GREE
AIR CONDITIONERS

Modular Air Cooled Process Inverter Chillers

32kW

65kW

125kW

-10°C operation with Glycol

Up to 1040kW Combination

2 GREE YEAR WARRANTY

Find out more at www.greeac.com.au

Gree Modular Air Cooled Inverter Chillers

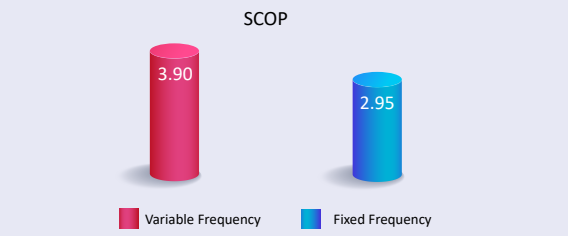
The all new Modular A-Series Inverter Water Chillers are capable of performing cooling all year round with high energy efficiency. They do not require cooling towers and are quite applicable to water deficient areas.

These chillers can be widely utilised with glycol mix down to -10°C in a range of different applications from cold stores, food processing areas, dairy processing breweries and wineries.

Air cooled chillers produce chilled water with inverter scroll compressors, R410a, cooling capacity 32~130kW.

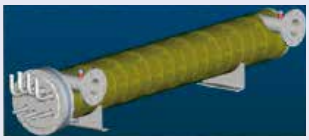
Comfort and Energy Efficiency

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

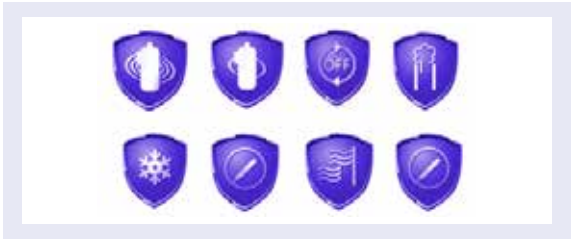
The unit can be started or stopped by the On/Off key operation.

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. Gree have produced a standard controller for air conditioning and a low temp -10°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. Modbus compatible.

Gree Intelligent Management System

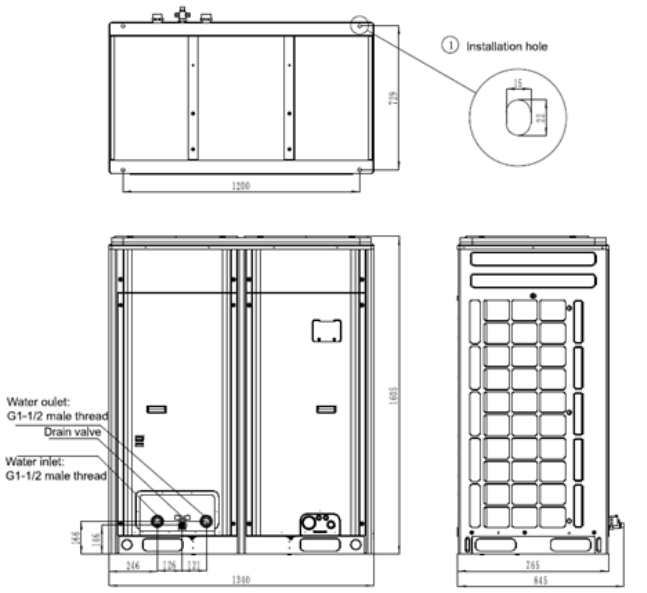
The long distance monitoring system allows users through a computer to remotely monitor up to 255 A series inverter chillers, including turning on /off the units, setting parameters, giving alarms for malfunctions, which provides an efficient tool for management of the intelligent air conditioning systems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

Environmentally Responsible

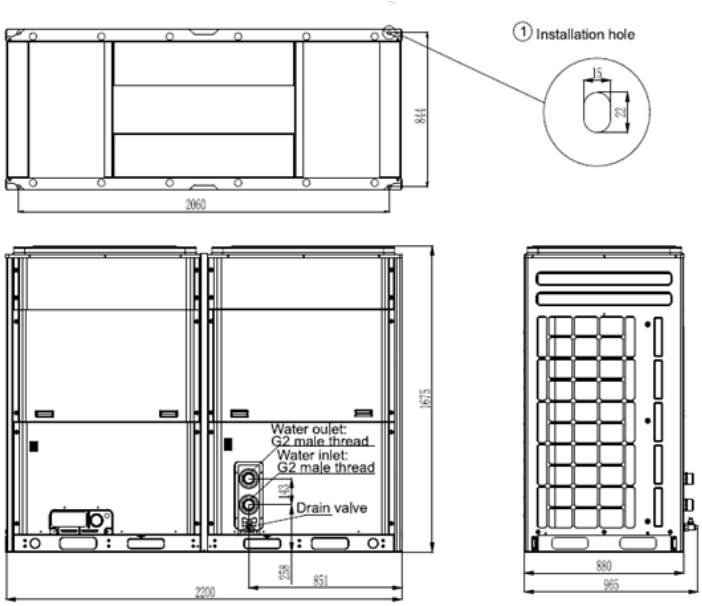
Gree A-Series Inverter Chillers use R410a. R410a has a zero ozone depletion potential and is non flammable and non toxic. The Gree A-Series Inverter Chillers come pre-charged so the potential for refrigerant leaks is reduced. Gree chillers also use less refrigerant than a standard VRF system of a similar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

General Arrangement and Dimensions

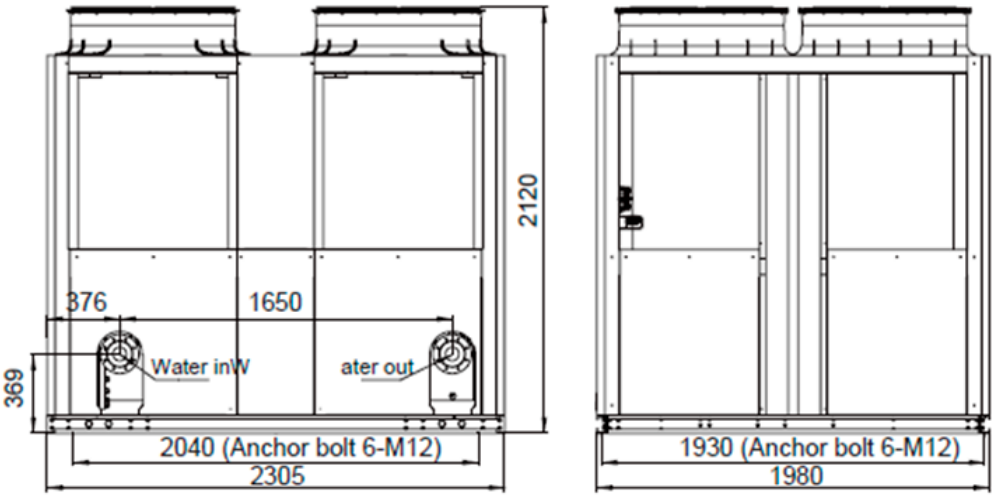
LSQWF35VM/NaA-M (Unit:mm)



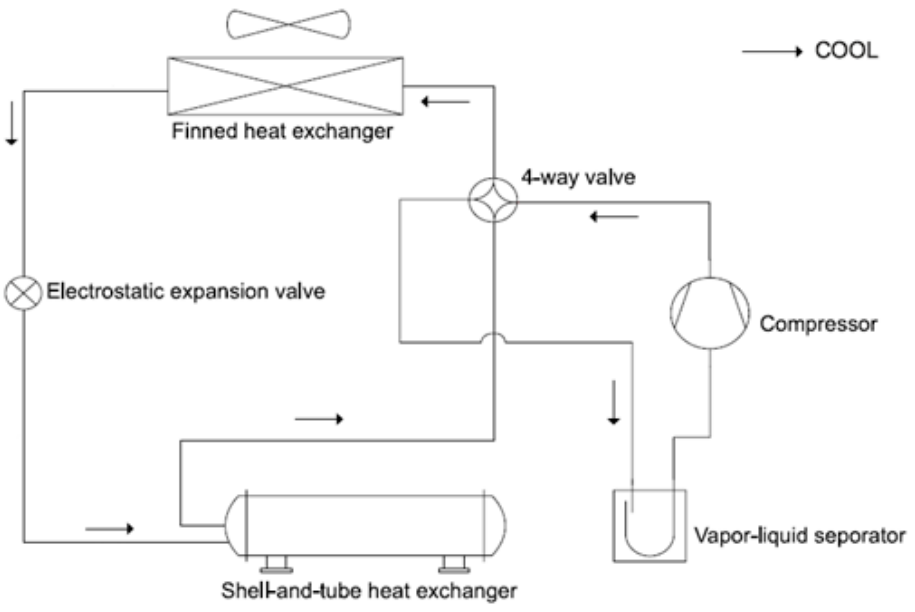
LSQWF65VM/NaA-M (Unit:mm)



LSQWF130VM/NaA-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 Capacity Correction

LSQWF35VM/NhA-M Cooling Capacity Correction																
	Ambient Temperature °C															
Water Outlet °C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	33°C	35°C	37°C	40°C	45°C	52°C
-10	12.01	13.32	13.52	14.19	14.60	14.32	14.22	13.82	13.62	13.14	12.16	11.11	10.04	8.63	4.33	2.27
-5	15.94	17.42	17.62	18.39	18.87	18.56	18.46	18.04	17.84	17.39	16.34	15.21	14.06	12.43	7.23	4.95
0	21.85	23.55	23.77	24.66	25.23	24.88	24.78	24.32	24.12	23.67	22.52	21.27	19.99	18.07	11.69	9.07
5	30.02	31.97	33.09	34.14	35.14	35.04	34.94	33.86	32.74	32.32	31.07	29.70	28.29	26.02	15.74	12.80
6	31.30	33.09	34.37	35.36	36.29	36.13	36.45	34.85	33.66	32.96	31.71	30.82	28.86	27.01	16.77	13.18
7	32.61	34.21	35.65	36.58	37.44	37.22	37.98	35.87	34.78	34.02	32.86	32.00	29.98	28.00	18.40	13.60
8	33.89	35.33	36.93	37.82	38.59	38.30	38.82	36.83	35.90	35.04	33.86	32.83	30.88	29.22	18.62	13.98
9	35.20	36.67	38.18	39.01	39.74	39.39	39.71	37.82	37.06	36.03	34.91	33.22	31.78	30.37	19.49	14.37
11	37.79	39.33	40.86	41.44	42.05	41.57	41.66	39.81	38.85	37.70	36.32	34.59	33.28	31.90	21.34	15.17
13	40.42	41.82	43.23	43.78	44.35	43.74	43.58	41.79	40.70	39.30	37.73	36.38	34.78	33.41	22.21	15.97
15	42.88	44.42	45.92	46.21	46.66	45.92	45.60	43.78	42.72	41.12	39.81	38.02	36.10	35.49	24.77	16.74
18	46.56	48.10	49.60	49.89	50.11	49.44	48.58	46.75	44.70	43.62	42.21	41.38	38.53	37.60	27.46	17.12
20	48.96	52.54	52.45	52.32	52.19	51.39	50.59	48.51	46.62	45.92	43.84	42.56	40.16	39.01	30.11	18.72

LSQWF65VM/NhA-M Cooling Capacity Correction																
	Ambient Temperature °C															
Water Outlet °C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	33°C	35°C	37°C	40°C	45°C	52°C
-10	35.56	38.16	38.81	39.85	40.17	39.59	39.20	37.90	37.18	35.04	32.37	29.71	26.98	24.38	15.86	8.45
-5	44.01	46.61	47.26	48.30	48.62	48.04	47.65	46.35	45.63	43.49	40.82	38.16	35.43	32.83	24.31	16.90
0	54.41	57.01	57.66	58.70	59.02	58.44	58.05	56.75	56.03	53.89	51.22	48.56	45.83	43.23	34.71	27.30
5	68.06	70.66	73.26	74.30	75.27	75.34	74.95	72.35	69.68	67.54	64.87	62.21	59.48	56.88	41.86	34.45
6	69.23	72.28	76.05	75.86	77.48	76.38	75.53	73.65	70.92	67.67	66.17	63.44	60.84	58.05	43.10	35.10
7	70.40	73.65	77.48	77.42	79.69	77.35	76.12	74.82	72.54	69.16	67.28	65.00	62.79	59.22	44.33	35.75
8	71.57	74.82	78.20	78.98	81.90	78.52	77.29	76.38	73.84	70.40	68.64	66.24	65.07	60.39	45.70	36.40
9	72.74	75.99	78.91	80.54	84.11	79.82	78.39	77.68	75.14	71.70	69.88	67.47	65.39	61.56	46.93	37.05
11	75.08	79.11	81.90	83.66	86.13	82.94	81.51	80.21	77.81	74.23	72.67	70.07	67.47	63.90	49.60	38.35
13	77.42	82.23	84.83	86.78	88.21	86.13	84.63	83.07	80.47	77.03	75.21	72.74	70.14	66.24	52.46	39.65
15	79.76	85.28	87.75	89.90	90.29	89.38	86.58	86.84	83.01	79.43	77.81	74.82	72.22	68.58	55.71	40.89
18	82.10	88.14	91.46	94.58	96.07	93.08	91.78	89.44	86.65	83.72	81.71	78.59	75.99	71.31	59.54	42.84
20	85.93	90.03	93.93	97.83	99.91	95.68	95.16	91.98	88.79	86.91	84.18	80.54	77.68	74.75	60.78	44.14

LSQWF130VM/NhA-M Cooling Capacity Correction																
	Ambient Temperature °C															
Water Outlet °C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	33°C	35°C	37°C	40°C	45°C	52°C
-10	68.41	73.41	74.66	76.66	77.29	76.16	75.41	72.91	71.53	67.41	62.28	57.15	51.90	46.90	30.51	16.26
-5	84.67	89.67	90.92	92.92	93.54	92.42	91.67	89.17	87.79	83.67	78.54	73.41	68.16	63.16	46.77	32.52
0	104.68	109.68	110.93	112.93	113.55	112.43	111.68	109.18	107.80	103.67	98.55	93.42	88.17	83.16	66.78	52.53
5	130.94	135.94	140.94	142.94	144.82	144.94	144.19	139.19	134.06	129.94	124.81	119.68	114.43	109.43	80.54	66.28
6	133.19	139.07	146.32	145.95	149.07	146.95	145.32	141.69	136.44	130.19	127.31	122.06	117.06	111.68	82.91	67.53
7	135.44	141.69	149.07	148.95	153.32	148.82	146.45	143.94	139.57	133.06	129.44	125.06	120.81	113.93	85.29	68.78
8	137.69	143.94	150.45	151.95	157.58	151.07	148.70	146.95	142.07	135.44	132.06	127.44	125.19	116.18	87.92	70.03
9	139.94	146.20	151.82	154.95	161.83	153.57	150.82	149.45	144.57	137.94	134.44	129.81	125.81	118.43	90.29	71.28
11	144.44	152.20	157.58	160.95	165.70	159.58	156.83	154.32	149.70	142.82	139.82	134.81	129.81	122.93	95.42	73.79
13	148.95	158.20	163.20	166.96	169.71	165.70	162.83	159.83	154.82	148.20	144.69	139.94	134.94	127.44	100.92	76.29
15	153.45	164.08	168.83	172.96	173.71	171.96	166.58	167.08	159.70	152.82	149.70	143.94	138.94	131.94	107.18	78.66
18	157.95	169.58	175.96	181.96	184.84	179.09	176.58	172.08	166.70	161.08	157.20	151.20	146.20	137.19	114.55	82.41
20	165.33	173.21	180.71	188.22	192.22	184.09	183.09	176.96	170.83	167.21	161.95	154.95	149.45	143.82	116.93	84.92

Specifications

Model			LSQWF35VM/NaA-M	LSQWF65VM/NaA-M	LSQWF130VM/NaA-M
Series Type			Modular Air Cooled Scroll Chiller		
Cooling Capacity		kW	32.00	65.00	125.00
Capacity Adjustment Range		%	31.25%~100%	15.625%~100%	8.44%~100%
EER		W/W	2.58	2.62	2.78
Power Supply		V/Hz/Ph	380-415 / 50 / 3		
Power Input	Cooling	kW	12.4	24.8	44.9
Rated Power Input		kW	13.4	28.8	56.0
Cooling Current Input		A	20	34.6	72.0
Safety Protection			High-low pressure protection, discharge temp. protection, motor overload protection, anti-freeze, water flow protection, phase-sequence protection, compressor overload protection		
Water Side Heat Exchanger	Type		Dry Expansion, Sheel + Tube		
	Water flow volume	l/s	1.52	3.1	6.2
		GPM	24	49	99
	Pressure drop	kPa	75.00	60.00	60.00
	Design Pressure(shell side)	kPa	1600	1600	1000
	Design Pressure(tube side)	kPa	4600	4600	4600
	Water in/outlet Pipe Diameter	mm	DN32	DN50	DN80
Air Side Heat Exchanger	Type		Aluminium Fin-Copper Tube		
	Fan Type & Qty		Axial-flow x 2	Axial-flow x 2	Axial-flow x 4
	Power Output	kW	0.75	0.75	0.75
	Total Air Flow	m³/h	2×6300	2×12000	4×15500
Compressor Gree – Landa	Brand		LANDA		
	Model x Qty		QXAS-H80zN345H x 1	QXAS-H80zN345H x 2	QXFS-H80zN345K x 4
	Oil Type		Inverter Rotary		
Refrigerant	Type		R410A		
	Charge Volume	kg	7.8	7.8×2	7.8×4
Sound Pressure Levels		dB(A)	62	68	69
Dimension	Outline(WxDxH)	mm	1340×845×1605	2200×965×1675	2305×1980×2190
	Package(WxDxH)	mm	1420×920×1775	2267×1030×1030	2365×2040×2190
Net Weight		kg	379.0	689.0	1320.0
Gross Weight		kg	391.0	725.0	1383.5
Operating Weight		kg	416.9	757.9	1447.0
Water Side Nominal Operating Condition	Inlet Water Temp.(°C)	Cooling	12	12	12
	Outlet Water Temp.(°C)	Cooling	7	7	7
Water Side Operating Range	Outlet Water Temp.(°C)	Cooling	-10~20	-10~20	-10~20
	Temp. Difference between Inlet&Outlet (°C)	Cooling	2.5~6	2.5~6	2.5~6
Air Side Nominal Operating Condition	Outdoor Temp. (DB °C)	Cooling	35	35	35
Air Side Operating ange	Outdoor Temp. (DB °C)	Cooling	-15~52	-15~52	-15~48

Nominal test conditions:
Cooling: Ambient Temp 35°C DB, Water Temp 12°C EWT/7°C LWT
Technical specifications are tested under laboratory conditions and may differ as a result of installation or application.

2 GREE YEAR WARRANTY

For Installation and Sales:

For Parts and Warranty:

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