www.audsun.com

Audsun

Heat Pump Expert

Guangdong Audsun Electric Technology Co.,Ltd

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Guangdong Audsun Electrical Technology Co., Ltd. is a professional manufacturer specialized in heat pump water heaters and heat pump dryers & dehumidifers.

Covers an area of more than 20000 square meters, Audsun factory is able to assess the customer's requirements and to design, manufacture and install the system to ensure customer satisfaction ;Our product range covers from stainless steel water tanks, copper evaporators, heat pump casings to various series of full set heat pump units.The company introduced the high end and famous brand "AMADA" equipment from Japan . All of the heat pump product are produced strictly according to quality management system ISO 9001 , Environmental Management ISO14001 and Occupational Health & SafetyOHSAS 18001 .The Audsun Enthalpy Difference Test Lab is used to measure the performance of various kinds of heat pumps by simulating various temperature and humidity conditions.

Audsun is one of the seldom approved factory who owns the "National industrial production permit" and "Import & Export licence " .Playing as a marketing leader ,the Audsun product were widely used and got very good reputation in domestic market and abroad over the pass ten years.

Audsun aims to continue marketing the best engineered product for domestic and overseas market and will continue to introduce new product in order to keep abreast with market trend.

Audsun We have more than 18 years water heater manufacturing experience



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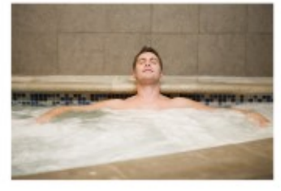
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Product Certificate

&

Factory Accreditation



Global Manufacturer Certificate



UN Global Market Place



ISO9001



OHSAS18001



ISO14001



EMC Certificate



LVD certificate



Domestic Heat Pump CB



Domestic Heat Pump GS



Domestic Heat Pump CE



Swimming Pool Heat Pump GS



Swimming Pool Heat Pump CE



Solar Keymark



Commercial Heat Pump CE LVD



Commercial Heat Pump CE EMC





National Industrial Production Permit



CCPIT Member

Audsun Heat Pump Casing Workshop








AMADA AE-NT Series turret punch press was engineered as part of an ongoing commitment to provide manufacturers with the widest range of high-performance punching solutions. The AE-NT Series ensure that parts are produced faster, easier and more economically.

Audsun Evaporator Workshop - Anti Corrosion Ultra Gold fin

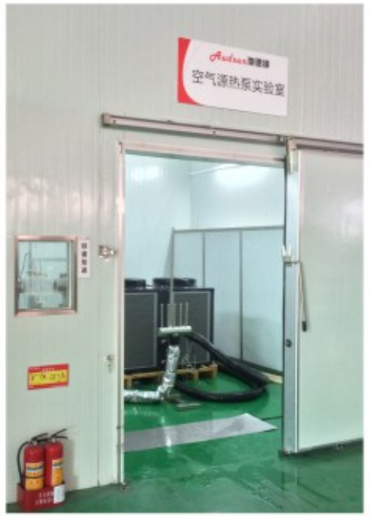





The ultra gold hydrophilic fins are coated with an expoxy resign layer.This treatment enhances the durability of the System and ensures peak performance lifespan.

Audsun The Audsun Enthalpy Difference Test Lab



The Audsun Enthalpy Difference Test Lab is used to meansure the performance of various kinds of heat pumps by simulating various temperature and humidity conditions.

Domestic heat pump

Ideal for multi-storey apartment buildings.





1.Optional function weekly anti-bacterial cycle which prevents the spread of Legionnaires Disease, a serious and sometimes fatal form of pneumonia.

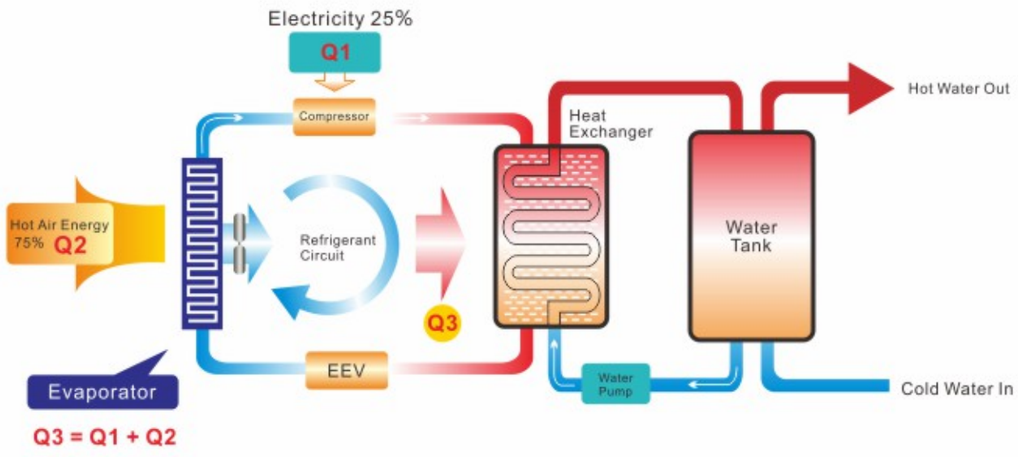
2.Proven high quality external Stainless Steel SUS304 /powder coated paint finish to ensure case is protected against weathering.

3.Intelligent controller complete with four section timer ON/OFF automatically.

4.Retrofit electric heating system &use existing geyser for storage avaliable.

5.Built-in water pump design ready to install with simple plumbing and electrical connections.

6.A unique "cross-over" switch ensures the client has hot water at all times should anything go wrong with the heat pump. (Optional function)



50Hz

Model Number		KF70-X	KF100-X	KF140-X	KF200-X
Outdoor Unit Air Outlet		Side Discharge Air Outlet			
Rated Heat Production Capacity	KW	3.25	4.64	6.5	9.28
	BTU/h	11100	15800	22100	31600
Rated Outlet Water Temp	℃	55			
Max. Outlet Water Temp	℃	60			
Rated Water Heating Capacity	L/h	70	100	140	200
Rated Input	KW	0.86	1.22	1.71	2.45
Rated Working Current	A	3.88	5.55	7.77	11
COP	W/W	3.8	3.8	3.8	3.8
Power Supply	V/PH/HZ	220~240V/1PH/50HZ			
Refrigerant		R410A			
Compressor Brand		Panasonic rotary			
Compressor QTY	Unit	1			
Fan QTY	Unit	1			
Noise	dB(a)	55			
Water Inlet/Outlet Diameter	Inch	G¾"			
Circulation Pump		Built-In Circulation Pump			
Water-Refrigerant Heat Exchanger		Copper Pipe in Steel case Heat Exchanger			
Outline Dimension	L×W×H(mm)	750×300×510	930×360×560		1000×370×630
Packing Dimension	L×W×H(mm)	835×330×520	1045×375×570		1115×375×640
Net Weight	KG	38	50	55	70
Gross Weight	KG	40	53	58	74

60Hz

Model Number		KF70-X	KF100-X	KF140-X	KF200-X
Outdoor Unit Air Outlet		Side Discharge Air Outlet			
Rated Heat Production Capacity	KW	3.5	4.7	7.2	10.3
	BTU/h	11942	16036	24566	35144
Rated Outlet Water Temp	℃	55			
Max. Outlet Water Temp	℃	60			
Rated Water Heating Capacity	L/h	75	100	155	220
Rated Input	KW	0.92	1.24	1.89	2.71
Rated Working Current	A	4.27	5.74	8.79	12.57
COP	W/W	3.8	3.8	3.8	3.8
Power Supply	V/PH/HZ	220~240V/1PH/60HZ			
Refrigerant		R417A			
Compressor Brand		Panasonic rotary			
Compressor QTY	Unit	1			
Fan QTY	Unit	1			
Noise	dB(a)	55			
Water Inlet/Outlet Diameter	Inch	G¾"			
Circulation Pump		Built-In Circulation Pump			
Water-Refrigerant Heat Exchanger		Copper Pipe in Steel case Heat Exchanger			
Outline Dimension	L×W×H(mm)	750×300×510	930×360×560		1000×370×630
Packing Dimension	L×W×H(mm)	835×330×520	1045×375×570		1115×375×640
Net Weight	KG	38	50	55	70
Gross Weight	KG	40	53	58	74

1.Testing Condition:
** Dry-bulb temperature 20℃
** Wet-bulb temperature 15℃
** Water temp.rises 40℃ degree (from 15℃ to 55℃)
2.Technical specification is subject to change without notice,final information please refer to the nameplate on machine.

Commercial heat pump





High performance/Long life brand named Copeland / Panasonic compressors.



Latest technology with easy to use LCD display controller.



Super large surface ultra gold fin coil evaporator optimised for high heat transfer.



Can be retro-fitted to existing boiler geysers and can be used in conjunction with solar water heater tanks for centrol hot water supply projects.



Fully automatic defrosting function included.



High / Low Pressure Safety Switches - protect pump against damage.



4-Way Reverse Valve option of cooling down water if need (min 10℃)

50Hz

Model Number		ARG-03S	ARG-05S-L	ARG-07S	ARG-10S-L	ARG-13S	ARG-15S-V	ARG-20S	ARG-25S	ARG-30S	ARG-40S
Water Heating Capacity(KW)		11	19	22	39	45	56	70	88	105	140
Water Cooling Capacity(KW)		8	15	18	31	36	45	56	71	84	112
Hot Water Yield L/H(ΔT=40℃)		220	410	470	840	960	1200	1500	1900	2250	3000
COP		3.8	4.42	3.8	4.61	3.8	4.4	3.8	3.8	3.8	3.8
Rated Input	KW	2.89	4.30	5.79	8.46	11.84	12.73	18.42	23.16	27.63	36.84
Max. Input	KW	4.05	6.02	8.11	11.84	16.58	17.82	25.79	32.42	38.68	51.58
Rated Input Current	A	13.16	8.14	10.96	16.02	22.43	24.10	34.89	43.86	52.33	69.78
Max. Input Current	A	18.42	11.40	15.35	22.43	31.40	33.75	48.84	61.40	73.27	97.69
Power Supply	V/PH/HZ	220V/1PH/50HZ	380~415V/3PH/50HZ								
Working Temperature Availabe		-5°C ~+43°C									
Max. Water Outlet Temperature		60°C									
Rated Water Outlet Temperature		55°C									
Condenser		Copper Pipe In Steel Case Heat Exchanger									
Defrosting		Included									
Intelligent Control		5 meters signal wire									
Compressor /Refrigerant		Copeland scroll Compressor /R417A /R410A/R22									
Compressor QTY	Unit	1	1	1	2	2	2	4	4	4	4
Fan QTY	Unit	1	1	1	2	2	2	2	2	3	4
Sound Level	dB(a)	65	65	65	68	68	68	68	68	68	68
Water Inlet/Outlet Diameter	Inch	G1"	G1"	G1"	G1½"	G1½"	G1½"	G2½"	G2½"	G2½"	G3"
Water Flow Rate	m³/h	2.5	4	5.6	7	8.4	10	12.5	15.2	18	25
Outline Dimension	L×W×H(mm)	710×710×850	810×810×1055	810×810×1355	1580×910×1180	1580×910×1380	1750×1050×1900	2000×1100×2100	2000×1100×2100	2500×1110×2100	2200×2000×2100
Packing Dimension	L×W×H(mm)	840×840×1030	890×890×1250	890×890×1550	1650×980×1340	1650×980×1540	1900×1160×2110	2200×1300×2350	2200×1300×2350	2700×1300×2350	2400×2200×2350
Net Weight	KG	100	138	160	270	320	460	560	700	900	1200
Gross Weight	KG	115	160	185	300	350	500	620	760	970	1280

60Hz

Model Number		ARG-03S	ARG-05S	ARG-07S	ARG-10S	ARG-05S	ARG-07S	ARG-10S	ARG-13S	ARG-20S	ARG-25S
Water Heating Capacity(KW)		11	18	25	36	18	25	36	45	74	90
Water Cooling Capacity(KW)		8.8	14.4	20	28.8	14.4	20	28.8	38	59.2	72
Hot Water Yield L/H(ΔT=40℃)		236	387	537	773	387	537	773	1031	1590	1934
COP		3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Rated Input	KW	2.89	4.74	6.58	9.47	4.74	6.58	9.47	12.63	19.47	23.68
Max. Input	KW	4.05	6.63	9.21	13.26	6.63	9.21	13.26	17.68	27.26	33.16
Rated Input Current	A	13.16	17.94	24.92	35.89	10.07	14.95	21.53	28.71	44.26	53.83
Max. Input Current	A	18.42	25.12	34.89	50.24	15.07	20.93	30.14	40.19	61.96	75.36
Power Supply	V/PH/HZ	220V/1PH/60HZ	220V/3PH/60HZ			380~415V/3PH/60HZ					
Working Temperature Availabe		-5°C ~+43°C									
Max. Water Outlet Temperature		60°C									
Rated Water Outlet Temperature		55°C									
Condenser		Copper Pipe In Steel Case Heat Exchanger									
Defrosting		Included									
Intelligent Control		5 meters signal wire									
Compressor /Refrigerant		Copeland scroll Compressor /R417A /R410A/R22									
Compressor QTY	Unit	1	1	1	2	1	1	2	2	4	4
Fan QTY	Unit	1	1	1	2	1	1	2	2	2	2
Sound Level	dB(a)	65	65	65	68	65	65	68	68	68	68
Water Inlet/Outlet Diameter	Inch	G1"	G1"	G1"	G1½"	G1"	G1"	G1½"	G1½"	G2½"	G2½"
Water Flow Rate	m³/h	2.5	4	5.6	7	4	5.6	7	8.4	13.8	17.2
Outline Dimension	L×W×H(mm)	710×710×850	810×810×1055	810×810×1355	1580×910×1180	810×810×1055	810×810×1355	1580×910×1180	1580×910×1380	2000×1100×2100	2000×1100×2100
Packing Dimension	L×W×H(mm)	840×840×1030	890×890×1250	890×890×1550	1650×980×1340	890×890×1250	890×890×1550	1650×980×1340	1650×980×1540	2200×1300×2350	2200×1300×2350
Net Weight	KG	100	138	160	270	138	160	270	320	560	700
Gross Weight	KG	115	160	185	300	160	185	300	350	620	760

1.Testing Condition:
** Dry-bulb temperature 20℃
** Wet-bulb temperature 15℃
** Water temp.rises 40℃ degree (from 15℃ to 55℃)
2.Technical specification is subject to change without notice,final information please refer to the nameplate on machine.

Low Temperature Heat Pump

1.EVI Copeland Scoll compressor ensure the perfect heating performance even in -20℃ ambient temperature.
2.Uses R407C refrigerant - ozone friendly (does not require yearly inspection).
3.State of the art technology has been used to produce specifically whisper quiet fans.
4.Digital controller makes the operation totally automatic and programmable supplying sanitary hot water and space heating purpose.
5.Electronic expansion valves(EEV) control the volume of the refrigerant accurately and improve units performance.

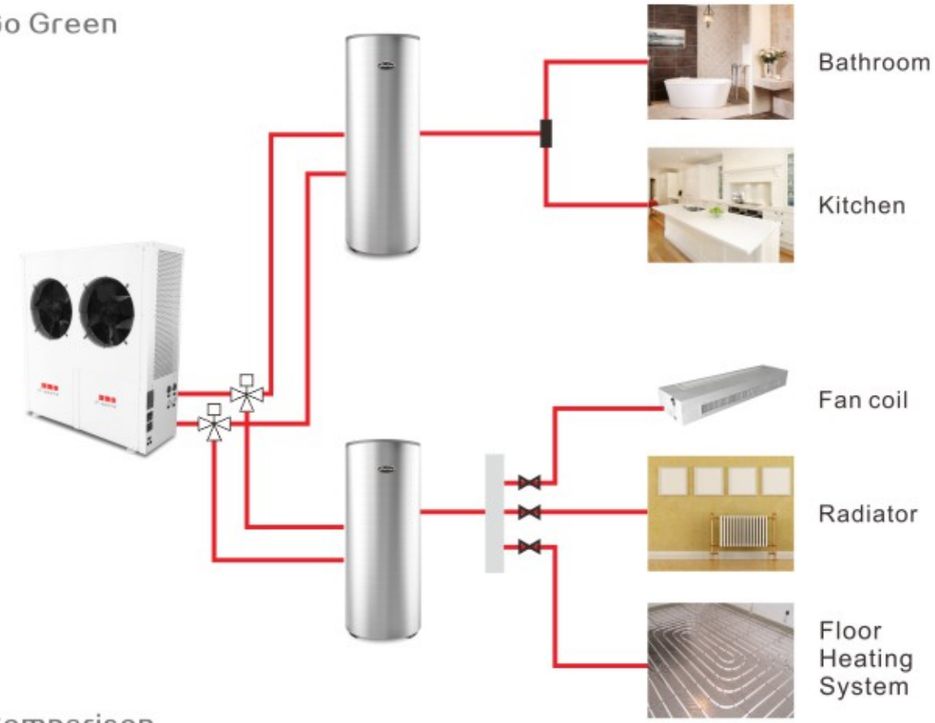


-25℃

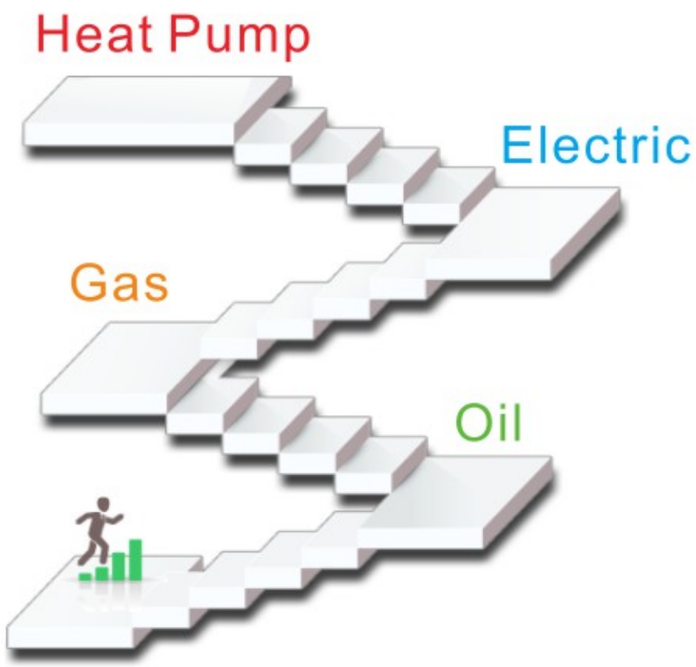
Enjoy the perfect temperature in house



Go Green



Comparison



Advantage



Home
Neat and Clean



Energy Saving
& Comfort



CO_2 Emissions
Reduction



Energy Efficiency
Enhancement

Product Parameter

Model		ARG-03C	ARG-04C	ARG-05C	ARG-10C
PowerSupply	V/Ph/Hz	220-240V/1PH/50HZ	220-240V/1PH/50HZ	380-415V/3PH/50HZ	380-415V/3PH/50HZ
*Ambient Temp.（Dry Bulb/Wet Bulb）		：7℃/6℃， Water Temp.（In/Out） ：30℃/35℃			
Output	KW	7.85	12.16	16.48	33
Input	KW	1.9	3	4.01	8
COP	W/W	4.1	4.12	4.11	4.12
*Ambient Temp.（Dry Bulb/Wet Bulb）		：2℃/1℃， Water Temp.（In/Out） ：30℃/35℃			
Output	KW	6	9.3	12.62	25.2
Input	KW	1.9	2.96	4.02	8.05
COP	W/W	3.14	3.15	3.14	3.13
*Ambient Temp.（Dry Bulb/Wet Bulb）		：-7℃/-8℃， Water Temp.（In/Out） ：30℃/35℃			
Output	KW	4.5	7	9.51	19
Input	KW	1.9	2.96	4.01	8.02
COP	W/W	2.3	2.37	2.36	2.37
*Ambient Temp.（Dry Bulb/Wet Bulb）		：-15℃/-16℃， Water Temp.（In/Out） ：30℃/35℃			
Output	KW	3.4	5.3	7.22	14.5
Input	KW	1.85	2.87	3.89	7.8
COP	W/W	1.86	1.85	1.83	1.86
*Ambient Temp.（Dry Bulb/Wet Bulb）		：35℃/24℃， Water Temp.（In/Out） ：12℃/7℃			
Output	KW	4.9	6.95	9	18
Input	KW	1.97	3.01	4.14	8.3
EER	W/W	2.17	2.27	2.17	2.17
Compressor	N/A	Copeland Scroll EVI	Copeland Scroll EVI	Copeland Scroll EVI	Copeland Scroll EVI
Compressor QTY	pc	1	1	1	2
Fan Motor	N/A	Side Blowing	Side Blowing	Side Blowing	Side Blowing
Fan Motor QTY	pc	1	2	2	2
Refrigerant	N/A	R407C	R407C	R407C	R407C
Max. Water Temp.	℃	60			
Refrigerant Control		Electric Expansion Valve			
Defrosting		4-way valve reverse auto defrosting			
Working Temp.	℃	Min.:-25/Max.: +43			
Nozzles Size	Inch	1	1	1	1.5
Water Flow Rate	m³/h	2.5~3.0	3.5~4.0	3.5~4.0	6.0~6.5
Noise	dB(a)	60	65	65	68
Unit Dimension:	cm	850×520×123	1305×505×1245	1305×505×1245	1565×575×1710
N.W/G.W:	Kgs	100/120	145/165	145/170	280/320

Swimming Pool Heat Pump

Extend Your Swim Season in Comfort

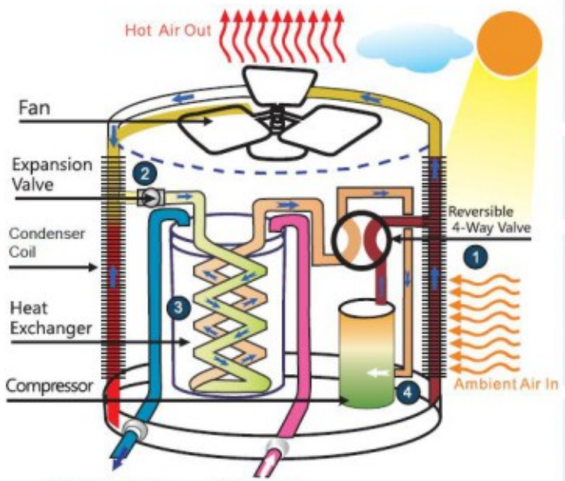


Corrosion resistant

Titanium Tube Heat Exchanger

Schematic diagram

AS A CHILLER



1 STAGE ONE
The temperature of the hot gaseous refrigerant discharged from the compressor is much higher than the outside ambient air temperature. When the outside air passes across the condenser coil, the gaseous refrigerant transfers its heat to the air and condenses into liquid.

2 STAGE TWO
The liquid refrigerant passes through the expansion valve, reducing its pressure and temperature.

3 STAGE THREE
The low temperature refrigerant passes to the heat exchanger evaporator, where the actual heat transfer takes place: the refrigerant absorbs heat from the water pumped into the heat exchanger and evaporates, whereby the water temperature is reduced.

4 STAGE FOUR
The gas refrigerant is then sucked to the compressor and compressed, increasing its pressure and temperature, ready to start the whole cycle once again.

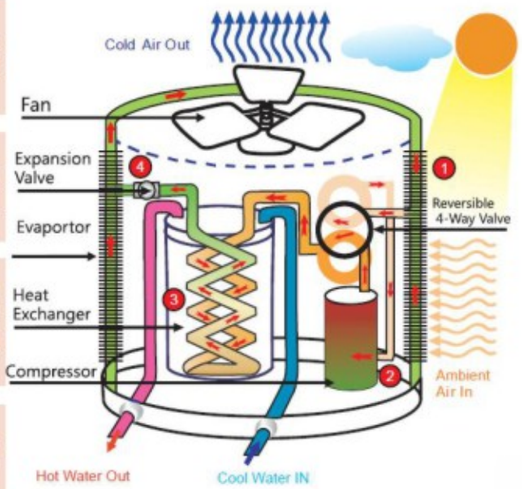
AS A HEAT PUMP

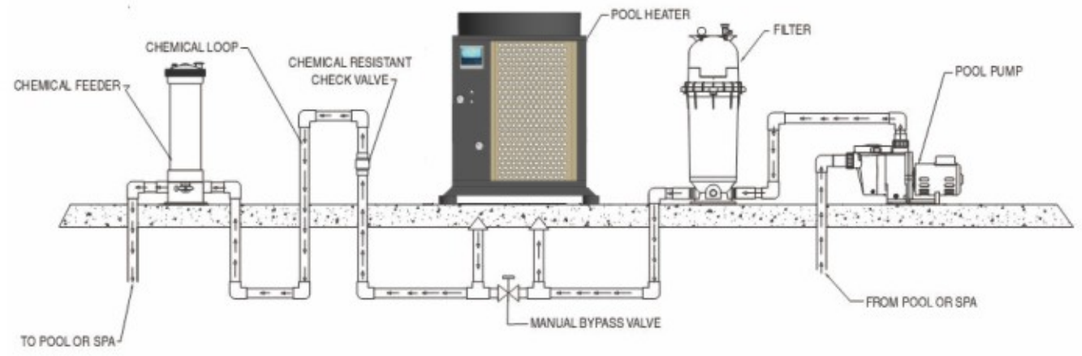
1 STAGE ONE
The heat transfer medium (the refrigerant) is colder than the outside air. As the outside air passes across the evaporator coil, the liquid refrigerant absorbs heat from the air and evaporates.

2 STAGE TWO
The gaseous refrigerant then passes to the compressor and is compressed. When compressed, the pressure is increased and the temperature of the vapor rises, effectively concentrating the heat.

3 STAGE THREE
The hot gaseous refrigerant passes to the heat exchanger condenser, where the actual heat transfer takes place: the intensely hot gaseous refrigerant transfers its heat to the water pumped into the heat exchanger and condenses back into a liquid.

4 STAGE FOUR
The liquid refrigerant then passes through an expansion valve, reducing its pressure and temperature, ready to start the whole cycle once again.





Characteristic

1.Available in a wide range of sizes and models to suit most pools and budgets.
2.Titanium heat exchanger with 50mm standard coupling connections for easy installation.
3.All use the ozone friendly refrigerant and are all designed to be the most energy efficient in their class.
4. Smart control program constant the desired temperature at any time of the day.
5. The uniquely designed fan ensures super quiet operation.
6. Heating or cooling the pool inversable by four way valve.
7.Safety Flow Switch if pool pump fails.







Swim All Year Long



Product Parameter

Horizontal Discharge Series:50Hz

Model		KF70-XTi-M	KF140-XTi-M	KF70-XTi-A	KF140-XTi-A	ARG-03STi-H
Air /Water 24℃ /26℃	Output Power (KW)	4.5	7.8	4.5	7.8	15.11
	Input Power(KW)	0.9	1.56	0.9	1.56	2.66
	COP	5.0	5.0	5.0	5.0	5.66
	Current	4.1	7.1	4.1	7.1	12.64
Air /Water 15℃ /26℃	Output Power (KW)	3.7	6.4	3.7	6.4	12.46
	Input Power(KW)	0.86	1.49	0.86	1.49	2.68
	COP	4.3	4.3	4.3	4.3	4.65
	Current	3.9	6.8	3.9	6.8	12.4
Air /Water 7℃ /26℃	Output Power (KW)	3.2	5.5	3.2	5.5	10.45
	Input Power(KW)	0.84	1.44	0.84	1.44	2.67
	COP	3.8	3.8	3.8	3.8	3.92
	Current	3.8	6.5	3.8	6.5	12.3
Electric Power		220~240V/1PH/ 50Hz		220~240V/1PH/ 50Hz		
Compressor		HITACHI/ Rotary		HITACHI/ Rotary		Panasonic/Scroll
Heat Exchanger		Titanium Tube in PVC Shell		Titanium Tube in PVC Shell		
Refrigerant		R410A		R410A		
Defrost		NO		Included		
Remote		NO / Mechanical Control		5m Signal wires /Intelligerant Control		
Cabinet		Galvanized steel sheet coated		Galvanized steel sheet coated		
Nozzles Size (mm)		Exterior 50mm/ Interior 40mm		Exterior 50mm/ Interior 40mm		
Fan Power Input (w)		60	80	60	80	160
Fan Power Output(w)		18	25	18	28	90
Fan (RPM)		870	870	870	870	850
Noice dB(A)		46	47	46	47	55
Water Flow Rate(m^3/h)		3.5	5	3.5	5	9
Product Dimension(mm)		750×325×470	930×360×550	750×325×470	930×360×550	1100×410×880mm
Packing Dimension(mm)		855×330×530	1060×380×600	855×330×530	1060×380×600	1120×410×995mm
Net/ Gross Weight(kgs)		37/40	49/54	37/40	50/55	90/95

Product Parameter

Vertical Discharge Series:50Hz

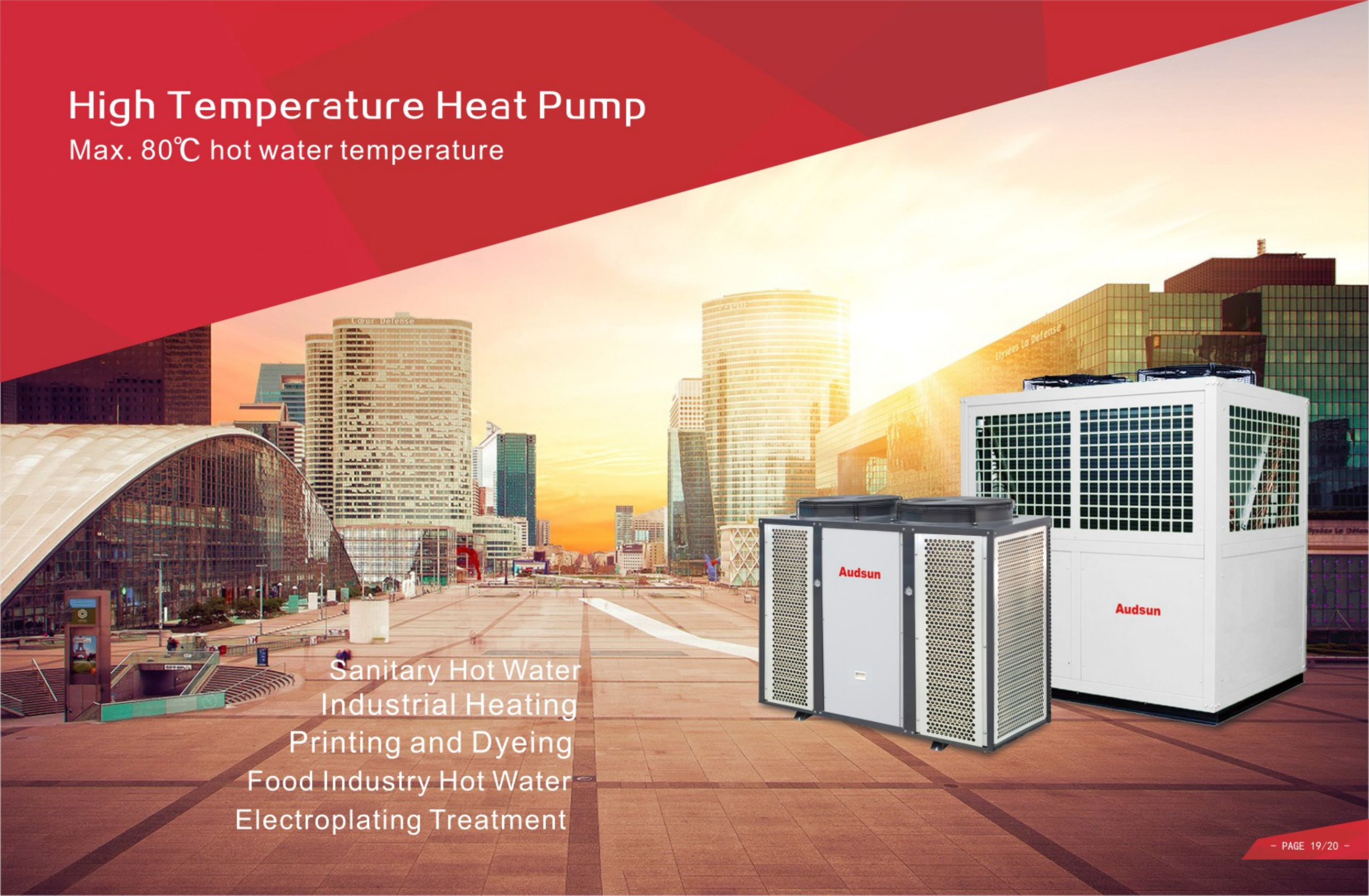
Model		ARG-02STi	ARG-03STi	ARG-04STi	ARG-05STi	ARG-07STi	ARG-10STi	ARG-13STi	ARG-15STi-V	ARG-20STi	ARG-25STi
Air /Water 24℃ /26℃	Output Power (KW)	8.94	15.11	18	21	33	40	52	70	90	105
	Input Power(KW)	1.52	2.66	3.21	3.82	6.2	7.5	9.8	13.2	17	20
	COP	5.88	5.66	5.6	5.5	5.3	5.3	5.3	5.3	5.3	5.3
	Current	7.27	12.73	15.36	7.23	11.74	14.20	18.56	25	32.20	37.88
Air /Water 15℃ /26℃	Output Power (KW)	8.13	12.89	15.95	18.65	29	31	40	56	81	95
	Input Power(KW)	1.32	2.58	3.13	3.73	5.8	6.2	8.1	11.2	16.9	19.8
	COP	5.34	5.0	5.09	5.0	5.0	5.0	5.0	5.0	4.8	4.8
	Current	6.32	12.34	14.98	7.06	10.98	11.74	15.34	20	32.01	37.50
Air /Water 7℃ /26℃	Output Power (KW)	5.68	10.45	13.17	16	22.7	26	33	21.21	70	81
	Input Power(KW)	1.52	2.67	3.1	3.72	5.27	6	7.8	9.8	16.3	18.8
	COP	3.9	3.92	4.25	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	Current	7.27	12.78	14.83	7.05	9.98	11.36	14.77	18.56	30.87	35.61
Electric Power		220~240V/1PH/50Hz			380V~415V/3PH/50Hz						
Compressor		Panasonic Rotary	Panasonic Scroll	Panasonic Scroll	Panasonic Scroll	Panasonic Scroll	Panasonic Scroll	Panasonic Scroll	Panasonic Scroll	Panasonic Scroll	Panasonic Scroll
Heat Exchanger		Titanium Tube in PVC Shell			Titanium Tube in PVC Shell						
Refrigerant		R410A			R410A						
Defrost		Included			Included						
Remote		5meter Signal Wire			5meter Signal Wire						
Cabinet		Galvanized steel sheet and sprayed baking paint			Galvanized steel sheet and sprayed baking paint						
Water Connection Port(mm)		Exterior 50mm/ Interior 40mm					Exterior 60mm/ Interior 50mm			Exterior 70mm/ Interior 60mm	
Water Outlet Temperature		10~45°C			10~45°C						
Factory Default Outlet Temperature		35°C			35°C						
Fan Power Input (w)		90	200	400	400	400	400×2	400×2	410×2	850	850
Fan Power Output(w)		50	90	250	250	250	250×2	250×2	200×2	550	550
Fan (RPM)		750	850	850	850	850	850	850	930	940	940
Noice dB(A)		51	49	49	58	58	58	58	58	65	65
Water Flow Rate(m^3/h)		6~8	8~10	10~12	12~15	12~15	20~25	25~30	35	40~50	50~60
Water Pressure Drop (Kpa)		14	14	14	15	15	16	18	20	30	35
Product Dimension(mm)		570×500×600	710×710×780	810×810×1050	810×810×1050	810×810×1050	1580×910×1180	1580×910×1380	1750×1050×1900	2000×1100×2300	2000×1100×2100
Packing Dimension(mm)		630×575×770	840×840×1030	890×890×1250	890×890×1250	890×890×1250	1650×980×1340	1650×980×1540	1900×1160×2110	2200×1300×2500	2200×1300×2350
Net/ Gross Weight(kgs)		51/57	100/115	120/140	135/160	160/190	270/300	320/350	460/500	560/620	700/760

Vertical Discharge Series:60Hz

Model		ARG-03STi	ARG-04STi	ARG-05STi	ARG-10STi	ARG-05STi	ARG-10STi	ARG-13STi	ARG-20STi	ARG-25STi
Air /Water 24℃ /26℃	Output Power (KW)	16	19	24	48	23.5	45	56	90	110
	Input Power(KW)	2.91	3.25	4.36	9.06	4.27	8.49	10.57	17.92	20.75
	COP	5.50	5.6	5.5	5.3	5.5	5.3	5.3	5.3	5.3
	Current	15.87	17.73	16.53	34.31	9.71	19.30	24.01	40.74	47.17
Air /Water 15℃ /26℃	Output Power (KW)	13.00	17.20	19.70	39.40	18.65	33	42	83	97
	Input Power(KW)	2.60	3.37	3.94	7.88	3.30	6.60	8.40	17.29	20.21
	COP	5.0	5.10	5.0	5.0	5.0	5.0	5.0	4.8	4.8
	Current	14.18	18.40	14.92	29.85	7.50	15.00	19.09	39.30	45.93
Air /Water 7℃ /26℃	Output Power (KW)	10.45	13.17	16.80	26	14	28	35	72.00	85
	Input Power(KW)	2.46	3.1	3.91	6.05	3.26	6.51	8.14	16.74	19.00
	COP	4.25	4.25	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	Current	13.41	16.90	14.80	22.90	7.40	14.80	18.50	38.05	43.18
Electric Power		220V/1PH/60Hz		220V/3PH/60Hz		380V/3PH/60Hz				
Compressor		Panasonic Scroll		Panasonic Scroll		Panasonic Scroll				
Heat Exchanger		Titanium Tube in PVC Shell		Titanium Tube in PVC Shell		Titanium Tube in PVC Shell				
Refrigerant		R410A		R410A		R410A				
Defrost		Included		Included		Included				
Remote		5meter Signal Wire		5meter Signal Wire		5meter Signal Wire				
Cabinet		Galvanized steel sheet coated		Galvanized steel sheet coated		Galvanized steel sheet coated				
Water Connection Port(mm)		Exterior 50mm/ Interior 40mm					Exterior 60mm/ Interior 50mm		Exterior 70mm/ Interior 60mm	
Fan Power Input (w)		200	400	400	400	400	400×2	400×2	850	850
Fan Power Output(w)		90	250	250	250	250	250×2	250×2	550	550
Fan (RPM)		850	850	850	850	850	850	850	940	940
Noice dB(A)		49	49	58	58	58	58	58	65	65
Water Flow Rate(m^3/h)		8~10	10~12	12~15	20~25	12~15	20~25	25~30	40~50	50~60
Water Pressure Drop (Kpa)		14	14	15	16	15	16	18	30	35
Product Dimension(mm)		710×710×850	810×810×1050	810×810×1050	1580×910×1180	810×810×1050	1580×910×1180	1580×910×1380	2000×1100×2100	2000×1100×2100
Packing Dimension(mm)		840×840×1030	890×890×1250	890×890×1250	1650×980×1340	890×890×1250	1650×980×1340	1650×980×1540	2200×1300×2350	2200×1300×2350
Net/ Gross Weight(kgs)		100/115	120/140	135/160	270/300	135/160	270/300	320/350	560/620	700/760

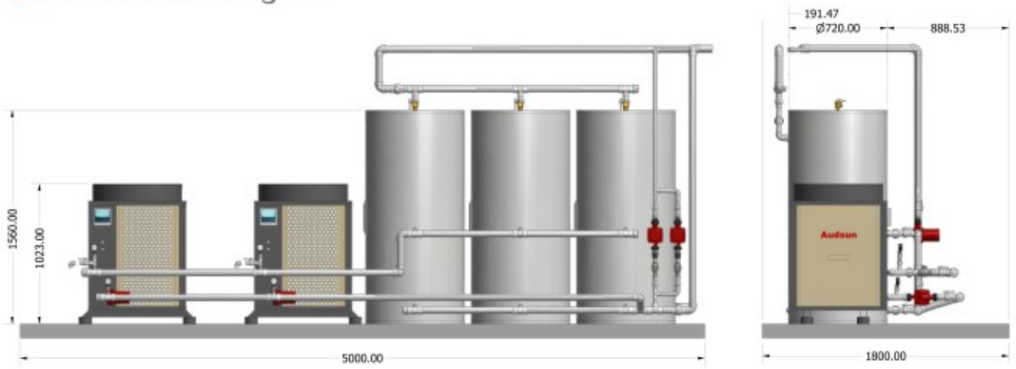
High Temperature Heat Pump

Max. 80℃ hot water temperature

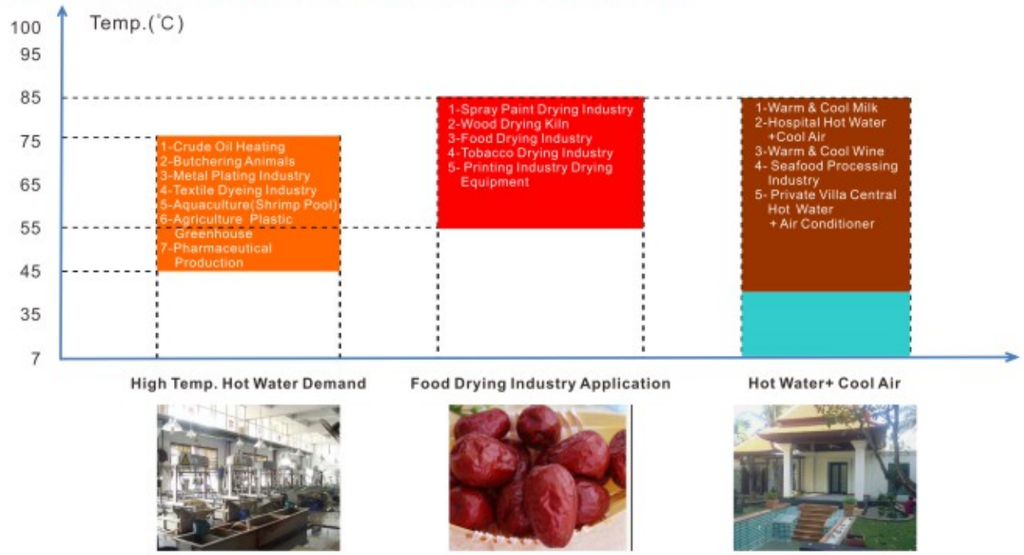


Sanitary Hot Water
Industrial Heating
Printing and Dyeing
Food Industry Hot Water
Electroplating Treatment

Schematic diagram



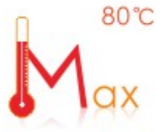
Audsun High Temp. Heat Pump Application (R134A Refrigerant)



Characteristic



Copeland Scroll compressor



Water temperature up to 80 ℃



Multi Protection:
Compressor Current Overhigh protection
High pressure switch
Low pressure switch
Water flow protection



User-friendly LCD remote provide quick and easy access to water temperature,timer program and system diagnostics

Product Parameter

50Hz

Model Number		ARG-03H	ARG-05H	ARG-10H	ARG-15H	ARG-20H	ARG-25H
Water Heating Capacity(KW)		8.5	14	28	42	56	70
Water Cooling Capacity(KW)		6.8	11.2	22.4	33.6	44.8	56
Hot Water Yield L/H(ΔT=40℃)		180	300	600	900	1200	1500
COP		3.8	3.8	3.8	3.8	3.8	3.8
Rated Input	KW	2.24	3.68	7.37	11.05	14.74	18.42
Max. Input	KW	3.13	5.16	10.32	15.00	20.63	25.79
Rated Input Current	A	10.17	6.98	13.96	20.93	27.91	34.89
Max. Input Current	A	14.23	9.77	19.54	29.31	39.07	48.84
Power Supply	V/PH/HZ	220V/1PH/50HZ	380~415V/3PH/50HZ				
Working Temperature Available		0°C ~+43°C					
Max. Water Outlet Temperature		80°C					
Rated Water Outlet Temperature		65°C					
Condenser		Copper Pipe In Steel Case Heat Exchanger					
Defrosting		Included					
Intelligent Control		5 meters signal wire					
Compressor /Refrigerant		Copeland /Scroll Compressor /R134A					
Compressor QTY	Unit	1	1	2	2	4	4
Fan QTY	Unit	1	1	2	2	2	2
Sound Level	dB(a)	65	65	68	68	68	68
Water Inlet/Outlet Diameter	Inch	G1"	G1"	G1½"	G1½"	G2½"	G2½"
Water Flow Rate	m³/h	2.5	4	7	9.6	13.8	17.2
Outline Dimension	L×W×H(mm)	710×710×850	810×810×1055	1580×910×1380	1750×1050×1900	2000×1100×2100	2000×1100×2100
Packing Dimension	L×W×H(mm)	840×840×1030	890×890×1250	1650×980×1540	1900×1160×2110	2200×1300×2350	2200×1300×2350
Net Weight	KG	105	138	270	460	560	700
Gross Weight	KG	120	160	300	500	620	760

60Hz

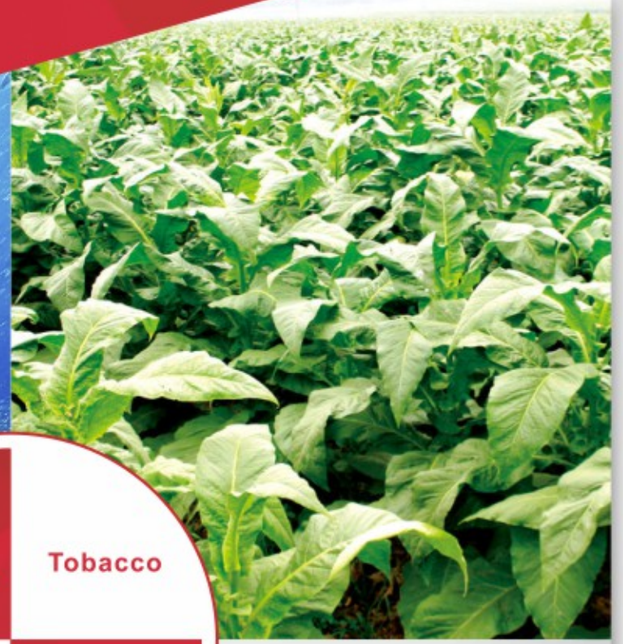
Model Number		ARG-03H	ARG-05H	ARG-10H	ARG-05H	ARG-10H	ARG-15H	ARG-20H	ARG-25H
Water Heating Capacity(KW)		9	16	32	16	32	48	64	72
Water Cooling Capacity(KW)		7.2	12.8	25.6	12.8	25.6	38.4	51.2	57.6
Hot Water Yield L/H(ΔT=40℃)		195	345	700	345	700	1050	1400	1550
COP		3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Rated Input	KW	2.37	4.21	8.42	4.21	8.42	12.63	16.84	18.95
Max. Input	KW	3.32	5.89	11.79	5.89	11.79	17.68	23.58	26.53
Rated Input Current	A	10.77	15.95	31.90	9.57	19.14	28.71	38.28	43.06
Max. Input Current	A	15.07	22.33	44.66	13.40	26.79	40.19	53.59	60.29
Power Supply	V/PH/HZ	220V/1PH/60HZ	220V/3PH/60HZ		380~415V/3PH/60HZ				
Working Temperature Available		0°C ~+43°C							
Max. Water Outlet Temperature		80°C							
Rated Water Outlet Temperature		65°C							
Condenser		Copper Pipe In Steel Case Heat Exchanger							
Defrosting		Included							
Intelligent Control		5 meters signal wire							
Compressor /Refrigerant		Copeland /Scroll Compressor /R134A							
Compressor QTY	Unit	1	1	2	1	2	2	4	4
Fan QTY	Unit	1	1	2	1	2	2	2	2
Sound Level	dB(a)	65	65	68	65	68	68	68	68
Water Inlet/Outlet Diameter	Inch	G1"	G1"	G1½"	G1"	G1½"	G1½"	G2½"	G2½"
Water Flow Rate	m³/h	2.5	4	7	4	7	10.5	13.8	17.2
Outline Dimension	L×W×H(mm)	710×710×850	810×810×1055	1580×910×1380	810×810×1055	1580×910×1380	1750×1050×1900	2000×1100×2100	2000×1100×2300
Packing Dimension	L×W×H(mm)	840×840×1030	950×950×1250	1650×980×1540	950×950×1250	1650×980×1540	1900×1160×2110	2200×1300×2350	2200×1300×2500
Net Weight	KG	105	138	270	138	270	460	560	700
Gross Weight	KG	120	160	300	160	300	500	620	760

1.Testing Condition:
** Dry-bulb temperature 20℃
** Wet-bulb temperature 15℃
** Water temp.rises 40℃ degree (from 15℃ to 55℃)
2.Technical specification is subject to change without notice,final information please refer to the nameplate on machine.

Heat Pump Dryer

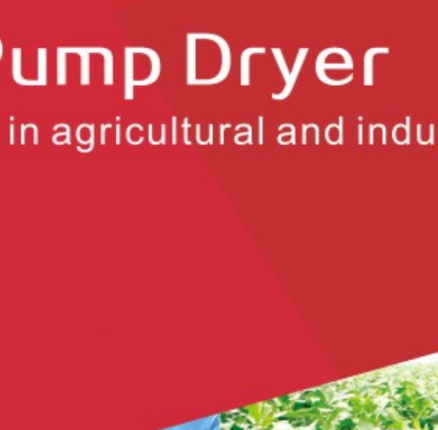
Widely used in agricultural and industrial area













Introduce

Nowadays the market for heat pump systems for water heating and space cooling/heating is well developed in the European countries.

However, Products of heat pump dryer have become known in many developed and other developing countries ,they are interested in applications of heat pumps for energy saving and pioneers have invested much money and time on heat pump dryer research, especially for industrial and agricultural drying purpose. The market has increased in the past few years.

Heat pump drying is a technology by which materials can be dried at low or high (10-80 ℃) temperature. They provide a means to dry products in a controlled or modified atmosphere, which may be oxygen-free, using less energy than common drying methods.

Heat pump dryer is therefore advantageous for drying biological materials which are thermally sensitive and oxygen sensitive.

Components



Characteristic

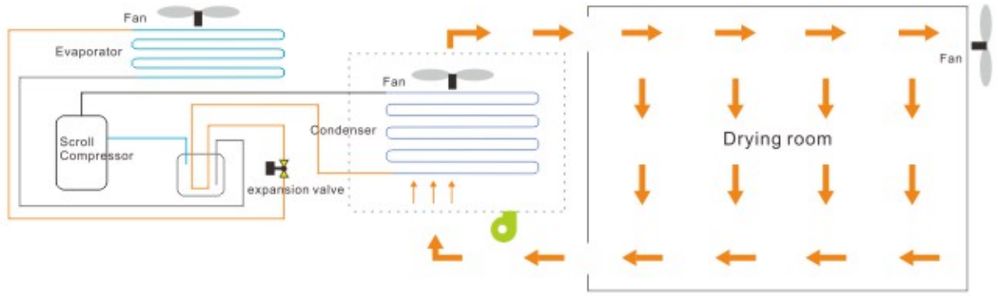
- High energy efficiency (reduced energy consumption) – up to 60% reduction in energy costs compared with traditional drying technologies.
- More environmentally friendly – 80–100% reduction in emissions of chemicals released as a result of drying some products and up to 60% reduction in CO2 emissions.
- Consistent output of products – heat pumps can operate 24 hours per day, so the production potential is higher than for traditional drying.
- Better product quality – heat pump dryers condition such as temperature and air flow rates are controlled to meet specific requirements. sensors and advanced controllers are used to adjust the temperatures of the condenser and evaporator to obtain suitable drying temperatures, which is not possible with traditional drying methods. It is also possible to control the speed of the fans to achieve optimal air flow.



Comparison of Heat Pump Dryer with common traditional drying methods

Item	Heat pump dryers	Electrical heating	Diesel engine heating	Wood burning	Sunlight
Efficiency	High	Low	Low	Low	Very low
Temperature range	10-80 (℃)	0-100 (℃)	0-100 (℃)	0-100 (℃)	≤ 40 (℃)
Operation time	Anytime	Anytime	Anytime	Anytime	During the day
Drying air flow	Controlled by fan speed	Controlled by fan speed	N/A	N/A	Depends on wind
Moisture extraction	Accurate	Accurate	Low	Low	Depends on weather
Temperature control	Accurate	Accurate	OK	Fair	N/A
Product quality	Perfect	Good	Effected by smoke	Effected by smoke	Depends on weather
Environmentally friendly	Yes	Yes	Release CO_2	Release CO_2	Yes
Weather effect	No	No	No	No	Yes
Initial capital cost	Very high	High	High	Fair	Low
Payback period	Short	Long	Long	N/A	N/A
Maintenance costs	Fair	High	High	Low	Very low
Application range	Wide	Wide	Limited	Limited	Limited

Schematic diagram





Product Parameter

Model		ARG-03D	ARG-05D	ARG-10D	ARG-15D
Heating Capacity	KW	8	14	28	42
	Btu/h	27300	47700	95500	143000
Compressor	Type	Scroll			
	Brand	Copeland			
	Refrigerant	R134A			
Max. Hot Air Temp.	℃	80			
Max.Pressure (High Pressure Side)	MPA	3.0			
Max. Circular Air Flow	m³/h	4500	7500	15000	22500
Max. Hot Air Flow	m³/h	780	1300	2500	3900
Temperature Control Accuracy	℃	±1			
Moisture elimination volume	kg/h	15	25	49	76
Power Supply	V/Ph/Hz	220~240V/1PH/50Hz	380V/3PH/50Hz		
Rated Input	KW	3.06	5.1	10.2	15.3
Rated Current	A	13	8	16	24
Sound Level	dB(a)	58	62	62	62
Outer Case Material	Material	Galvanized Steel or Stainless Steel			
Product Dimention (L x W x H)	mm	1375x1040x1470	1575x1080x1530	2180x1100x1645	2215x1305x1765
Net Weight	kg	200	280	470	600

Applications







Location	Application(s)	Conclusion
SiChuan Province	Red chillies	The high quality of the dried chillies was highlighted as the major advantage of heat pump dryer compared to sun drying







Location	Application(s)	Conclusion
Fujian Province	Marine products	Computer simulation model of the heat pump dehumidified drying was shown to be in good agreement with experimental results .The modified atmosphere heat pump dryer produced better physical properties





Location	Application(s)	Conclusion
GuangXi Province	Timber	Better product quality . The specific moisture extraction rate of the designed dryer was notably more than conventional types of dryers with respect to saving energy

Air Conditioner Heat Pump

Hot Water

Cool Water

Cool Air



Schematic diagram

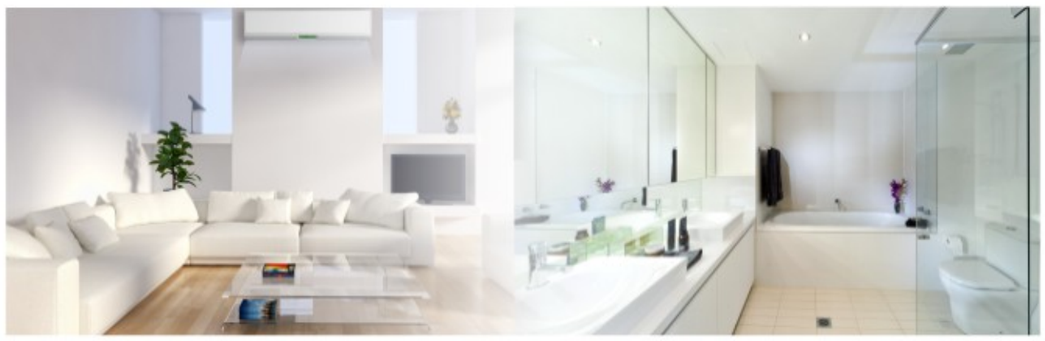




1. Stainless steel SUS304 Casing durable design especially suitable for tropical areas villa clients.
2. Electronic expansion valves control the volume of the refrigerant accurately and improve units performance.
3. Max. 80℃ hot water temperature can reduce the storage cylinder size but keep Sufficient pleasant hot water volume 24/7/365.
4. Heating water and cooling air in one outdoor machine for better enegry saving purpose.
5. Equipped with user-friendly LCD remote displays that can be installed inside the home to provide quick and easy access to water temperature, running times and system diagnostics.



Working mode



Working mode





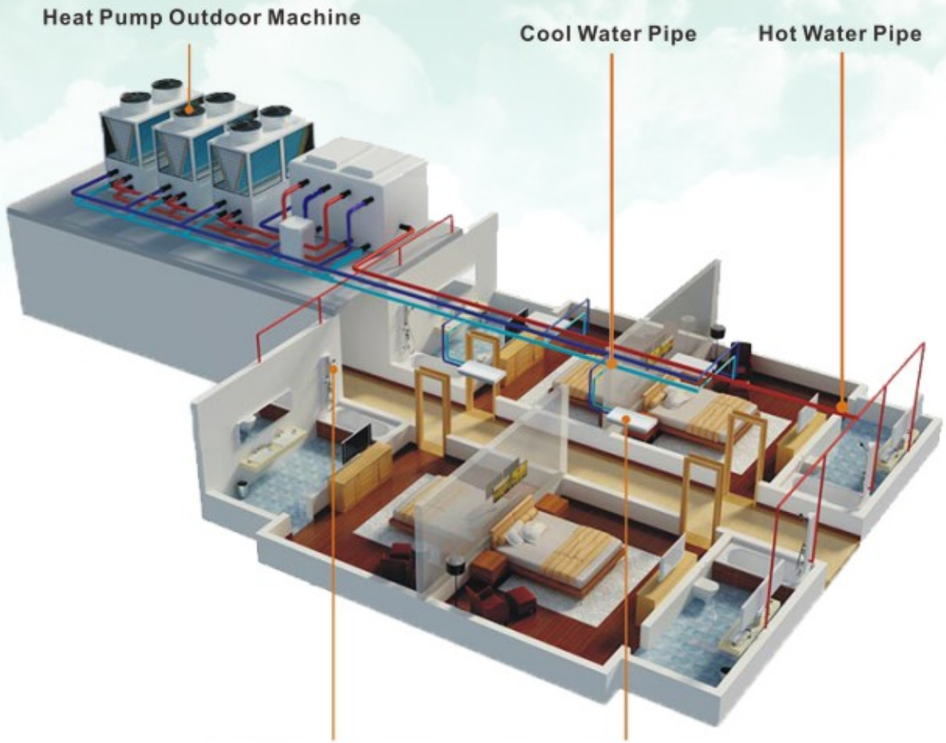
Product Parameter

Model		KF140-HK	ARG-03HK	ARG-05HK	ARG-07HK
Power Supply	V/PH/HZ	220~240V/1PH/50HZ	220~240V/1PH/50HZ	380~415V/3PH/50HZ	380~415V/3PH/50HZ
Refrigerant		R134A	R134A	R134A	R134A
Water Heating Capacity	KW	6.2	9	14	22
	BTU/h	21100	32300	47600	74800
Water Cooling Capacity	KW	4.96	7.2	11.2	17.6
	BTU/h	16924	24566	38214	60051
Air Cooling Capacity	KW	4.6	7.2	10.5	17
	BTU/h	15700	24480	35700	57800
Air Heating Capacity	KW	4.9	7.67	11.18	18.11
	BTU/h	16700	26169	38162	61787
Rated Input	KW	1.65	2.4	3.5	5.6
Rated Input Current	A	7.5	10.91	6.24	9.98
Max. Input	KW	2.31	3.36	4.9	7.84
Max. Input Current	A	10.5	15.27	9.28	14.85
Outlet Water Temp.	℃	65	65	65	65
Max. Outlet Water Temp.	℃	80	80	80	80
Water Heating Capacity	L/h	140	190	270	400
Compressor Brand		Hitachi	Copeland	Copeland	Copeland
Compressor Type		Rotary	Scroll	Scroll	Scroll
Compressor Quantity	Unit	1	1	1	1
Fan Qty	Unit	1	1	1	1
Sound Level	dB(a)	65	65	65	70
Water Inlet/Outlet Direction	Inch	G3/4″	G1″	G1″	G1″
Outdoor Unit Air Outlet		Side Discharge	Top Discharge	Top Discharge	Side Discharge
Water-Refrigerant Heat Exchanger	Inch	Shell Pipe Type Heat Exchanger			
Working ambient temp	℃	0~43	0~43	0~43	0~43
Outline Dimension L*W*H	mm	1000×370×630	700×700×780	810×810×1050	1050×1220×700
Packing Dimension L*W*H	mm	1115×375×640	750×770×905	950×950×1250	1290×1090×850
Net Weight	KG	74	110	130	200
Gross Weight	KG	109	125	155	230

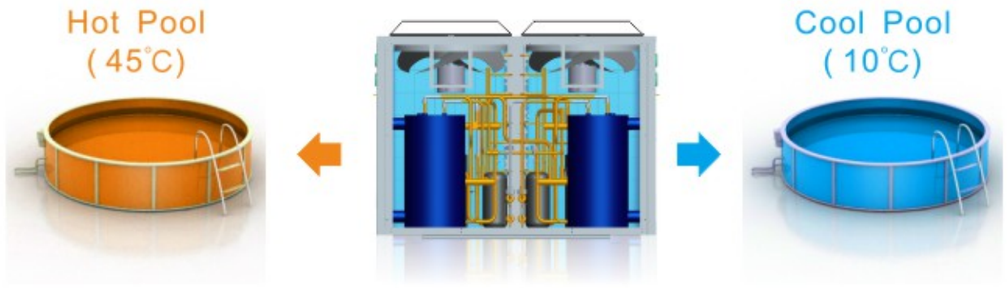
Double Source Heat Pump



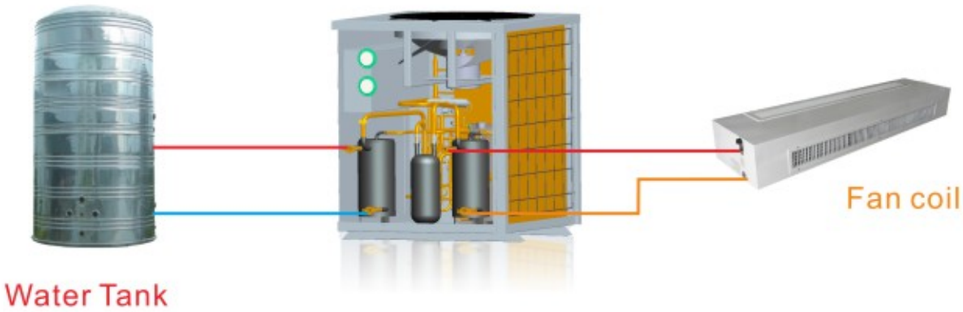




Schematic diagram



Titanium tube in SUS316L Shell:
one heat exchanger make hot water supply to SWIMSPA
another heat exchanger make cool water supply to JACUZZI



Copper tube in steel shell:
make hot water or cool water at the same time :
one heat exchanger make hot water supply to sanitary shower heating
another heat exchanger make cool water supply to cassettes chilled water coil (cool air)



Applicable place

Hotel: Sanitary Hot Water + Air Cooling.





SPA: one side provide hot water , another side provide cold water.





Product Parameter

Model Number		WARG-05HK-S	WARG-05HK	WARG-10HK	WARG-20HK	WARG-25HK	WARG-05STiHK	WARG-10STiHK
APPLICATION		Hot Water 220V	Hot Water					Swimming Pool
Compressor Refrigerant		Copeland Scroll /R134A						
Compressor QTY		1	1	2	2	2	1	2
Heat Exchanger		Copper Pipe In Steel Case					Titanium tube in SUS316L Case	
		One heat exchanger for water heating ,another heat exchanger for water cooling						
Power Supply	V/PH/HZ	220-240V/1PH/50HZ	380~440V/3PH/50HZ					
Rated Heat Production Capacity	KW	14	14	28	56	70	14	28
Rated Water Heating Capacity	L/h	300	300	600	1200	1500	300	600
Rated Cooling Capacity	KW	11.2	11.2	22.4	44.8	56	11.2	22.4
Rated Water Cooling Capacity	L/h	240	240	480	960	1200	240	480
Rated Hot Water Outlet Temp.	℃	65	65	65	65	65	65	45
Max. Hot Water Outlet Temp.	℃	80	80	80	80	80	75	60
Rated Input	KW	3.7	3.7	7.36	14.7	18.5	3.7	7.36
Rated Working Current	A	19	5.6	11.2	22.3	30	5.6	11.2
COP (DB/WB: 20°C/15°C)	W/W	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Fan Capacitor	μF	15	15	15	NO	NO	15	15
Fan QTY	Unit	1	1	2	2	2	1	2
Sound Level	dB(a)	64	64	68	68	68	64	68
Water Inlet/Outlet Diameter	Inch	1"	1"	1.5"	2.5"	3"	1"	1.5"
Water Flow Rate	Ton/h	2.4	2.4	4.8	9.6	12	2.4	4.8
Water Pump		NO Water Pump Inside						
Outline Dimension	L×W×H(mm)	810×810×985	810×810×985	1450×750×1100	2000x1100x2100	2000x1100x2100	810×810×985	1450×750×1100
Packing Dimension	L×W×H(mm)	890×890×1160	890×890×1160	1550×850×1200	2200×1300×2350	2200×1300×2350	890×890×1160	1550×850×1200
Net Weight	KG	130	130	290	540	630	130	290
Gross Weight	KG	160	160	330	600	700	160	330

1.Testing Condition:
** Dry-bulb temperature 20℃
** Wet-bulb temperature 15℃
** Water temp.rises 40℃ degree (from 15℃ to 55℃)
2.Technical specification is subject to change without notice,final information please refer to the nameplate on machine.

Audsun Combo All-in-one Heat Pump



Product Parameter

Model		Unit	KF70/200-L1	KF70/250-L1	KF70/300-L1	KF70/300-L2	KF70/400-L1
Feature	Tank Volume	L	200	250	300	300	400
	Power Supply		220V/50HZ/1PH	220V/50HZ/1PH	220V/50HZ/1PH	220V/50HZ/1PH	220V/50HZ/1PH
	Power Cable		3*1.5mm²	3*1.5mm²	3*1.5mm²	3*1.5mm²	3*1.5mm²
	Breaker	A	30	30	16	16	16
Economy Mode (C Mode)	Rated Output	KW	3.0	3.0	2.5	3.6	3.0
	Rated Hot Water Yield	L/H	65	65	55	78	65
	Rated Input	KW	0.86	0.86	0.6	0.87	0.86
	Rated Current	A	3.9	3.9	2.73	2.3	3.9
	Rated Hot Water Temp.	℃	55	55	55	55	55
	Max. Hot Water Temp.	℃	65	65	65	65	65
	Max.Input	KW	1.3	1.3	0.92	1.3	1.3
	Max. Current	A	6	6	4.18	6	6
E-Heater Mode (E Mode)	Electric Heater	W	2000	2000	2000	2000	1500
	Max. Hot Water Temp.	℃	70	70	70	70	70
	Current	A	9	9	9	9	6.8
Hybrid Mode (C+E)	Rated Input	KW	0.86+2	0.86+2	0.6+2	0.87+2	0.86+1.5
	Rated Current	A	3.9+9	3.9+9	4.18+9	3.9+9	3.9+6.8
	COP(A20°C/W55°C)		3.5	3.5	4.16	4.15	3.5
	Working Ambient Temp.		-20°C/0°C~43°C	-20°C/0°C~43°C	7°C~43°C	7°C~43°C	-20°C/0°C~43°C
Heat Pump Part	Compressor		rotary	rotary	rotary	rotary	rotary
	Refrigerant		R134A	R134A	R134A	R134A	R134A
	Evaporator		Ultra Gold Fin Tube Type	Ultra Gold Fin Tube Type	Ultra Gold Fin Tube Type	Ultra Gold Fin Tube Type	Ultra Gold Fin Tube Type
	Fan Type		Axial Fan	Axial Fan	Axial Fan	Axial Fan	Axial Fan
	Controller		LED	LED	LED	LED	LED
	Defrosting		4-Way Valve/ Auto	4-Way Valve/ Auto	4-Way Valve/ Auto	4-Way Valve/ Auto	4-Way Valve/ Auto
Water Tank Part	Inner Tank Material	mm	Enamel SPCC/2.5mm	Enamel SPCC/2.5mm	Enamel SPCC/2.5mm	Enamel SPCC/2.5mm	-Duplex 2205 Stainless Steel /1.5mm -SUS304 Stainless Steel /1.5mm
	Outer Tank Material	mm	Galvernized Steel Painted/0.5mm	Galvernized Steel Painted/0.5mm	Galvernized Steel Painted/0.5mm	Galvernized Steel Painted/0.5mm	Galvernized Steel Painted/0.5mm
	Insulation Foam	mm	PUF 50mm	PUF 50mm	PUF 50mm	PUF 50mm	PUF 50mm
	Heat Exchanger	mm	Copper Pipe wrapped outside Inner Tank	Copper Pipe wrapped outside Inner Tank	Copper Pipe wrapped outside Inner Tank	Copper Pipe wrapped outside Inner Tank	Copper Pipe wrapped outside Inner Tank
Dimension	Noise	dBa	52	52	48	48	52
	Product Dimension	mm	Φ570 x 1712	Φ570 x 2100	Φ620 x 1950	Φ620 x 1950	Φ652 x 2230
	Packing Dimension	mm	710x680x1812	710x680x2132	700x700x2130	700x700x2130	750x750x2310
	N.W/ G.W	kg	90/95	120/128	130/140	130/140	145/160
	Loading QTY 20GP/40GP		24/51	24/51	24/48	24/48	21/45

Heat Pump Circular Water Tank

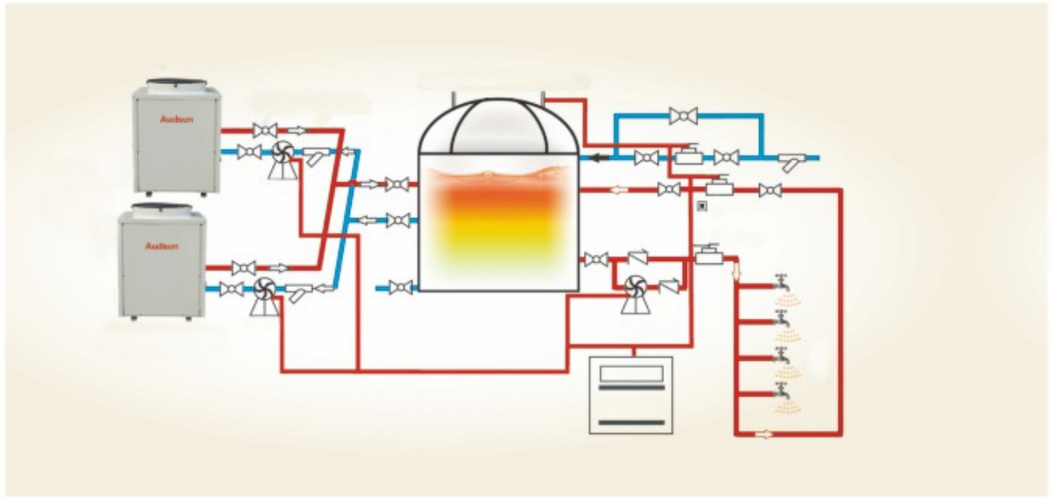


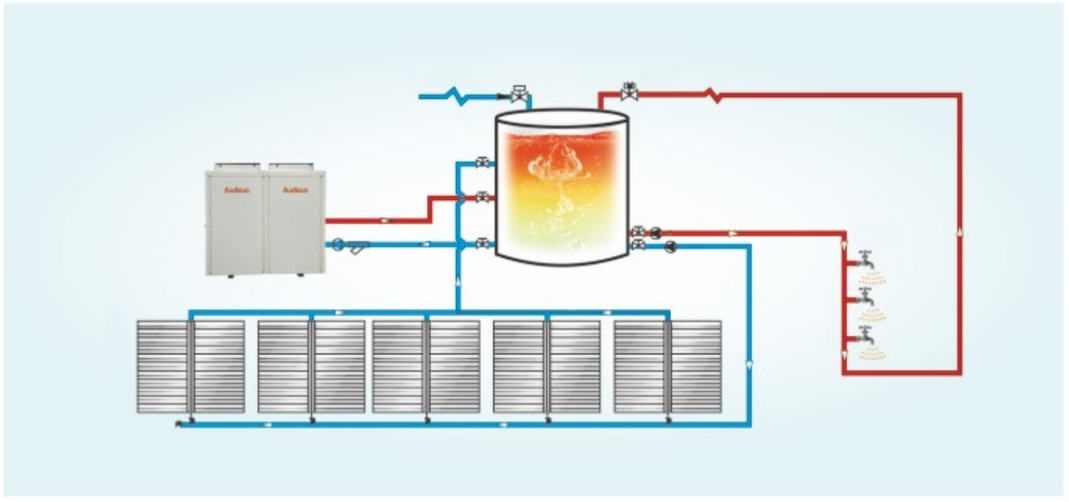
Product Parameter

Model		RSX-150	RSX-200	RSX-320	RSX-500
Capactiy	L	150	200	320	500
Inlet/Outlet Nozzle Diameter	Inch	G½"	G½"	G½"	G¾"
Water Circulation Nozzle	Inch	G¾"			
Product Dimension	mm	Φ440 x 1520	Φ520 x 1520	Φ560 x 1820	Φ720 x 1880
Packing Dimension	mm	540x540x1580	600x600x1580	635x635x1880	790x790x1950
N.W / G.W	kg	33 / 36	36 / 41	48 / 54	72 / 80

Remark:
1. Inner Tank: Stainless Steel SUS304, thickness 1.2~1.5mm.
2. Outer Tank: Carbon Steel Painted, Thickness 0.4mm.
3. Insulation: Polyurethane foam, thickness 50mm.
4. Without heat exchanger inside the tank.
5. Testing Pressure: 1.2Mpa(12 bar)
6.Operation Pressure: 0.6Mpa(6 bar).

Commercial Project Diagram







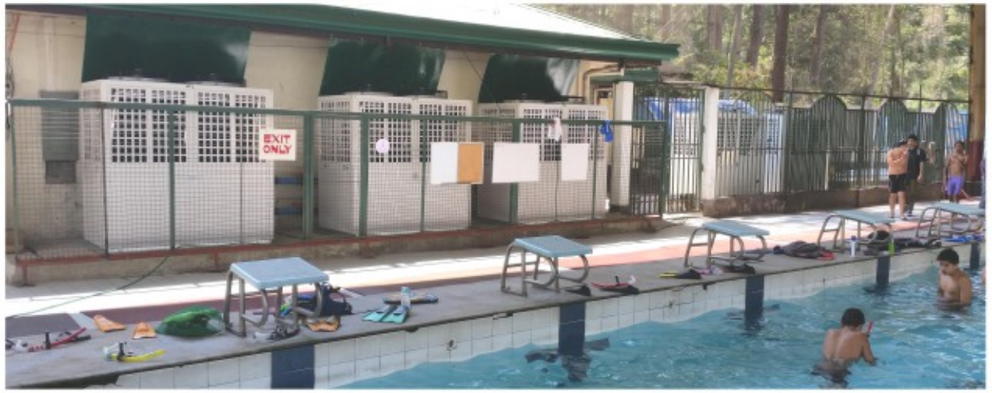









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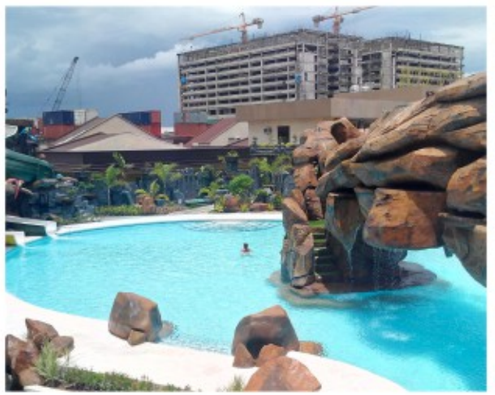










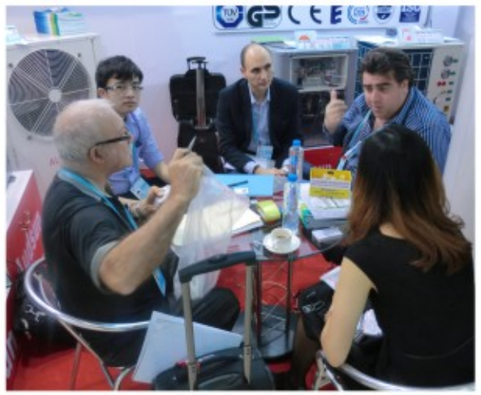
















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