



Air to Water Mini Chiller & Heat Pump



FEATURES

STRUCTURE

Panels and base frame are made from galvanized steel protected with polyester powder painting to ensure total resistance to atmospheric agents.

HERMETIC COMPRESSOR

The units use high efficiency, hermetically sealed, compressors, oil return lubrication and rubber vibration damper. The thermal overload cut-out, phase sequence relay and crankcase heater are integrated as the security protection to enhance reliability and performance.

AXIAL FAN

External rotor type axial fans, equipped with three phase direct drive motors, low noise 8 poles, protection level IP54, provided with a protective outlet grille.

EVAPORATOR

Evaporator built with high efficiency plate type heat exchanger, factory insulated with flexible close cell material.

CONDENSER

Condenser built with seamless internal screw thread copper tubes mechanically expanded into blue wave hydrophilic aluminum fins.

HYDRAULIC CIRCUIT

Hydraulic circuit built with galvanized pipe, complete with water discharge connection for tube in tube heat exchanger and flange type hydraulic connectors in two directions easy for connections from both sides of the units.

ELECTRIC PANEL

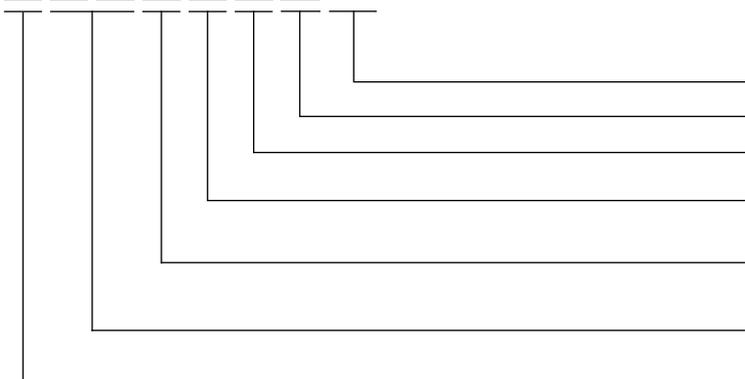
Electric panel consist of: Compressor contactor, fan motor contactor, compressor protection breaker, fan protection breaker, phase sequence relay and microprocessor with function display (display only for master/packaged unit) Automatic operation dramatically reducing maintenance cost thanks to reliable microprocessor system.

OPTIONAL

- Flow switch
- Water pump
- BMS
- Stainless steel covering
- Heat recovery
- Split type design
- DC inverter compressor
- DC inverter fan

NOMENCLATURE

H C A C A 10 W HF



- HF: Non-inverter; HI: DC inverter
- W: Scroll compressor; R: Rotary compressor
- Model (usRT)
- Refrigerant Type
- : R22; A: R410a; C: R407c
- C: Cooling only
- H: Heat pump
- CA: Air cooled scroll
- CW: Water cooled scroll
- HYC Product

SPECIFICATION

R410a(Non-inverter type)

Model		3.5	04	06	07	8.5	10	12	15
Power supply	/	380-415V/3Ph/50Hz							
Cooling capacity	kW	12	14	21	25	30	35	40	50
Heating capacity	kW	13.8	16.5	24	27.5	33	38.4	46	56
Rated power input	kW	4.27	5.13	7.09	8.61	10.05	11.62	13.66	17.58
Compressor									
Type		Hermetic scroll							
Qty	/	1	1	1	1	1	1	1	2
Input power	kW	4.27	4.65	6.54	8.06	9.3	10.52	12.56	16.08
Running current	A	7.5	8.32	12.52	14.04	16.64	20.06	24.02	29.58
Axial fan qty	/	2	2	1	1	1	2	2	2
Expansion type	/	Electrical expansion							
Evaporator									
Type	/	Plate heat exchanger							
Water flow	m ³ /h	2.1	2.4	3.4	4.3	4.8	6.2	6.9	8.6
Water pressure drop	kPa	33	36	36	38	42	50	52	52
Water pipe in/out	mm	DN25	DN25	DN32	DN32	DN32	DN32	DN32	DN40
Dimension									
Length	mm	1250	1250	1600	1600	1600	2000	2000	2000
Width	mm	450	450	940	940	940	900	900	900
Height	mm	1180	1180	1080	1080	1080	1080	1080	1080
Net weight	kg	150	180	282	310	339	310	470	520
Noise	dB(A)	60	64	64	66	68	70	70	70

The performance values refer to the following conditions:

- Cooling: ambient air temperature 35°C; evaporator water in/out temperature 12/7°C.
- Heating: ambient air temperature DB 7°C, WB 6°C; condenser water in/out temperature 40/45°C.
- HYC reserve the right to make changes for above parameters without prior notice.

SPECIFICATION

R410a(DC inverter type)

Model		2.5	03	04	4.5	05	06	6.5	07	08	09
Rated cooling	kW	9	11	13.5	16	18	20	22	25	28	32
Rated heating	kW	10	12	14.5	17.5	20	22	24	27	30	34
Cooling power input	kW	2.73	3.43	4.46	5.07	5.81	6.57	7.50	7.65	9.05	10.76
Heating power input	kW	2.86	3.57	4.68	5.22	6.06	6.80	7.53	8.36	9.81	11.57
Cooling EER	—	3.30	3.21	2.91	3.16	3.10	3.04	2.93	3.27	3.09	2.97
Heating COP	—	3.50	3.36	3.10	3.35	3.30	3.23	3.19	3.23	3.06	2.94
IPLV	—	4.9	4.7	4.4	4.6	4.52	4.44	4.2	4.8	4.55	4.45
Power supply	—	220V/1PH/50Hz					380-415V/3Ph/50Hz				
Compressor	type	—	DC inverter compressor								
	qty	—	1	1	1	1	1	1	1	1	1
Fan	type	—	DC inverter axial fan								
	qty	—	1	1	1	2	2	2	2	2	2
	input power	kW	0.1	0.1	0.1	0.1	0.1	0.1	0.7	0.7	0.7
Water pump	input power	kW	0.37	0.37	0.37	0.37	0.37	0.75	0.75	0.75	0.75
	current	A	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9
Evaporator	type	—	Plate heat exchanger								
	water flow	m ³ /h	1.55	1.89	2.32	2.75	3.1	3.44	3.78	4.3	4.82
Water side pressure drop	kPa	17	19	22	24	27	31	27	30	30	33
Lift head	m	14	13	17	15	14	21	20	19	17	20
Water pipe connection	—	G1/Rc1					G1 1/4 Rc1 1/4				
Dimension	LxWxH	mm	1000×400×1010			1000×400×1370			1100×400×1570		
Net weight	kg	110	110	111	146	146	148	150	190	192	195

The performance values refer to the following conditions:

- Cooling: ambient air temperature 35°C; evaporator water in/out temperature 12/7°C.
- Heating: ambient air temperature DB 7°C, WB 6°C; condenser water in/out temperature 40/45°C.
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