

# All-in-one Air Source Heat Pump Water Heater 160L & 200L

## Description:

In an all-in-one heat pump water heater, the heated refrigerant is usually conveyed through a heat exchanger that's wrapped around the outside of the tank, under the insulation. The refrigerant heats the tank by conduction, transferring heat from the condenser coil through the tank shell, to the water inside.

Heat pump is a device in which the refrigerant R134a is continuously changing the shape from gas to liquid. It pumps out the solar energy from the air in the room and together with electrical energy consumed by compressor it gives out the total heating capacity which is accumulated in the water storage tank. Evaporator is an air-refrigerant heat exchanger. In the evaporator the refrigerant is vaporized at low pressure and relative low temperature. Because of vaporization the heat transfer from air to refrigerant starts. Vaporized refrigerant comes in the compressor where the pressure goes higher and also the temperature. From compressor the vaporized and high temperature steam goes in the condenser (refrigerant-water) where again the heat is transferred from refrigerant to water. The refrigerant is now in liquid shape under high pressure. After it flows through the expansion valve it reaches the basic shape and the process goes around again. The circuit is in process until the water temperature in the water storage tank reaches the set point.

## Technical Parameters and Pricing:

Model	KRS38A-160V	KRS38C-160V	KRS38A-200V	KRS38C-200V
Capacity	160L		200L	
Inner tank material	Enameled Steel (Steel BTC340R, 2.5mm)		Enameled Steel (Steel BTC340R, 2.5mm)	
Outer casing	Painted galvanized steel		Painted galvanized steel	
Insulation	Polyurethane foam, 45mm		Polyurethane foam, 45mm	
Rated working pressure	0.8MPa		0.8MPa	
Waterproof grade	IPX4		IPX4	
Condenser	Micro-Channel Heat Exchanger		Micro-Channel Heat Exchanger	
Voltage	~220-240V / 50Hz		~220-240V / 50Hz	
Heat capacity	1780W	1600W	1780W	1600W
Rated Power	420W	415W	420W	415W
COP	4.25	3.85	4.25	3.85
Refrigerant	R134a	R22	R134a	R22
Energy efficiency Grade	Grade A	Grade C	Grade A	Grade C
Inlet / Outlet size	3/4"		3/4"	
Electric heater	2500W		2500W	
Control Method	Touch screen	Remote display	Touch screen	Remote display
Noise	40dB(A)		40dB(A)	
Dimensions	Ø525×1735		Ø525×1955	

**Product Photos(KRS38A):**



**Product Photos(KRS38C):**



## Details:



### High efficient Micro-Channel Heat Exchanger

Larger heat exchange area, Better heat transfer effect and More durable performance.

The energy efficiency grade of the system can reach 4.2 even above.

Not touch with water in the water tank, so the heat exchanger has no risk of corrosion, scaling, leakage, etc.

### Enamel Water Tank Brings You Healthier Water Quality

High pressure and fatigue resistance which pass 280,000 times pulse test.

High corrosion resistance because enamel coating makes the welding line of steel plate separate with water, so with long working life



### ◆ High Efficient Compressor

Being internationally-renowned brand dedicated compressor for heat pump, it is more reliable in system matching and quieter in operation.

### ◆ Intelligent Defrosting

With intelligent defrosting design, it can revolutionarily solve the bottlenecks of heat exchangers in cold winter such as frosting and slow heating, etc., allowing you to spend a more comfortable winter.

### ◆ 1:1 Gold Ratio

The unit and water tank are matched with a gold ratio to eliminate the phenomenon of disharmony, so that it is more energy-saving and professional.

### **Library Level 40dB Silence**

Centrifugal fan, smooth air intake

Double plate air guiding, optimizing air duct

Double layer soundproofing, reducing radiation

Double piece evaporator makes it more optimized



Smart and Convenient Touch Control

Intelligent light display

### **Intelligent Control Electric Expansion Valve**

The electric expansion valve can control the refrigerant volume more accurately to ensure the unit stay in the best state.

