GREE

Smart air for smarter living

Modular Air Cooled Heat Pump Inverter Chillers

5°C-20°C Cool

35°C-50°C Heat

R32

2 GREE YEAR WARRANTY

Find out more at www.greeac.co.nz

Gree Modular Air Cooled Inverter Chillers

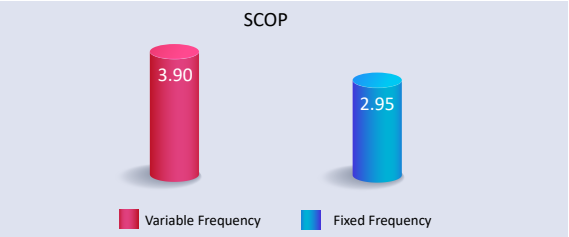
The all new Modular A-Series Inverter Heat Pump Water Chillers are capable of performing cooling all year round with high energy efficiency. They do not require cooling towers and are quite applicable to water deficient areas.

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.

Air cooled heat pumps for production of heating or cooling water with inverter scroll compressors, R32, cooling capacity 32~130kW, heating capacity 36~140kW.

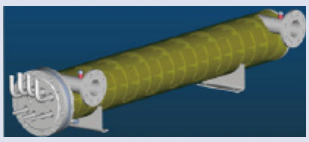
Comfort and Energy Efficiency

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

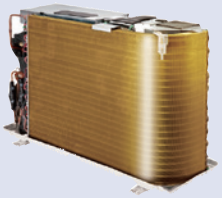
The Gree A-Series compressor operation technology ensures that each compressor operates in turn. This reduces the number of stop start cycles on an individual compressor to maximise their lifespan.

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 quite 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.



Remote On/Off

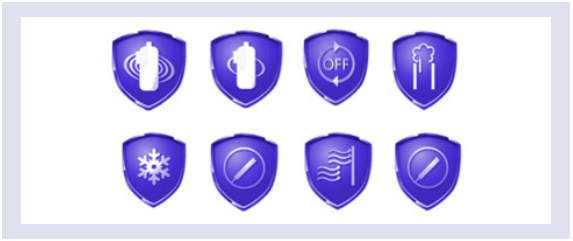
The unit can be started or stopped by the On/Off key operation.

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 cooling load. You can combine up to 16units 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. 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. Modbus compatible.

Gree Intelligent Management System

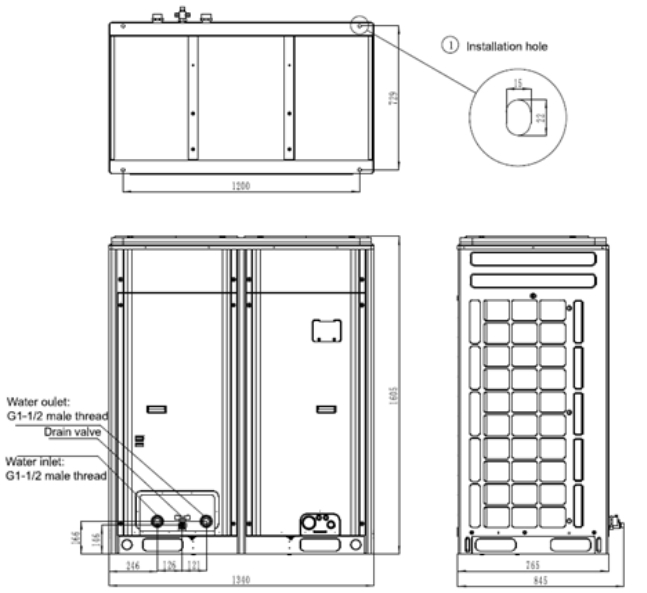
The long distance monitoring system allows users through a computer to remotely monitor up to 255 A series inverter chillers, including turning on /off the units, setting parameters, giving alarms for malfunctions, which provides an efficient tool for management of the intelligent air conditioning systems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

Environmentally Responsible

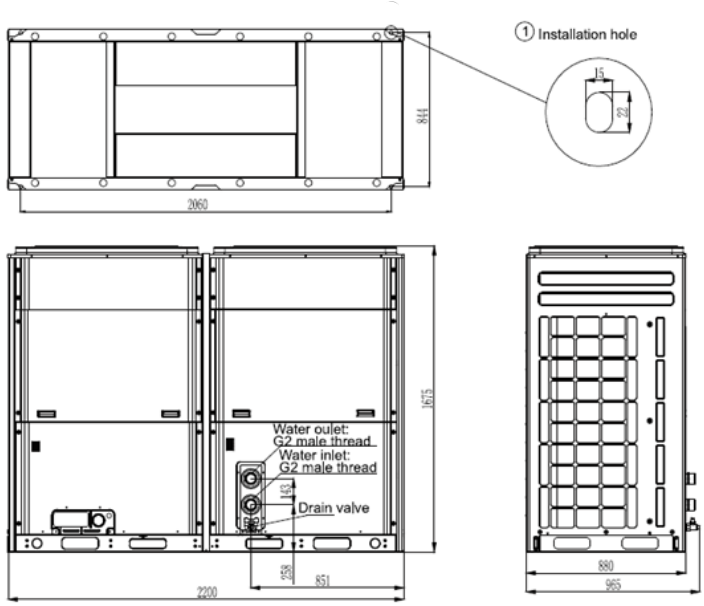
The Gree heat pump inverter chiller range uses R32 Refrigerant. R32 refrigerant is a better environmental option when compared to R410a as R32 refrigerant has a 68% lower Global Warming Potential (GWP). R32 also has superior energy efficiency, a higher refrigeration capacity and thermal conductivity so the refrigerant charge is also 30% less than R410a.

General Arrangement and Dimensions

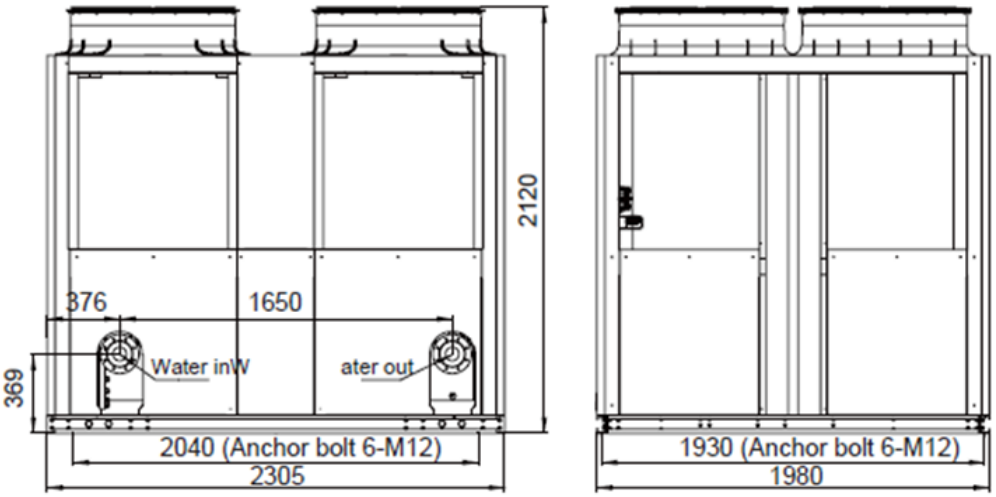
LSQWRF35VM/NhA-M (Unit:mm)



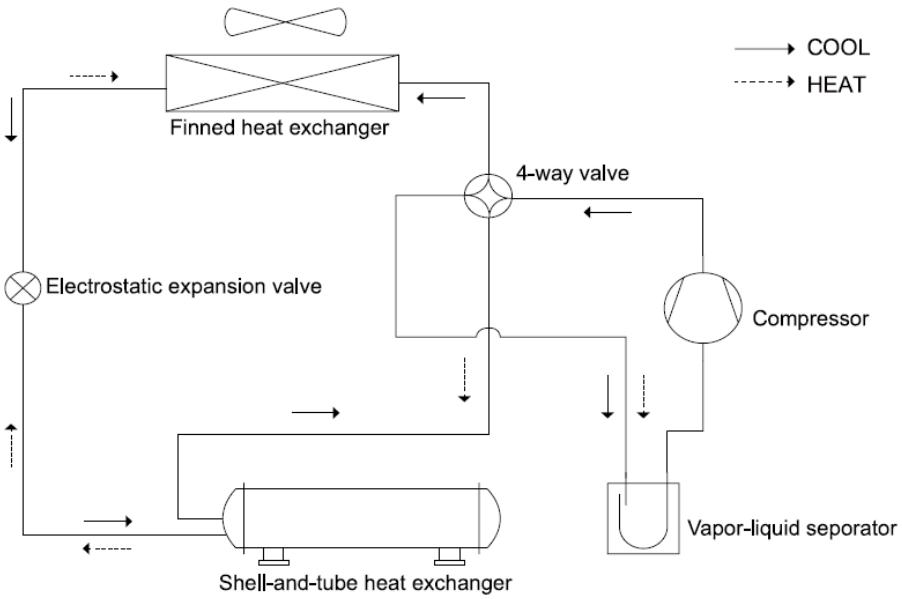
LSQWRF60VM/NhA-M (Unit:mm)



LSQWRF130VM/NhA-M (Unit:mm)



Principle Diagram

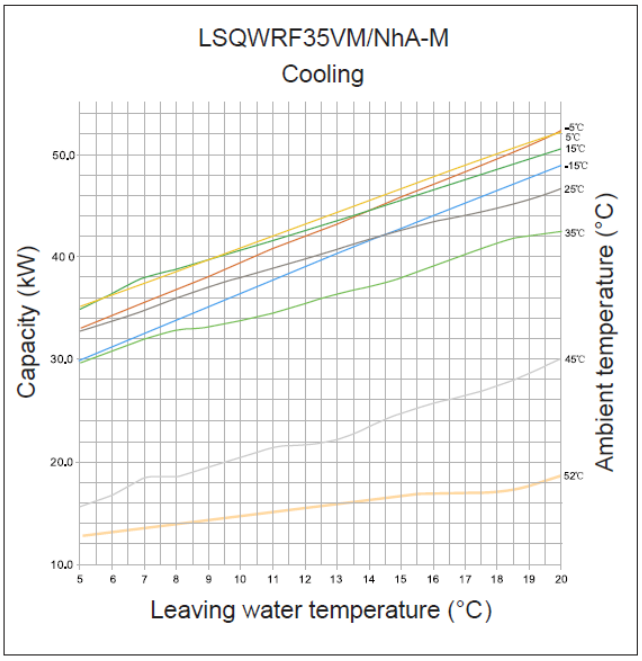


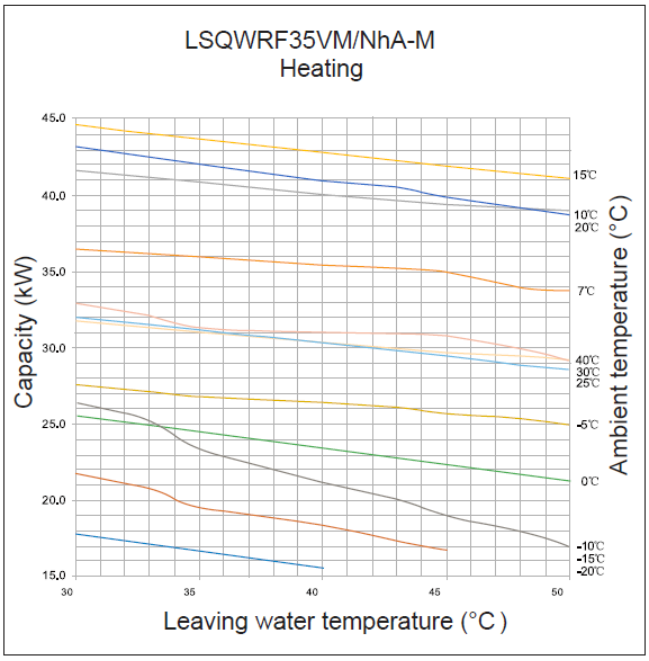
Water Quality and Treatment

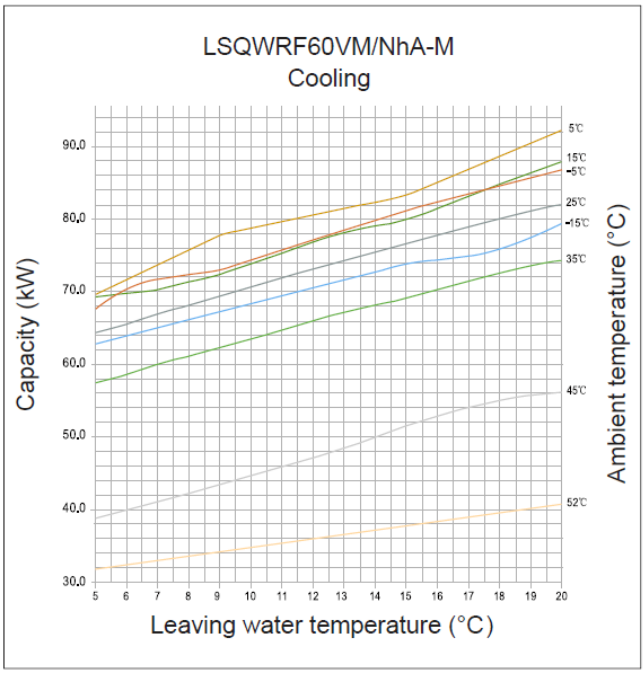
Given the distinctive characteristics of copper and steel in water systems, it is crucial to prioritise water quality monitoring.

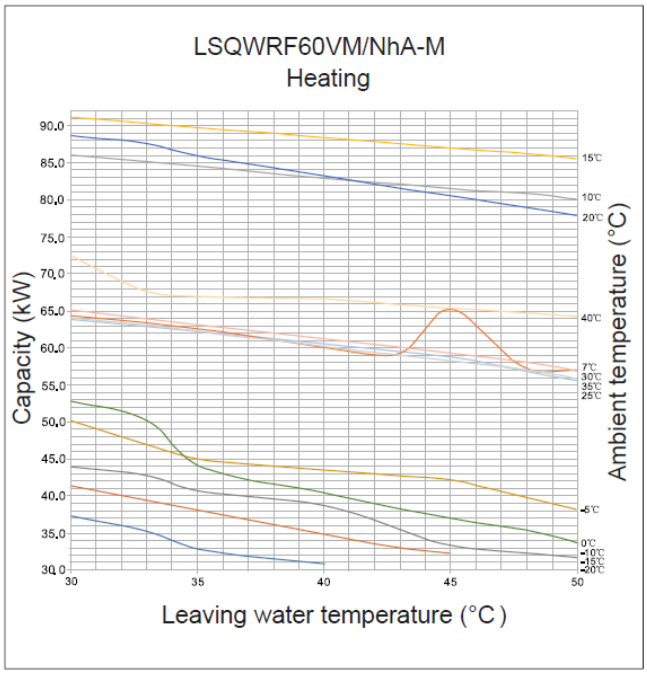
The recommended pH range is 6.8-8. Additionally, it is advised to consult the installation manual for comprehensive guidance on meeting all water quality requirements.

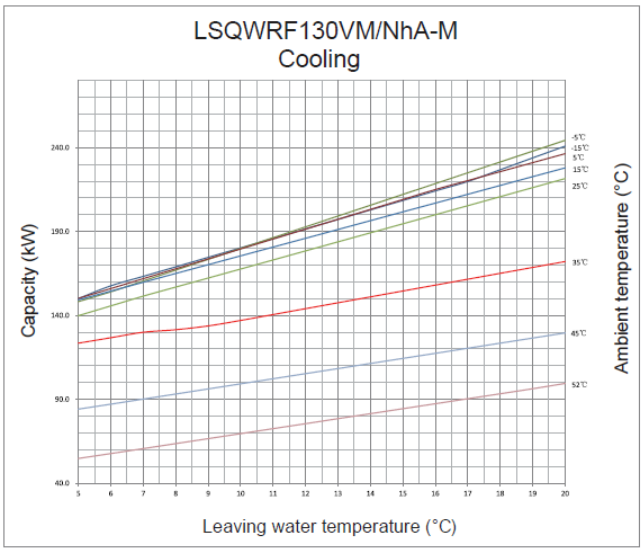
Cooling and Heating Ambient Temperature

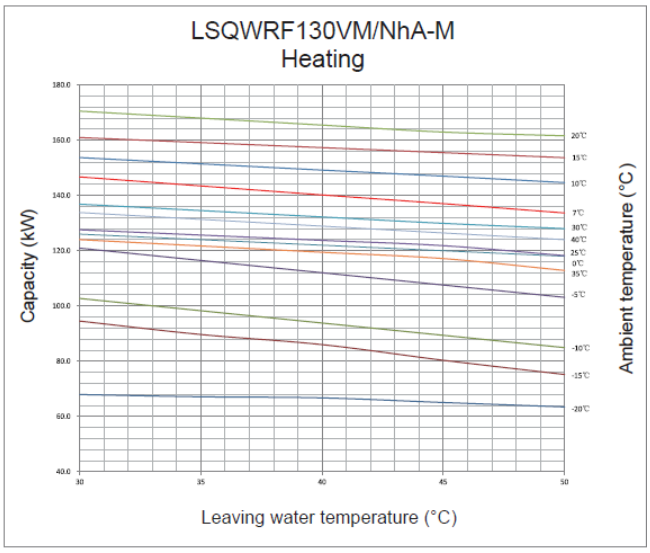












Specifications

Model			LSQWRF35VM/NhA-M	LSQWRF60VM/NhA-M	LSQWRF130VM/NhA-M
Series Type			Inverter Air-Cooled Scroll Chiller		
Capacity	Cooling / Heating	kW	32 / 35	60 / 65	130 / 137
Capacity Adjustment Range			0, 10~100%		
EER/COP		W/W	2.74 / 3.30	2.88 / 3.27	2.96 / 3.34
Power Supply		V/Hz/Ph	380-415 / 50 / 3		
Power Input	Cooling / Heating	kW	11.7 / 10.6	20.8 / 19.9	43.9 / 41
Current Input		A	19.2 / 17.5	32.9 / 30.7	67.4 / 62.9
Water Side Heat Exchanger	Type		Dry Expansion, Sheel + Tube		
	Water Flow	L/s	1.53	2.86	6.21
	Pressure Drop	kPa	75	55	60
	Connection Pipe	mm	G 1.1/4 ext thread	G 2 ext thread	DN80
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	2x6300	2x12000	4x15500
Compressor Gree – Landa	Name		LANDA		
	Model + Qty		QXAS-H80zN345H x 1	QXAS-H80zN345H x 2	QXAS-H80zN345H x 4
	Crank Case	W	2x40		
	Oil Type		FV50S		
	Oil Charge Volume	L	1.800		
	Displacement	m³/h	23.04		
Sound Pressure Levels		dB(A)	62	68	69
Defrosting Method			Automatic		
R32 Refrigerant Charge		kg	5.5	5.5 x 2	5.5 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	2305 x 1980 x 2120
	Net Weight	kg	405	686	1286
	Operating Weight	kg	445	755	1413
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	7		-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.

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For Installation and Sales:

For Parts and Warranty:

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