

# *Modular Air Cooled Inverter Chillers*



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### ***Gree Modular Air Cooled Inverter Chillers***

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The all new Modular A-Series Inverter Heat Pump Water Chillers are capable of performing cooling all year round with high energy efficiency. They do not require cooling towers and are quite applicable to water deficient areas.

These chillers can be widely used in new or retrofitted buildings of various sizes such as hotels, apartments, restaurants, office buildings, shopping malls, theatres, gyms, workshops and hospitals.

Gree have also created the new A-Series Inverter chillers so that they can chill a glycol mix to -5°C for use in cold stores, food processing areas, dairy processing, breweries and wineries.

Air cooled heat pumps for production of heating or cooling water with inverter scroll compressors, R410a, cooling capacity 32~130kW, heating capacity 36~140kW.

### Comfort and Energy Efficiency

The inverter technology can quickly respond to load changes and lead to decreased water temperature fluctuations and better comfort. This also leads to better energy usage.

### High Efficiency Shell and Tube Heat Exchanger

The Gree A-Series Inverter Chillers utilise high efficiency shell and tube heat exchangers. Internal baffles ensure the water mixes thoroughly in the heat exchanger to achieve a higher rate of heat transfer. The Gree heat exchangers provide advantages over other types of heat exchangers. The tube spacing virtually eliminates clogging due to foreign matter accumulating from poor water quality or scaling.

### Compressor Operation Balance

The Gree A-Series compressor operation technology ensures that each compressor operates in turn. This reduces the number of stop start cycles on an individual compressor to maximise their lifespan.

### Low Noise Fans

The high efficiency and low noise fan blades and motors as well as the optimized air passage can greatly lower the operation noise of the unit. The addition of a quiet mode also reduces night time noise for an ultra quiet environment.

### Gold Fin Coil

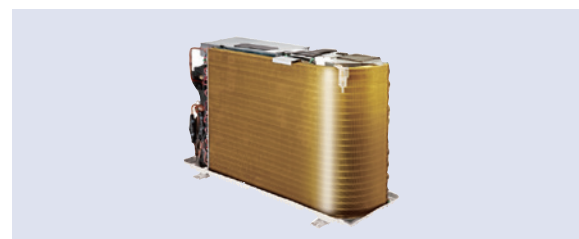
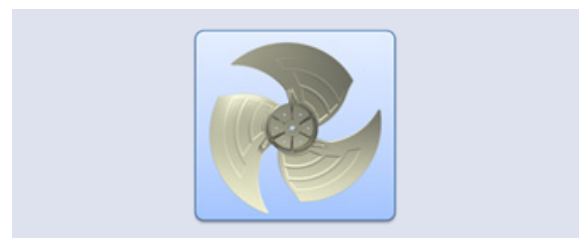
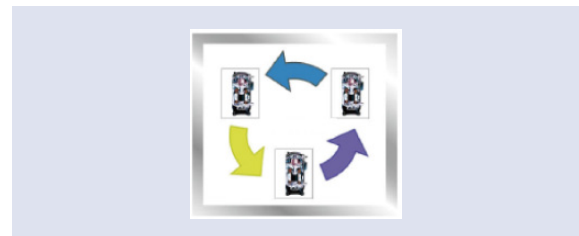
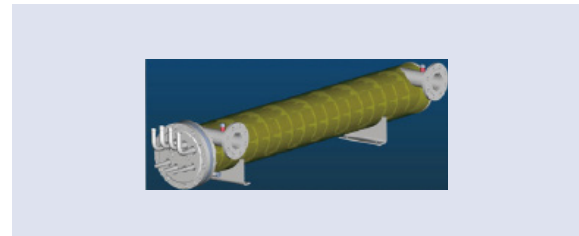
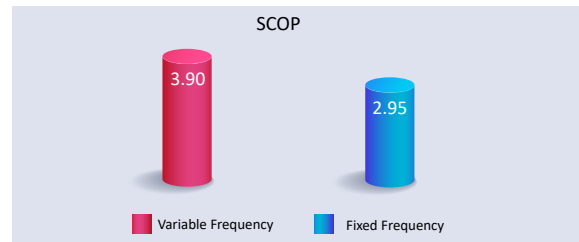
The new Gree A-Series Inverter Chiller features Gold Fin coating on the air cooled coil. This offers greater resistance to corrosive elements. Gold Fin coils perform 20x better under salt spray testing than Blue Fin coils. Gold Fin is a hydrophilic coating which repels water. As a result it improves the efficiency by accelerating the defrost process (when the unit is used for water heating).

### Remote On/Off

The unit can be started or stopped by the On/Off key operation.

### Twin Water Pumps (optional)

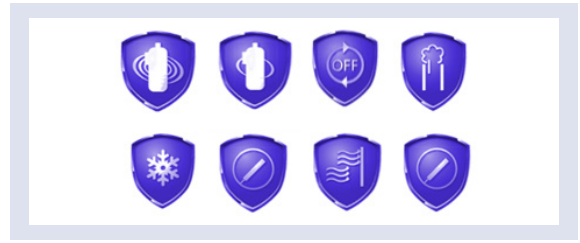
Two water pumps can work alternatively with equilibrium runtimes as to extend their service life and lower maintenance difficulty.



### **Advance Protection Functions**

Gree A Series Inverter Chillers are equipped with an advanced microcomputer control system complete with powerful error diagnostics. Some of the main protection functions are:

- Compressor HP
- Compressor Overload
- Antifreeze Control
- High Discharge Temperature
- Temperature Sensor Failure
- Compressor LP
- Overflow control
- Water flow protection
- Phase safety device



### **Flexible Capacity**

With the Gree A Series Inverter Chillers you can combine different units to achieve your required heating or cooling load. You can combine up to 16 units with a cooling capacity ranging from 32kW to 1040kW.



### **Gree XE73-25/G Microprocessor Controller**

This control panel has been especially designed for the A Series Inverter Chiller. It is capable of controlling and displaying all running parameters of the chiller. Gree have produced a standard controller for air conditioning and a low temp -5°C controller for low temperature processes. This controller can control up to 16 units and with Gree's Free Master connection there is timely communication with all units and a fault on one will not affect the operation of the other units.



### **Gree Intelligent Management System**

The long distance monitoring system allows users through a computer to remotely monitor up to 255 A series inverter chillers, including turning on /off the units, setting parameters, giving alarms for malfunctions, which provides an efficient tool for management of the intelligent air conditioning systems for modern buildings.



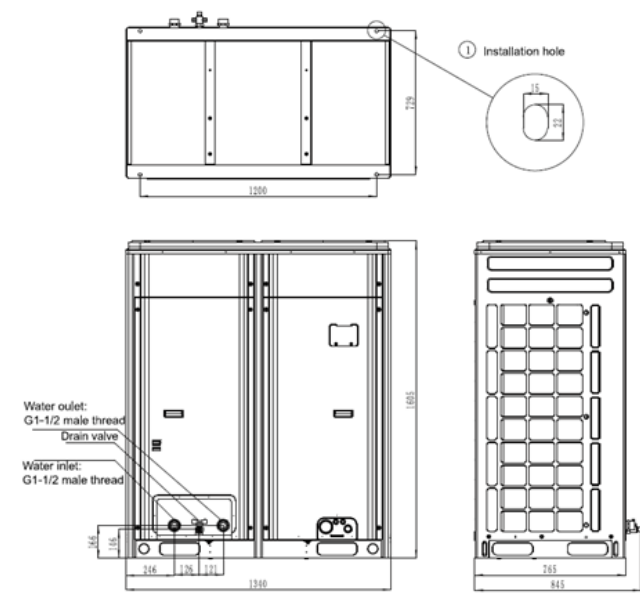
### **Environmentally Responsible**

Gree A-Series Inverter Chillers use R410a. R410a has a zero ozone depletion potential and is non flammable and non toxic. The Gree A-Series Inverter Chillers come pre-charged so the potential for refrigerant leaks is reduced. Gree chillers also use less refrigerant than a standard VRF system of a similar size.

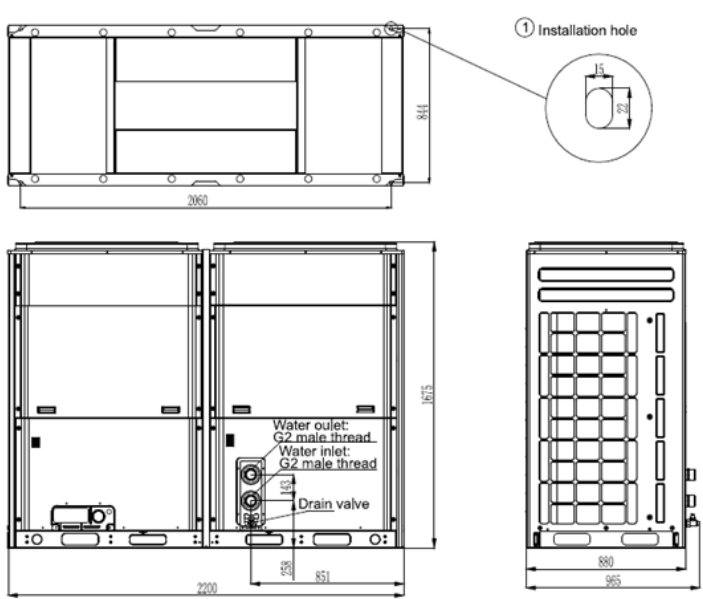


General Arrangement and Dimensions

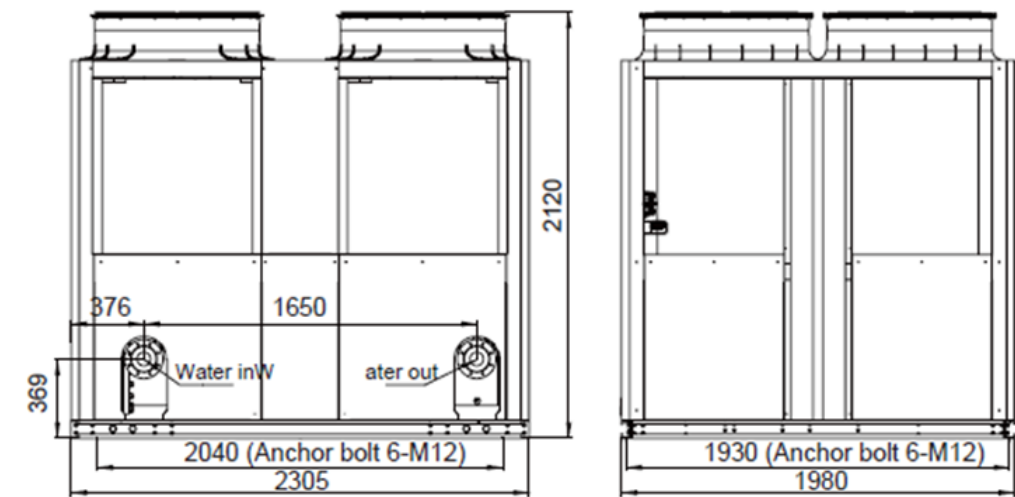
LSQWRF35VM/NaA-M (Unit:mm)



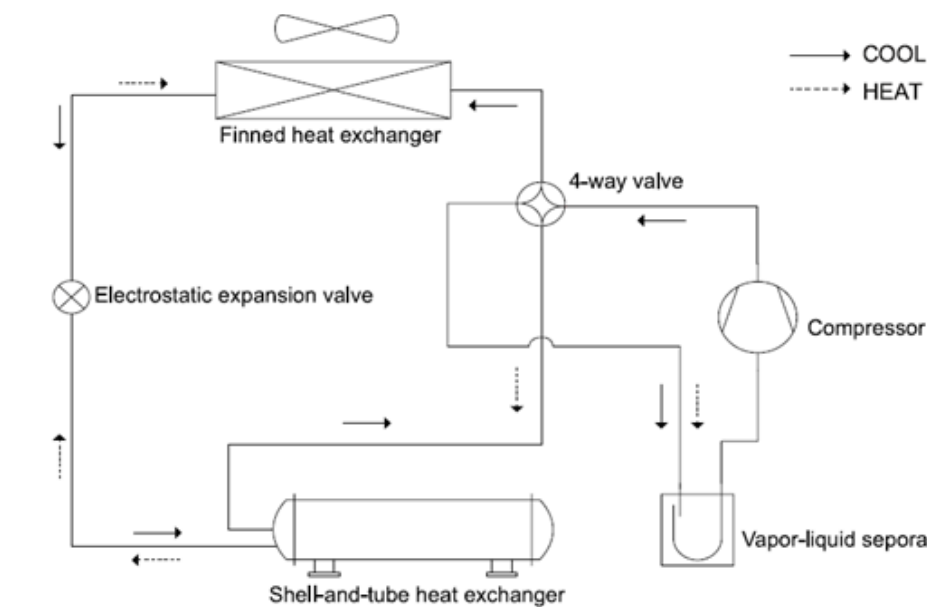
LSQWRF65VM/NaA-M (Unit:mm)



LSQWRF130VM/NaB-M (Unit:mm)



Principle Diagrams





## Specifications

Model			LSQWRF35VM/NaA-M	LSQWRF65VM/NaA-M	LSQWRF130VM/NaB-M
Series Type			Inverter Air-Cooled Scroll Chiller		
Capacity	Cooling / Heating	kW	32 / 36	65 / 70	130 / 140
Capacity Adjustment Range			0, 10~100%		
EER/COP		W/W	2.58 / 3.33	2.62 / 3.20	3.08 / 3.48
Power Supply		V/Hz/Ph	380-415 / 50 / 3		
Power Input	Cooling / Heating	kW	12.3 / 10.8	24.8 / 21.9	42.2 / 40.2
Current Input		A	20.0 / 17.9	38.4 / 34.6	64.1 / 61.1
Water Side Heat Exchanger	Type		Dry Expansion, Sheel + Tube		
	Water Flow	L/s	1.6	3.11	6.20
	Pressure Drop	kPa	75	60	60
	Connection Pipe		DN32 BSP	DN50 BSP	DN80 Flange
Air Side Heat Exchanger	Type		Aluminium Fin-Copper Tube		
	Fin Colour		Gold		
	Fan Type & Qty		Axial-flow x 2	Axial-flow x 2	Axial-flow x 4
	Power Output	kW	0.75	0.75	0.75
	Running Current	A	0.70	1.28	1.28
	Total Air Flow	m³/h	2x1.25x104	2x1.2x104	
Compressor Gree – Landa	Name		LANDA		
	Model + Qty		QXAS-H80zN345H x 1	QXAS-H80zN345H x 2	QXAS-H80zN345H x 4
	Crank Case	W	2x4		
	Oil Type		FV50S		
	Oil Charge Volume	L	1.800		
	Displacement	m³/h	23.04		
Sound Pressure Levels		dB(A)	62	67	69
Defrosting Method			Automatic		
R410a Refrigerant Charge		kg	7.8	7.8 x 2	7.8 x 4
Throttling Method			EXV		
Weights and Measures	Dimensions (L X W X H)	mm	1340 x 845 x 1605	2200 x 965 x 1675	1980 x 2305 x 2190
	Net Weight	kg	379.0	654.0	1270.0
	Operating Weight	kg	416.9	719.4	1397.0
Water Side					
	Nominal Operating Condition		Operating Range		
	Inlet Water °C	Outlet Water °C	Outlet Water °C	Differential °C, Inlet & Outlet	
Cooling	12	7	5~20	2.5~6	
Heating	40	45	35~50	2.5~6	
Air Side					
	Nominal Operating Condition		Operating Range		
	Outdoor (DB°C)		Outdoor (DB°C)		
Cooling	35		-15~52		
Heating	6		-20~40		

Nominal test conditions:

Cooling: Ambient Temp 35°C DB, Water Temp 12°C EWT/7°C LWT

Heating: Ambient Temp 7°C DB/6°C WB, Water Temp 40°C EWT/45°C LWT

Technical specifications are tested under laboratory conditions and may differ as a result of installation or application.



For Installation and Sales

For Parts and Warranty



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