



# **PRODUCT BROCHURE**

# Air Cooled Scroll Chiller(Modular chiller)



**AMH- Series** 

Heat pump

R410A

#### Feature

#### HERMETIC COMPRESSOR

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

#### AXIAL FAN

External rotor type axial fans, equipped with three phase direct drive motors, low noise 8 poles, protection level IP55,F class provided with a protective outlet grille.

#### EVAPORATOR

Evaporator built with high efficiency tube in tube type or shell and tube 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.

#### **REFRIGERANT CIRCUIT**

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

Hydraulic circuit built with galvanized pipe, complete with water discharge connection for 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:

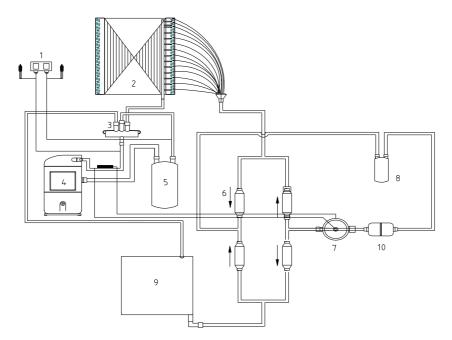
Compressor contactor, fan motor contactor, compressor protection breaker, fan protection breaker, phase sequence relay and microprocessor with function display (display only for master/packaged unit)

#### Instruction of model

А	Μ	H(C)	60	D
(1)	2	3	4	5

- 1 A: Air cooled chiller
- 2 M: Modular
- ③ H: Heat pump, C: Cooling only
- (4) 60: Cooling capacity (KW)
- (5) D: Refrigerant: A: R22 B: R407C C: R134a D: R410a

### Schematic diagram



Code	Description	Code	Description
1	pressure relay	6	one way valve
2	air side heat exchanger	7	Thermostatic expansion valve
3	4- way valve	8	Reservoir
4	Compressor	9	water side heat exchanger
5	Liquid-gas separator	10	Filter drier

#### **Technical data**

ι	Jnit Model	AM	Н	60	68	90	136	
Rated	cooling capacity	КW	/	60	68	96	136	
Р	ower input	КW	/	21	21.5	29.8	43	
Rated	heating capacity	КW	/	64	69	100	138	
Р	ower input	KW	/	21	22	30	44	
Compressor type			Scroll					
Compressor Amount			4	2	3	4		
	Power Supply			3N-380V-50HZ				
	Start type				Dir	ect		
	Refrigerant			R410a				
	Charge amount			4*4	11*2	6.5*3	6.5*4	
	Control method			Thermal Expansion Valve				
	Тур	be		Shell and tube				
Fuenerator	Pressure drop	)	kpa	70~90				
Evaporator	Connection p	pipe size DN		50	50	50	65	
	Water flow		m3/ h	10.3	11.7	16.5	23.4	
	Condenser				Fin Heat E	Exchanger		
condensing	Тур	ре			Axial Fan			
fan	Amo	unt		2	2	2	4	
			L	2110	2110	2110	2110	
Dimension			W	1080	1080	1080	1080	
			н	1870	1870	1980	1920	
Weight		kg	660	700	780	1360		
Operation Weight		kg	720	760	840	1480		
Noise		dB (A)	68	68	71	73		

Performance values refer to the following conditions:

\*Cooling capacity is measured under the condition: Ambient temperature DB 35°C/WB 24°C, user side water inlet/outlet temperature  $12^{\circ}C/7^{\circ}C$ ;

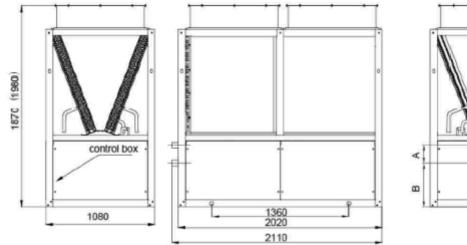
\*Heating capacity is measured under the condition: Ambient temperature DB 7  $^{\circ}$ C/WB 6  $^{\circ}$ C, user side water inlet/outlet temperature 40  $^{\circ}$ C /45  $^{\circ}$ C.

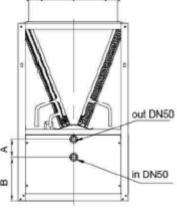
NO.	Name	Brand	Note
1	Compressor	Copeland/Panasonic/Daikin	USA/Japan brand
	Temperature display controller	Punp	Domestic brand
2	AC contactor	Schneider/NADER	France brand/ Domestic brand
	Thermal relay	Schneider/NADER	France brand/ Domestic brand
	Condenser	Kybom	Domestic brand
	Evaporator	Qiaoxin/Hengda/Saifute	Domestic brand
3	Filter	Taohua	Domestic brand
5	Expansion Valve	Carel	Italy brand
	Pressure Gauge	FUCO	Domestic brand
	Fans	Mar/Sunbrain	Domestic brand
4	Water Pump	Chuanyuan/CNP	Taiwan brand/ Domestic brand

# **Physical dimension**

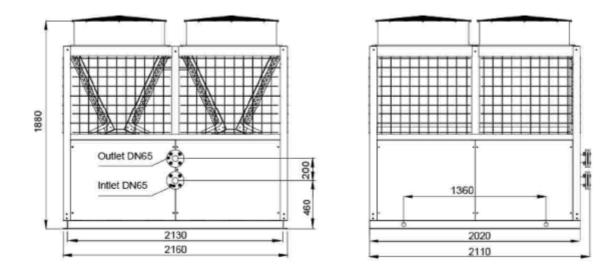
#### AMH60- 68-90

Height of 60/68 is 1870mm, height of 90 is 1980mm.

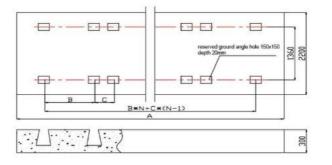




#### AMH136



#### Unit foundation:mm



	60	68	90	136
А	1350	1350	1350	2400
В	1030	1030	1030	2130
С	1	/	1	/
N	1	1	1	1

Note:

1. The foundation may (must be 150-300mm higher than ground level) be the concrete structure or the steel frame, and keep the foundation 2. Add a 20~30mm rubber shock pad between the unit and the foundation.

3. Design the foundation according operation weight of the unit.

4. Use the M16 foot bolt fix the unit.

5. Reserve more than 1.5m space around the unit, which is better for the circulation and the maintenance of the equipment.

# **Reference photos**







