

Air Cooled Modular Chiller and Heat Pump

65kW-260kW   

Application areas

- Offices, Hotels, Hospitals
- Industry
- Administration
- Light commercial and residential buildings

Why this choice?

- Very high efficiency with R410A
- Very low noise operation
- R410A scroll compressors
- Advanced control
- Unit with pump and optional buffer tank
- Very compact for outdoor or indoor installation



Characteristics

The master module can work independently or together with up to 16 slave modules.

Units with V type heat exchanger: panels, frame and base are made from galvanized steel protected with polyester powder painting to ensure total resistance to atmospheric agents.

3-phase scroll type compressor, with built-in thermal overload cut-out and crankcase heater, mounted on rubber vibration dampers.

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 built with high efficiency Shell and tube type heat exchanger, factory insulated with flexible close cell material.

Condenser built with seamless copper tubes mechanically expanded into blue hydrophilic aluminum fins.

Refrigerant circuit complete with charge valves, filter drier, sight glass, gas-liquid separator, thermostatic expansion valve, high & low pressure switch. The heat pump unit is completed also with 4-way valve, liquid receiver and one way valve.

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 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

Paddle flow switch;

Metallic filter for hydraulic circuit;

Water pump;

Rubber antivibration mounting.

Heat recovery functions



- *High efficiency*
- *Low-sound levels*
- *High reliability*

Technical Data

Model		AW60	AW100	AW130	AW200	AW260
Cooling capacity*	kW	65	97.5	130	195	260
Cooling power input	kW	20.8	31.4	42.1	63.6	84.2
Heating capacity**	kW	68	102	136	204	272
Heating power input	kW	20.2	30.6	41	61.2	82
Max input power	kW	24	35.7	47.7	71.4	95.4
Max input current	A	50	74	97	148	194
Cooling running current	A	46	68	89	136	178
Start-up current	A	167	187	206	374	412
Compressor						
Power supply	/	380/3/50				
Brand/Type	/	Daikin/Scroll				
Refrigerant	/	R410a				
Qty/refrigerant circuit	Nr.	2	3	4	6	8
Cooling power input*	kW	2*9.4	3*9.63	4*9.77	6*9.63	8*9.77
Heating power input**	kW	2*9.1	3*9.36	4*9.5	6*9.36	8*9.5
Energy adjustment	%	0-25-50-75-100				
Axial fan						
Quantity	Nr.	2	2	2	4	4
Power input	kW	2	2.5	3	5	6
Airflow	m ³ /h	24000	36000	48000	72000	96000
Evaporator						
Type	/	Shell and tube heat exchanger				
Water flow when cooling	m ³ /h	11.2	16.8	22.4	33.6	44.8
Water flow when heating	m ³ /h	11.7	17.6	23.4	35.1	46.8
Water side pressure drop ***	kPa	46	52	55	52	55
Water connection size	DN	50	50	65	2x50	2x65
Noise level***	dB(A)	70	72	72	74	75
Dimensions						
V type coil	Length	mm	2000	2207	2207	2207
	Width	mm	1060	1300	1300	2207
	Height	mm	1957	2076	2076	2096
Net weight	kg	620	1060	1120	2160	2280
Working weight	kg	635	1090	1155	2220	2350

*Ambient temperature 35°C; evaporator water in/out 12/7 °C;

** Ambient temperature DB 7 °C, WB 6 °C; condenser water in/out temperature 40/45 °C;

*** In the nominal water flow condition the pressure drop is between this range.

**** Sound pressure measured at a distance of 1 m and a height of 1.5 m above the ground in a dear field.

