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R290 Refrigerant EVI Full DC Inverter

Air to Water Heat Pump

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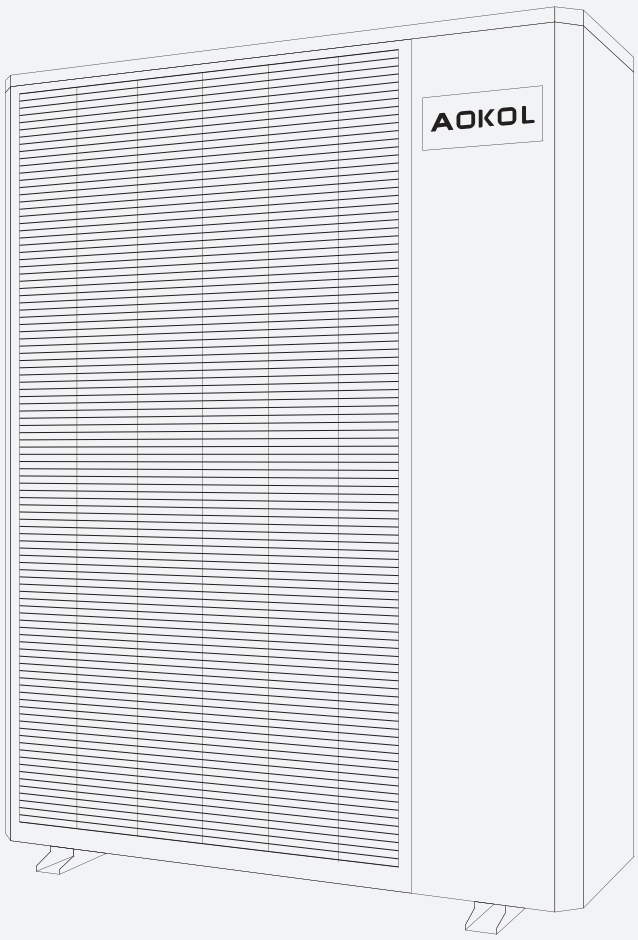

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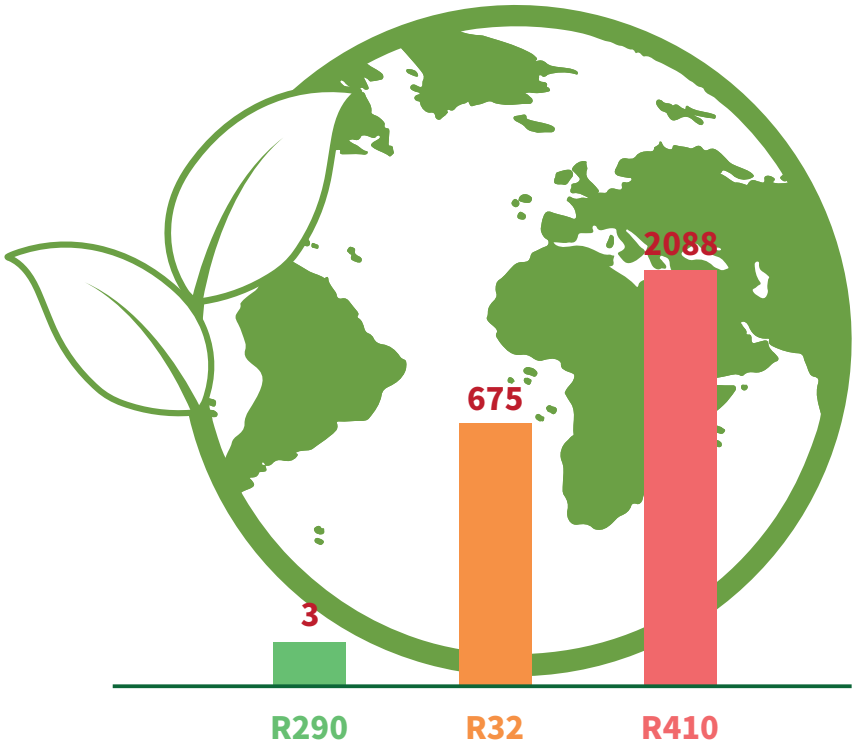
R290 Refrigerant Heat Pump Has Lower GWP More Environmentally Friendly

With the acceleration of global warming and the destruction of the ozone layer, countries have strengthened restrictions on the use of high global warming potential (GWP) refrigerants. R290 refrigerant is widely praised internationally for its low global warming potential (GWP), environmental friendliness, and stronger sustainability. R290 refrigerant has changed the future development trend of heat pumps, as its global warming potential (GWP) is much smaller than the current R410A and R32 refrigerants, and it will dominate the market in the future.

R290 VS R32



◆R290 Global Warming Potential 3

◆R32 Global Warming Potential 675

RM Series R290 Refrigerant Heat Pump

◆ RM Series Monobloc Type air to Water Heat Pump is an integrated complete module such as compressor, plate heat exchanger, refrigerant system and water pump included in the outdoor unit. The connection between the outdoor unit and the indoor unit is only suitable for water pipes. There are no refrigerant pipes entering the room. It is safe, environmentally friendly and pollution-free.

◆ RM Series Monobloc Type air-to-water heat pump design has lower noise levels than tradition al Monobloc Type, complying with the low noise level of EU regional noise regulations, while retaining -high performance advantages.In addition, compared with the traditional heat pimp, the energy efficiency of the RM Series is significantly improved, so it is recognized as an efficient series of products.

RM Series Heat Pump Functions

11 national languages are available, and more languages can be customized, current languages: English / German / Polish / Dutch / Bulgarian / Danish / Norwegian /Swedish / Finnish / Turkish / Chinese.

◆ Module cascade, up to 8 machines can be connected.

◆Smart grid SG Ready.

◆ Automatic intelligent defrosting and antifreeze function.

◆ Smart WIFI, handheld APP.

◆ 24-hour timing function and Fixed periodic setting within a week.

◆ Remote control which is convenient for customers to solve after-sales problems.

◆ RM Series heat pump complying with the low noise level of EU regional noise regulations.

◆ Full DC frequency conversion technology, with energy efficiency reaching A+++level

DC INVERTER COMPRESSOR

DC inverter EVI compressor, R290 Refrigerant, based on the high reliability of maintaining DC frequency conversion, the maximum heating water temperature reaches 75 ° C.

DC Inverter Water Pump

DC Inverter high-efficiency shielded circulating water pump, low power consumption, 20% lower energy consumption,30% lower noise than ordinary water pumps,quiet and energy saving, ensuring long - term Reliable operation of the unit.

High-efficiency exhaust valve

A high-efficiency exhaust valve is able to collect and release a large amount of air that may be present in a heating, cooling water system (when the water flows through the valve for the first time), releasing the eventual sharp increase in pressure.

Four Way Reversing Valve

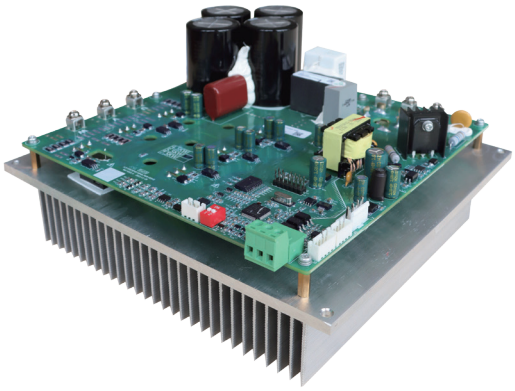
High-quality four-way reversing valve, sensitive to hot and cold switching, flow control, fully enclosed and waterproof, safe and reliable, and stable in performance

Plate Heat Exchanger

316 Texture of Material Stainless Steel Brazed Plate Heat Exchanger,Small size, Simple Disassembly, Convenient After Sales Operating,Heating& Cooling High HeatExchange Efficiency, Excellent Performance, and More Efficient.

DC Fan Motor

The performance of the DC inverter fan motor is 10% higher than ordinary motors and the size is reduced by 35%. This device can adjust the speed in real time and steplessly according to the system operating status to reduce energy consumption. The large-diameter low-noise fan has low rotation speed and low vibration, which effectively reduces the operating noise level and ensures that the system is always in silent operation.

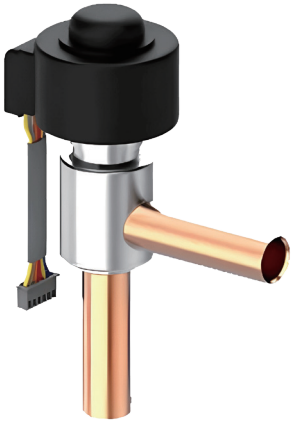


DC Full Inverter Driver Module

The intelligent DC inverter chip achieves automatic adjustment of compressor high-frequency and low-frequency operating, secure and stable, intelligent control, and comprehensively improves system stability and energy efficiency

Electric Expansion Valve

Dual electronic expansion valve throttling control method, It automatically adjusts the refrigerant flow rate according to the ambient temperature, system pressure, and inlet and outlet water temperature, with precise throttling, small size, and high reliability, keeping the product in optimal condition and achieving energy saving



Pressure Sensor

Ceramic core pressure sensor manufactured with special process, corrosion-resistant, 24-bit measurement, realizes accurate sensing of system pressure between the operating temperature range of -60°C to 150°C, and transmits the signal to the main control board, effectively ensuring the system stability to protect the long-term efficient operation of the unit.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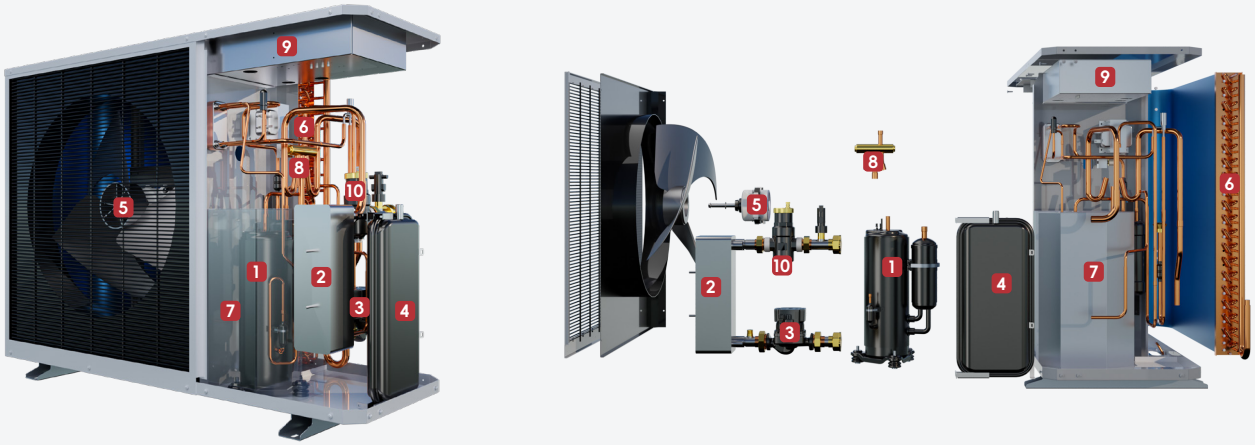
RM Series Monoblock Heat Pump
High degree of integration Easy to install

AOKOL RM series heat pump has a maximum water supply temperature of up to 75 ° C, without the need to change the old radiator system. It is your best solution for heating, hot water, and air conditioning cooling.



1 Compressor

2 Plate heat exchanger

3 Inverter circulating pump

4 Expansion tank

5 Fan motor

6 Evaporator

7 Soundproof cabin

8 Four-way valve

9 Electric control box

10 Exhaust valve

Collaborative Brand of Components

Panasonic GRUNDFOS Danfoss SAGInoMIYA CALEFFI Hydronic Solutions Sensata Technologies

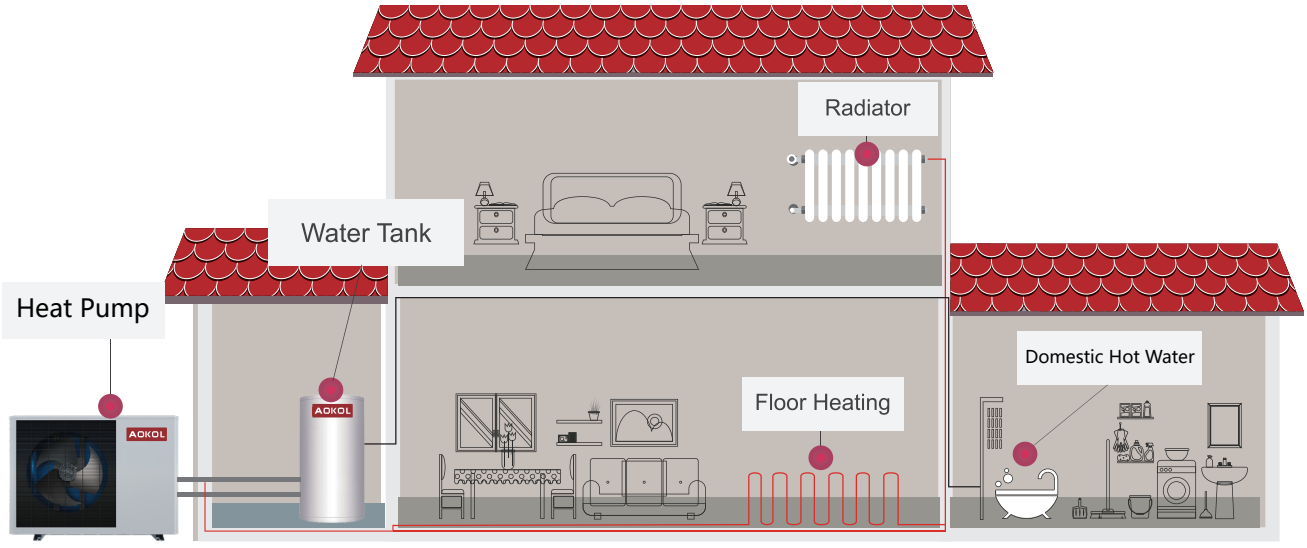
35°C
A+++

55°C
A++

75°C
Hot Water

RM Series Heat Pump Features

◆ Monoblock Design,Simple Installation , Flexible and Convenient.
◆ Fashionable Design, Compact Structure, Multiple Soundproofing Protection and Runnin-gin Lower Noise.
◆ Meet Cold Regions Heating in Winter, Coolingin Summer, and Whole Years' Domestic Hot Water Demand.



Note: Reference only

RM Series Monobloc
Air to Water Heat Pump

Model			ASH-08CHW-RM	ASH-15CHW-RM	ASH-15CHW-RMS	ASH-18CHW-RMS	ASH-22CHW-RMS
Power Supply		V/Ph/Hz	220~240/1/50	220~240/1/50	380~415/3/50	380~415/3/50	380~415/3/50
ErP Level		at35℃	A+++	A+++	A+++	A+++	A+++
ErP Level		at55℃	A++	A++	A++	A++	A++
Nominal Heating Capacity(A7℃/W35℃)		kW	8	15	15	18	22
Heating A7/6℃ W30/35℃	Heating Capacity Range	kw	3.10~8.67	5.32~15.4	5.38~15.6	6.45~19.1	8.10~22.1
	Heating Power Input Range	kw	0.59~2.03	1.02~3.65	1.03~3.66	1.24~4.52	1.56~5.12
	COP Range	w/w	4.28~5.45	4.21~5.28	4.26~5.32	4.22~5.30	4.32~5.22
Heating A7/6℃ W47/55℃	Heating Capacity Range	kw	3.05~7.90	4.81~13.60	4.85~13.76	6.15~18.7	7.78~22.2
	Heating Power Input Range	kw	0.96~2.82	1.60~4.77	1.62~4.78	2.06~6.68	2.47~7.79
	COP Range	w/w	2.80~3.24	2.85~3.07	2.88~3.12	2.80~3.05	2.85~3.36
Hot Water A20/15℃ W15/55℃	Heating Capacity Range	kw	4.45~12.20	7.64~21.67	7.73~21.95	9.22~26.52	11.60~30.45
	Heating Power Input Range	kw	0.86~2.80	1.53~5.05	1.55~5.10	1.81~6.15	2.27~7.03
	COP Range	w/w	4.36~5.28	4.29~5.18	4.30~5.20	4.31~5.22	4.33~5.21
Cooling A35/24℃ W23/18℃	Cooling Capacity Range	kw	3.35~9.38	5.78~15.23	5.81~15.45	7.32~18.62	10.48~22.60
	Cooling Power Input Range	kw	0.76~3.33	1.40~5.54	1.39~5.56	1.97~6.65	2.74~8.01
	EER Range	w/w	2.82~3.31	2.75~3.19	2.78~3.21	2.80~3.25	2.82~3.31
Cooling A3524℃ W12/7℃	Cooling Capacity Range	kw	2.64~6.88	4.55~11.2	4.67~11.8	5.76~13.7	8.25~19.0
	Cooling Power Input Range	kw	0.88~2.60	1.52~4.29	1.56~4.49	1.94~5.23	2.75~7.14
	EER Range	w/w	2.65~3.09	2.61~3.02	2.63~3.07	2.62~3.05	2.66~3.08
Max. Input Power		kW	3.4	6	6.2	7.4	8.5
Max.Input Current		A	15.5	27.3	10.4	12.4	14.3
Compressor		Type	Panasonic DC+EVI				
Fan Motor		Type	DC				
Water Pump		Type	GRUNDFOS DC				
Max Water Pump Flow / Lift		m^3/m	4/8.9	6 / 10.5	6 / 10.5	6 / 10.5	8 / 12.5
Max. Outlte Water Temp		℃	75℃	75℃	75℃	75℃	75℃
Ambient temp Range		℃	-30℃~50℃	-30℃~50℃	-30℃~50℃	-30℃~50℃	-30℃~50℃
Refrigerant Type / Input		kg	R290 /0.8kg	R290 /1.3kg	R290 /1.3kg	R290 /1.8kg	R290 /2.0kg
CO2 Equivalent		Tonnes	0.0024/Tonnes	0.0039/Tonnes	0.0039/Tonnes	0.0054/Tonnes	0.0060/Tonnes
Sound Pressure (1m)		dB(A)	45	46	46	47	48
Sound power Level		dB(A)	52	53	53	54	55
Electricity Shock Proof		Class	I	I	I	I	I
Water Proof		Class	IPX4	IPX4	IPX4	IPX4	IPX4
Net Weight/Gross Weight		kg	89/95	126/145	126/145	165/193	178/205
Net Dimension(L*D*H)		mm	1185*435*848	1255*435*1394	1255*435*1394	1255*435*1394	1255*435*1480
Packing Dimension(L*D*H)		mm	1280*530*1015	1355*500*1555	1355*500*1555	1355*500*1555	1355*500*1620

Notice:

★According to EN14511, EN14825, EN12102 standard, the data was tested in GSG approved AOKOL low temperature air to water heat pump laboratory.

★Since the continuous improvement and control in the production process, The above data is for reference only.