220V 1N~50Hz					
Heating capacity ^a	Rated heating capacity (-12℃)	w	3000	4000				
	High tem. heating (7℃)	w	3000	4000				
	Low tem. heating (-20°C)	W	3000	4000				
	Rated heating capacity (-12℃)	w	1300	1740				
Input power	High tem. input power	W	830	1110				
	Low tem. input power	W	1500	2000				
Input current	Rated input current	А	5.97	7.99				
	High tem. input current	А	3.81	5.10				
	Low tem. input current	A	6.89	9.18				
COP	-12°C	1	2.3	2.3				
	7°C	1	3.6	3.6				
	-20°C	1	2	2				
	Maximum input current	A	11.4	15				
	Maximum input power	W	2500	3300				
	Compressor form	1	DC inverter compressor					
	Number of compressor	pcs	1	1				
	Refrigerant	1	R410A/1.2kg	R410A/1.4kg				
Noise	Indoor unit	dB (A)	42	42				
	Outdoor unit	dB (A)	53	53				
Dimension	Indoor unit (W×D×H)	mm	700×640×215					
	Outdoor unit (W×D×H)	mm	840×280×610	840×310×730				
Net weight	Indoor unit	kg	15	15				
	Outdoor unit	kg	40	43				
	Indoor air volume	m³/h	650	680				
	Protection class	1	I class					
Indoor and outdo	oor machine connection tube specifications	φ6.35,	φ9.52					

a: Heating test conditions, DB20 C, WB15 C. If there is any change, please use the nameplate parameter as the standard.

Airosd ultra-low temperature air heater





Suitable for central hot water such as real estate projects, large scale commercial establishments.

Suitable for large place heating in winter and cooling in summer



Ultra-low temperature central hot water installation diagram



Ultra-low temperature heating & central AC installation diagram

Radiator or Radiant Floor Heating

Radiator: Quick start and high energy-efficient

Radiant Floor Heating: The warm wind blows

out from the bottom and the temperature is



Buffer Tank

of the air heat pump

uniform

Buffer tank ensures stable operation of the system, avoid frequent starting and stopping

Ultra-low temperature heating & central AC solution

Ultra-Low Temperature Heating + Cooling Heat Pump

Stable operation at -30°C ambient temperature, enhanced vapor injection technology. One for two purposes, which can heating powerful in winter and cooling in summer

Fan Coil

Two modes operation of heating in winter and cooling in summer, whole house central air conditioning by towing multiple fan coils

Radiant Floor Heating

Radiant floor heating is the most comfortable way of heating today. It has the characteristics of uniform temperature, healthy and comfortable, high efficiency and energy saving, beautiful and clean, safe and reliable

Heating Heat Pump





Greenhouse heating project cases







Villa heating project cases







School heating project cases



Hospital heating project cases



Staff dormitory heating project cases













AIROSD project cases sharing





Neighbourhood central heating project cases













ban























Drying project cases





AIROSD project cases sharing

Children activity center heating project cases











Residential heating project cases



















Bath central heating project cases















School hot water project cases









AIROSD project cases sharing







Staff dormitory hot water project cases









Disaster relief central hot water project cases







Hotel hot water project cases







Swimming pool hot water project cases







Holiday village hot water project cases









Nursing home hot water project cases





45 New Era of High Speed Heat Pump

AIROSD project cases sharing



