# Water Cooled Scroll Chiller

# 80kW~160kW 🗱 💥 🔀 22.9Ton~45.7Ton





#### **Application areas**

■ Industry process, precision, traditional manufacturing, food processing, government project, pharmaceutical.

### Why this choice?

- High efficiency scroll compressor, shell and tube type and environment friendly R410a Refrigerant.
- Multi units parallel technology, more compressors parallel design to save more power, heat recovery function.
- Micro computer control, each modular unit running independently. Integrated control is an optional.



### **Characteristics**

The master module can work independently or together with up to 7 slave modules, flexible design, stable performance, easy maintenance.

Reusable: using solar energy stored in earth as cooling & heating source.

Panels and frame 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.

Shall and tube type evaporator, factory insulated with flexible close cell material. Shall and tube dry expansion type condenser, factory insulated with flexible close cell material. The refrigerant circuit is complete with filter drier, direct expansion valve, high and low pressure switch.

Acting as multi-function unit such as cooling, heating, with heat recovery function producing hot water for domestic use.

LCD display as standard Automatic operation dramatically reducing maintenance cost thanks to reliable microprocessor system.

Wide application as hotel, apartment, villa, factory, shopping center, office building, school, etc.



# Electric panel

consists of:

Compressor breaker

Compressor contactor

Phase sequence relay

Control circuit breaker

Microprocessor with function display

### **Optional**

Desuperheater as optional Electronic controller with BMS system.

### **Technical Data**

Model			WW80	WW120	WW160	
Water cooled conditions	Cooling capacity—	kW	80	120	160	
		Ton	22.9	34.2	45.7	
	Cooling power input(kW)		15.5	23.5	31.0	
Compressor	Туре		Danfoss/Copeland scroll compressor			
	Power input		380V/3N~50Hz			
	Qty		2	3	4	
User side heat exchanger	Туре		Shell and tube heat exchanger			
	Water resistance(kpa)			40-60		
	Fouling factor(m <sup>2</sup> .°C/kw)			0.086		
	Pipe size (mm)		DN65		DN80	
	Connection type			Flange		
	Water flow rate(m³/h)		13.8	20.5	27.5	
Source side heat exchanger	Туре		Shell and tube heat exchanger			
	Water resistance(kpa)		40-60			
	Fouling factor(m <sup>2.°</sup> C/kw)					
	Pipe size (mm)		DN65		DN80	
	Connection type					
	Water flow rate(m³/h)		16.5	24.5	32.8	
Dimension	Length(mm)		2110	2110	2530	
	Width(mm)		620	620	650	
	Height(mm)		1365	1365	1410	
Noise level≤dB(A)		67	67	67		
Unit weight (kg)		560	800	1050		

Note: 1. Cooling condition: User side water inlet/outlet  $12^{\circ}\text{C}/7^{\circ}\text{C}$ , Source side water inlet/outlet  $30^{\circ}\text{C}/35^{\circ}\text{C}$ .

2. Power supply: 3P-380V-50Hz.

