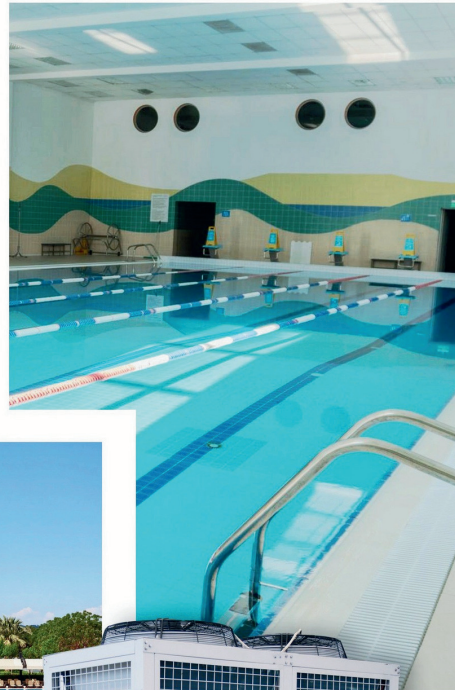


SWIMMING POOL HEAT PUMP



ABOUT MAMMOTH

Since 1935, Mammoth has been producing and installing air conditioning units with the most innovative technologies. Our solutions are found in some of the world's most important buildings for its unparalleled flexibility and efficiency. When performance and energy efficiency are important factors to a project, our products are often chosen as the final solution.



Established in Minneapolis, USA – 1935



Since 1988, Mammoth has been providing energy saving products to projects in China. In 2002, Mammoth invested US\$10 million to establish its manufacturing facility in Anji, China's #1 Ecological County, and its national sales headquarter in Shanghai to provide custom engineered air conditioning systems for projects in China and abroad.

Energy Saving & Innovation



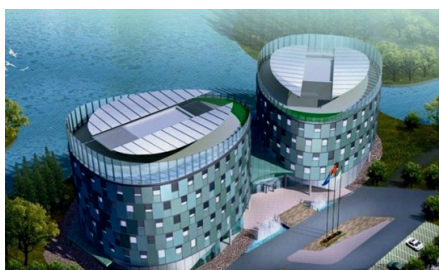
Mammoth produces air conditioning equipment that leverages energy saving and innovative technologies. Our products include, but not limited to, geothermal & water source heat pumps, air & water cooled commercial air conditioning units, fan coils, AHU, VAV box, screw chillers, and energy recovery units.

Customization & Energy Saving is Our Standard



Mammoth has been recognized as a leader in providing custom designed Total Energy Solution HVAC Systems. Our solutions can fit any design applications from WSHP systems to geothermal systems, from hybrid systems to various energy saving systems. Based on the needs of our customers, our recommendations help our customers assess the economic benefits of Mammoth solutions over alternative systems.

Outstanding Achievement



Mammoth has also brought its innovative design concepts to the industry. We have printed numerous technical design manuals and books to facilitate engineers in the design of Renewable Energy HVAC Systems. Together with industry associations and the commercial section of the US Embassy and Consulate General Offices, we have frequently conducted technical seminars in major cities in China and abroad. We have supplied our solutions to projects that amount to almost 10 million sq. m., and have been continuously recognized as the leader in Renewable Energy products in China.

POOL HEAT PUMP WATER HEATER

PRODUCT FEATURES

- + Swimming pool water heating.
- + Efficient Scroll Or Rotor Compressor
- + Eco Friendly Refrigerant : R410a
- + Electronic expansion valve regulates the flow of refrigerant precisely.
- + Air exchanger (Fins-coil) with hydrophilic coating.
Heat exchanger with titanium tubes enclosed within a high-strength plastic shell offers corrosion resistance and the convenience of easy disassembly
- + The housing is constructed from galvanized plates and further protected with a powder coating for added durability and resistance to environmental factors.
- + Wire controller with an LCD display.
- + The modular control design allows for flexible unit installation, enabling units to be combined freely. With this setup, a single controller has the capability to manage up to 16 units simultaneously.

A variable energy design, the number of active compressors automatically adjusts in response to changes in water temperature. For example of 16pcs KFRS-40J2Y, the variable energy is 32/32,31/32,30/32.....,1/32.

- + The soft start design initiates the compressors in a sequential manner, with priority given to the one that has been at rest for a longer duration. This approach minimizes sudden power surges and promotes smoother operation.
- + The flexibility to set the operating time according to your preferences or requirements.

Unit runs or stop automatically according to tank water temperature.

- + Automatic defrosting.
- + Automatic prevent freezing in the winter.
- + Water flow protection control.
- + With control of auxiliary heating device (e.g. electric heating).
- + More protection functions.
- + Fault diagnosis and display.



SPECIFICATION



Model		KLRS-20E2Y	KLRS-40E2Y	KLRS-50E2Y	KLRS-80E2Y	KLRS-100E2Y
HP		5	10	12	20	25
Rated Cooling Capacity	kW	12	25	30	50	65
Cooling Power Input	kW	4.4	8.5	10.5	17.5	22.5
Rated Heating Capacity	kW	20	40	50	80	100
Heating Power Input	kW	3.8	7.5	9.6	15	19.5
Circulating Water	m ³ /h	5.8	11.4	14.2	22.9	28.5
Pressure Drop	kPa	≤40				
Hot water temperature range	°C	25~43				
Power Supply		380-415V/3PH/50Hz				
Compressor Type		Rotary			Scroll	
Compressor Qty		1	2	2	2	2
Refrigerant		R410a				
Noise	db	58	64	64	66	66
Net Weight	kg	126	300	350	700	760
Unit Dimensions (L×W×H)	mm	755×755×680	950X 1110 X 1670		2025×1030×1990	
Packing Size (L×W×H)		855×855×720	1055×1210×1850		2130×1075×2080	
Pipe Connection Size	mm	DN40	DN50		DN65	
Picture of appearance		Picture 3	Picture4	Picture4	Picture5	Picture5
Ambient air range	°C	-5 ~43				
Water side Heat Exchanger		Co-axial (Ti)	Shell & tube (Ti)	Shell & tube (Ti)	Shell & tube (Ti)	Shell & tube (Ti)
Flow switch		built in				
Air Discharge		Top Discharge				

CONFIGURATION & FUNCTION

Model		KFRS-20E2Y	KFRS-40E2Y KFRS-50E2Y	KFRS-80E2Y KFRS-100E2Y
Configuration				
• Compressor				
– Type		Rotor	Rotor	Scroll
– Quantity		1	2	2
• Evaporator				
Hydrophilic aluminium fins + Internal thread copper pipe				
• Condenser				
Titanium Tube in tube heat exchanger				
• Throttle Type				
Electronic expansion valve				
• Fan Motor				
Two speed to improve unit operation				
• Pressure Gauge				
	pcs	✓	✓	✓
Housing				
• Material				
Galanized steel Powder Coating				
• Color				
White				
Control				
• Control Type				
Wire remote				
• Controller Display				
LCD				
• Operation				
Button				
• Max Modular Control Units				
	pcs		16	16
• Variable Energy Design				
		✓	✓	✓
• Soft Start Design				
		✓	✓	✓
• Keep Memory When Power Off				
		✓	✓	✓
• Auto restart after power restore				
		✓	✓	✓
• Running Parameters Inspect				
		✓	✓	✓
• Control Parameters to Modify				
		✓	✓	✓
• Clock On Controller				
		✓	✓	✓
• Timer Function				
Two Period Timer Setting				
• Auto Defrost				
		✓	✓	✓
• Auto Control the Standby Electric Heater				
		✓	✓	✓
• Fault Diagnosis and display				
		✓	✓	✓
Protection Function				
• High Pressure Protection				
		✓	✓	✓
• Low Pressure Protection				
		✓	✓	✓
• Discharge temp overheating protection				
		✓	✓	✓
• Water Outlet overheating protection				
		✓	✓	✓
• Water flow protection				
		✓	✓	✓
• High current protection				
		✓	✓	✓
• Power phase sequence protection				
		✓	✓	✓
• Automatic prevent freezing in winter				
		✓	✓	✓
Accessory				
• Wire controller				
		✓	✓	✓
• Connecting line of controller				
	m	5	5	5
• Screws for controller mounting				
		✓	✓	✓
• Water flow switch				
		✓	✓	✓
• Line for modular communication				
		✓	✓	✓
Packing				
• Packing Type (normal)				
		Carton+plywood pallet		Plastic+film+plywood
• Quantity				
– 20ft Container	pcs	27	10	5
– 40ft Container	pcs	57	23	11



Mammoth[®]

The Leader In Custom HVAC & Energy Saving