



GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

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Note:

Gree is committed to continuously improving its products to ensure the highest quality and reliability standards, and to meet local regulations and market requirements.

All features and specifications are subject to change without prior notice.

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Distributor information



CAC

T1 50/60Hz
R32/R410A/R134a

ABOUT GREE

Gree Electric Appliances, Inc. of Zhuhai was founded in 1991 and was listed on the Shenzhen Stock Exchange in November 1996. At the beginning, Gree was only a company that assembled residential air conditioners. Now it has grown into a diversified global technological industrial group that has expanded its business to air conditioners, home appliances, high-end equipment and communication equipment under three brand names: GREE, KINGHOME and TOSOT. Gree is the number one brand of air conditioners in the world in 2019*.

2005

Gree has topped No.1 in production and sales volume of residential air conditioners for 14 consecutive years.

2015

Gree's sales revenue exceeded 15.08 billion USD.

2016

Gree's sales revenue exceeded 16.51 billion USD.

2017

Gree's sales revenue exceeded 22.21 billion USD.

2018

Gree entered into the list of Forbes Global 2000 again and ranked No. 294, moving up 70 places compared with the previous year.

Gree's sales revenue exceeded 30.23 billion USD.

2019

Gree entered into Fortune Global 500. Gree' s return on equity (ROE) ranked the first among the 129 Chinese enterprises on the list.

2020

Gree has ranked the 436th on the list of Fortune Global 500.

Thanks to 400 million users' choices, Gree brands are sold widely to more than 160 countries and regions.

Action makes the future and innovation makes achievement. Looking forward, Gree will press ahead with its business philosophy of passion, innovation and realization. We aim to build a centenary air conditioning enterprise and create a better life for humankind..

*Gree is the number one brand of air conditioners in the world in 2019

Footnote: "Source Euromonitor International Limited; Consumer appliances 2020ed; retail volume sales in units, 2019 data."

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SOME PARTS

-  **Golden fin condenser**
Anti-corrosive performance of golden fin is 3 times better than normal fin.
-  **Inner groove copper**
Special thickened inner groove copper tube enhances heat exchanging performance.
-  **Built-in drain pump**
The drain pump can pump the condensation to a high level. It facilitates condensation draining from the indoor unit and makes the installation of indoor unit easier.
-  **Washable filter**
Filters are easy to dismantle and install. You can use dirt collector or water to clear away the dust.

-  **Quality motor**
Quality motor makes operation steady and in low noise.
-  **Auxiliary electric heater**
Auxiliary heater greatly improves heating capacity and saves energy.
-  **Slave and master wired controller**
One indoor unit can be connected with two wired controllers to realize controlling of the same indoor unit from different control points.
-  **Long connection pipe design**
The total length of connection pipe reaches 1000m, which greatly improves the project flexibility of the unit.

COMFORTABLE & HEALTHY

-  **Vertical swing**
Air discharge flaps can move vertically for efficient air and temperature distribution throughout the room.
-  **Horizontal swing**
Air discharge louver can move horizontally for efficient air and temperature distribution throughout the room.
-  **Anti-cold function**
The indoor unit will not blow in the winter if the air is not warm enough.
-  **Turbo function**
To run with strong power and make you feel comfortable(cool or warm) quickly.

-  **Fresh air supply ventilation**
The unit can introduce a certain percentage of fresh air to satisfy the fresh air requirement.
-  **Comfortable sleeping mode**
The setting temperature and the indoor noise can be adjusted to a more comfortable level when you set the "sleeping mode".
-  **Quiet function**
Unit is ensured to operate with the lowest noise by ultra-low fan speed and auto adjustment according to system parameter.

HIGH EFFICIENCY & ENERGY SAVING

-  **High efficiency**
The air conditioner is designed to high energy efficiency and to realize power saving.
-  **Intelligent defrosting**
It performs defrosting intelligently when necessary, thus improving heating efficiency and saving energy.
-  **Energy saving function**
When this function is activated, the temperature setting is only in limited range, so as to save energy.
-  **All DC inverter technology**
All motors adopt DC inverter technology, which greatly improves energy efficiency.

CONVENIENCE

-  **Memory function**
Unit is able to remember the operations before power failure and automatically returns to those operations when power restored.
-  **Compact design**
Unit is designed with smaller dimension, which is easy to install and transport, and saves the cost.
-  **Easier maintainability**
The unit is designed to be easier for maintenance and component replacement.
-  **Auto addressing technology**
The new generation of indoor unit applies auto addressing technology, which greatly reduces project debugging time and error rate.

RELIABILITY

-  **Auto clean**
After turning off unit , the indoor fan will keep running in low speed for a moment to dry the inner components and parts, in order to prevent mildew and keep users healthy.
-  **Self-diagnosis**
Malfunction codes are shown on the display panel for fast and easy maintenance when any problem occurs.
-  **Low voltage startup**
Unit is able to safely start when voltage is below standard.

-  **Low temperature heating**
Unit is able to start and operate in normal when the ambient temperature is lower than -20℃ and heating capacity remains still.
-  **Modular operating**
Several units can operate together as modules, so that capacity output control is more precise, and also higher reliability.
-  **Comprehensive protection**
The unit is designed with various of protection functions to ensure the reliability.

VERSATILITY

-  **High ESP**
The external static pressure range is higher, which ensures longer delivery distance for air to provide powerful cooling.
-  **Wide voltage range**
The unit can operate in a wide range of voltage, greatly reducing the impact of voltage fluctuation.
-  **Wide operation range**
Unit can operate in wide range, greatly reducing the ambient temperature limitation.

-  **Multi fan speed**
The fan can operate with multi speeds and satisfy different air flow volume requirement.
-  **Modular structure**
High efficiency compressor presents reliable performance.

CONTROLLER

-  **24 hour timer**
Unit can be set to turn on or turn off at anytime in a day.(The timing interval is 5-minute.)
-  **Weekly timer**
Unit can be set to start heating or cooling anytime on a daily or weekly basis.
-  **°C/°F switch**
Under status of unit off, press MODE and "-" buttons simultaneity to switch °F.
-  **Clock display**
Time is shown on remote controller .
-  **Child lock**
It avoids child's wrong operation on the remote controller.
-  **Key-card control**
The key-card control function is specially designed for the hotel rooms. By removing the key-card, the air conditioner can be automatically switched to stand-by status.

-  **Centralized control**
Starts, stops and regulates the air conditioner from a distance.
-  **Long-distance monitoring**
Long-distance monitoring enables the unit to be controlled and monitored from a long distance.
-  **Shield function**
Remote control the indoor unit and shield the functions of wired controller which include ON/OFF, temp or mode setting, energy-saving function, etc.
-  **Human engineering operation**
Adopts the technologies of auto addressing, non-polar communication and auto debugging, which improves project efficiency.
-  **Floor Heating Debugging**



LIGHT COMMERCIAL AC

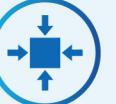
U-Match

Big Duct Type Unit

U-Match Inverter Series Cooling Only (for Singapore)

It is a kind of split system that the outdoor unit can be connected to various indoor unit(duct,cassette type)with its cooling capacity from 5kW to 12kW.



	Turbo function		High efficiency		Memory function		Compact design		All DC inverter technology		Easier maintainability
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» All DC inverter compressor and DC motor are adopted, the energy efficiency of unit is higher.

» With quick cooling function.

» Compact design: the tallest outdoor unit with a single fan is only 820mm.

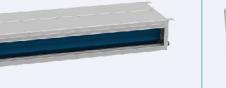
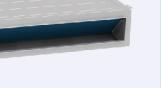
Duct type

- » Wired controller can adjust the static pressure according to the engineering requirements.
- » Fresh air interface reserved.
- » Built-in water pump optional.

Cassette type

- » 360° air discharge panel.
- » DC motor and DC water pump, high-efficiency and energy-saving.
- » Water pump lift is up to 1000mm.
- » Only 570mm for 12K and 18K cassette unit.

Units Lineup

Capacity Index	18K	24K	30K	42K
Outdoor unit				
Duct				
Indoor unit				
Cassette				

Item	Nominal operating condition(temperature)				Operating range(temperature)	
	Outdoor condition		Indoor condition			
	DB(°C)	WB(°C)	DB(°C)	WB(°C)		
Cooling	35	24	27	19	5-48	

Specifications

Model	Outdoor unit		GULD18W/NhB-K(P)	
	Indoor unit		Cassette	
			GULD18T/B-K(P)	
Capacity	Cooling	kW	5.00	
		Btu/h	17100	
EER		W	4.36	
Power supply		V/Ph/Hz	230V ~50Hz	
Power input	Cooling	kW	1.15	
Current input	Cooling	A	5.40	
Refrigerant charge volume		kg	1.60	
Indoor unit	Air flow volume		CFM	647/618/559/500
		m³/h		1100/1050/950/850
	ESP	Rated	Pa	-
		Range	Pa	-
Panel	Sound pressure level (SH/H/M/L)	dB(A)		43/42/40/39
	Dimension (W×D×H)	Outline	mm	840×840×240
		Package	mm	933×903×272
	Net weight/Gross weight	kg		29/34
Outdoor unit	Dimension (W×D×H)	Outline	mm	950×950×52
		Package	mm	1038×1033×112
	Net weight/Gross weight	kg		6.00/9.50
	Sound pressure level	dB(A)		52
Connection pipe	Dimension (W×D×H)	Outline	mm	892×340×698
		Package	mm	1029×458×750
	Net weight/Gross weight	kg		51/55
	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)
Loading quantity		Gas	inch(mm)	Φ5/8(16.00)
	Height	m		25
	Length	m		50
	Loading quantity	40'GP/40'HQ	unit	208/234

Model	Outdoor unit		GULD24W/NhB-K(P)	
	Indoor unit		Duct(with water pump)	Cassette
			GULD24PS/B-K(P)	GULD24T/B-K(P)
Capacity	Cooling	kW	7.30	7.30
		Btu/h	24900	24900
EER		W	3.78	3.78
Power supply		V/Ph/Hz	230V ~50Hz	
Power input	Cooling	kW	1.93	1.93
Current input	Cooling	A	8.80	8.80
Refrigerant charge volume		kg	1.60	1.60
Indoor unit	Air flow volume		CFM	706/676/647/559
		m³/h		1200/1150/1100/950
	ESP	Rated	Pa	25
		Range	Pa	0-75
Panel	Sound pressure level (SH/H/M/L)	dB(A)		40/39/37/36
	Dimension (W×D×H)	Outline	mm	1300×450×220
		Package	mm	1628×578×300
	Net weight/Gross weight	kg		31/38
Outdoor unit	Dimension (W×D×H)	Outline	mm	-
		Package	mm	-
	Net weight/Gross weight	kg		6.00/9.50
	Sound pressure level	dB(A)		54
Connection pipe	Dimension (W×D×H)	Outline	mm	892×340×698
		Package	mm	1029×458×750
	Net weight/Gross weight	kg		51/55
	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)
Loading quantity		Gas	inch(mm)	Φ5/8(16.00)
	Height	m		25
	Length	m		50
	Loading quantity	40'GP/40'HQ	unit	196/224

Model	Outdoor unit		GULD18W/NhB1-K(P)	
	Indoor unit		Duct(with water pump)	Cassette
			GULD18PS/B1-K(P)	GULD18T/B1-K(P)
Capacity	Cooling	kW	5.30	5.30
		Btu/h	18100	18100
EER		W	3.75	3.75
Power supply		V/Ph/Hz	230V ~50Hz	
Power input	Cooling	kW	1.40	1.40
Current input	Cooling	A	6.70	6.70
Refrigerant charge volume		kg	1.00	1.00
Indoor unit	Air flow volume		CFM	559/529/471/412
		m³/h		950/900/800/700
	ESP	Rated	Pa	25
		Range	Pa	0-50
Panel	Sound pressure level (SH/H/M/L)	dB(A)		43/42/39/36
	Dimension (W×D×H)	Outline	mm	1000×450×200
		Package	mm	1308×568×275
	Net weight/Gross weight	kg		26/31
Outdoor unit	Dimension (W×D×H)	Outline	mm	-
		Package	mm	1038×1033×112
	Net weight/Gross weight	kg		6.00/9.50
	Sound pressure level	dB(A)		52
Connection pipe	Dimension (W×D×H)	Outline	mm	818×302×596
		Package	mm	948×420×645
	Net weight/Gross weight	kg		39/42
	Outer diameter	Liquid	inch(mm)	Φ1/4(6.00)
Loading quantity		Gas	inch(mm)	Φ1/2(12.00)
	Height	m		20
	Length	m		35
	Loading quantity	40'GP/40'HQ	unit	288/324

Model	Outdoor unit		GULD30W/NhB-K(P)	
	Indoor unit		Duct(with water pump)	Cassette
			GULD30PHS/B-K(P)	GULD30T/B-K(P)
Capacity	Cooling	kW	8.80	8.80
		Btu/h	30100	30100
EER		W	3.89	3.89
Power supply		V/Ph/Hz	230V ~50Hz	
Power input	Cooling	kW	2.28	2.28
Current input	Cooling	A	10.70	10.70
Refrigerant charge volume		kg	2.00	2.00
Indoor unit	Air flow volume		CFM	1294/1176/1029/882
		m³/h		2200/2000/1750/1500
	ESP	Rated	Pa	37
		Range	Pa	0-150
Panel	Sound pressure level (SH/H/M/L)	dB(A)		43/41/40/38
	Dimension (W×D×H)	Outline	mm	1400×700×300
		Package	mm	1601×813×365
	Net weight/Gross weight	kg		50/56
Outdoor unit	Dimension (W×D×H)	Outline	mm	-
		Package	mm	-
	Net weight/Gross weight	kg		6.00/9.50
	Sound pressure level	dB(A)		53
Connection pipe	Dimension (W×D×H)	Outline	mm	920×370×790
		Package	mm	1083×488×855
	Net weight/Gross weight	kg		58/63
	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)
Loading quantity		Gas	inch(mm)	Φ5/8(16.00)
	Height	m		25
	Length	m		50
	Loading quantity	40'GP/40'HQ	unit	84/98

Model	Outdoor unit		GULD42W/NhB-K(P)		
	Indoor unit		Duct(with water pump) GULD42PHS/B-K(P)	Cassette GULD42T/B-K(P)	
Capacity	Cooling	kW	12.50	12.50	
		Btu/h	42800	42800	
EER		W	3.16	3.34	
Power supply		V/Ph/Hz	230V ~50Hz		
Power input	Cooling	kW	3.74	3.74	
Current input	Cooling	A	16.13	16.13	
Refrigerant charge volume		kg	2.70	2.70	
Indoor unit	Air flow volume		CFM	1294/1176/1029/882	1118/1000/882/765
	ESP	Rated	m³/h	2200/2000/1750/1500	1900/1700/1500/1300
	ESP	Range	Pa	37	-
	Sound pressure level (SH/H/M/L)	dB(A)		44/41/40/38	52/51/48/45
	Dimension (W×D×H)	Outline	mm	1400×700×300	840×840×290
		Package	mm	1601×813×365	933×903×335
	Net weight/Gross weight	kg		50/56	36/42
	Dimension (W×D×H)	Outline	mm	- -	950×950×52
		Package	mm	- -	1038×1033×112
	Net weight/Gross weight	kg		- -	6.00/9.50
Panel	Sound pressure level		dB(A)	55	55
	Dimension (W×D×H)	Outline	mm	940×460×820	
		Package	mm	1083×573×973	
	Net weight/Gross weight	kg		80/92	
Connection pipe	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)
		Gas	inch(mm)	Φ5/8(16.00)	Φ5/8(16.00)
	Height	m		30	30
	Length	m		65	65
Loading quantity		40'GP/40'HQ	unit	84/98	182/182

Control System Lineup

Controlling system	Product series	Duct type	Cassette type
Wireless remote controller	YAC1FB1		<input checked="" type="radio"/>
	YAW1F9		<input type="radio"/>
	YAA1FB		<input type="radio"/>
	YAN1F6		<input type="radio"/>
	YT1F(MOTO)		<input type="radio"/>
Wired remote controller	XK117		<input checked="" type="radio"/>
			<input type="radio"/>
WIFI module (G-Cloud)	ME31-00/C4 ME31-00/C6		<input type="radio"/>
MODBUS Gateway	ME50-00/EG(M)		<input type="radio"/>
Centralized controller (up to 36 indoor units)	CE52-24/F(C)		<input type="radio"/>
Dry contact gateway (Extended Function Board)	ME30-42/E1		<input type="radio"/>
Door controller	MK03		<input type="radio"/>

Big Duct Type Unit

INVERTER **R410A**

Inverter Series(High Capacity)

It is a kind of split system that can be connected with air duct to realize cooling/heating in subdivided area.



*: If the capacity of outdoor unit is 40kW, two outdoor units are needed for the operation of one indoor unit.



Intelligent defrosting



Compact design



Comprehensive protection



Easier maintainability



Self-diagnosis

- All DC inverter for high efficiency and energy saving.
- High static units for longer ducted runs.
- ESP is up to 250Pa.
- Static pressure is adjustable.
- Intelligent filter cleaning reminding function.
- Indoor fan can be adjusted according to the static pressure of air duct installed by customers.

Item	Nominal operating condition (temperature)				Operating range (temperature)	
	Outdoor condition		Indoor condition			
	DB (°C)	WB (°C)	DB (°C)	WB (°C)		
Cooling	35	24	27	19	-7~48	
Heating	7	6	20	15	-15~24	

Model	Heat pump		FGR20Pd/DNa-X	FGR25Pd/DNa-X	FGR30Pd/DNa-X	FGR40Pd/D(2)Na-X
Capacity	Cooling	kW	20	25	30	40
		BTU/h	68240	85300	102360	136480
	Heating	kW	22	27.5	33	43
		BTU/h	75060	93830	112590	146710
	EER/COP	W/W	2.55/3.14	2.65/3.10	2.65/3.20	2.60/3.10
	Power supply	V/Ph/Hz	380-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz
Power input	Cooling	kW	7.8	9.435	11.3	15.45
	Heating	kW	7.0	8.87	10.3	13.85
Current input	Cooling	A	16.5	18.9	22.7	27.8
	Heating	A	15.6	17.2	20.7	26.4
	Refrigerant charge volume	kg	6.4	8.0	9.5	6.4×2
Indoor unit	Air flow volume		CFM	2177	2472	3060
	m³/h			3700	4200	5200
	ESP	Rated	Pa	120	120	120
		Range	Pa	0-250	0-250	0-250
	Sound pressure level		dB (A)	52	53	55
	Dimension (W×D×H)	Outline	mm	1315×760×385	1520×840×450	1520×840×450
		Package	mm	1578×883×400	1788×988×465	1923×1153×850
	Net weight /Gross weight	kg	82/104	99/134	105/145	165/210
Outdoor unit	Sound pressure level		dB (A)	62	63	65
	Dimension (W×D×H)	Outline	mm	940×320×1430	940×460×1615	940×460×1615
		Package	mm	1038×438×1580	1038×578×1765	(1038×438×1580)×2
	Net weight /Gross weight	kg	120/130	146/162	175/190	(120/130)×2
Connection pipe	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ1/2(12.7)
		Gas	inch(mm)	Φ3/4(19.05)	Φ7/8(22)	Φ1(25.4)
Loading quantity	Max distance	Height	m	30	30	30
		Length	m	70	70	70
	20'GP	unit		12	10	10
	40'GP/40'HQ	unit		24/24	20/22	20/22
						18/18

*Single unit's noise value.

Control System Lineup

Controlling system	Model	Outlook	Big duct type unit
Wired controller	XK46		
	XK79		
Wireless controller	YAP1F		

Note: ● means standard, ○ means optional. Wireless controller should be chosen with wired controller at the same time.



VRF

GMV5

GMV5 HR

GMV5 Max

GMV5 CP

Indoor Units Lineup

Control System Lineup

Branching Joint

ERV+DX Coil

GMV5

INVERTER **R410A**

Gree GMV5 All DC Inverter VRF adopts high-efficient DC inverter compressor and DC inverter fan motor. The unit can be combined modularly from 8HP to 88HP. Maximum capacity can up to 246kW.

GMV5 Slim



- Outdoor unit quiet mode.
- High energy efficiency with high-performance compressor; Long connection pipe design with the maximum length of 1000m.
- Auto switch of module status in every 8hrs, which greatly improves the reliability of complete unit.
- 4 levels of static pressure for option with the maximum of 82Pa.



Max. piping length (meter)	GMV5 Slim	GMV5
Total piping length	300m	1000m
Actual piping length	120m	165m
Equivalent piping length	150m	190m
Height difference between indoor units	15m	30m
Height difference between ODU and IDU (ODU is located above the IDU)	50m	90m
Height difference between ODU and IDU (IDU is located above the ODU)	40m	90m
Piping length from first indoor branch to the farthest IDU	40m	40m

Notes:

*1: The value is applied to product type with 8kW, 10kW or 12.1kW.

*2: The value is applied to product type with 12kW, 14kW or 16kW.

Item	Nominal operating condition (temperature)				Operating range (temperature)	
	Outdoor condition		Indoor condition		Outdoor condition DB(°C)	
	DB(°C)	WB(°C)	DB(°C)	WB(°C)	GMV5 Slim	GMV5
Cooling	35	-	27	19	-5~52	-5~52
Heating	7	6	20	-	-20~27	-20~24

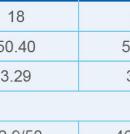
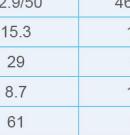
GMV5 Slim Lineup (380-415V 3N~ 50/60Hz)

HP	Model	Product
8	GMV-224WL/C-X	
10	GMV-280WL/C1-X	
12	GMV-335WL/C1-X	

GMV5 Slim (380-415V 3N~ 50/60Hz)

Model		GMV-224WL/C-X	GMV-280WL/C1-X	GMV-335WL/C1-X
Capacity range	HP	8	10	12
Cooling capacity	Rated kW	22.4	28.0	33.5
Heating capacity	Rated kW	16.5	18.0	21.5
	Max. kW	24.0	28.0	33.5
SEER	Ducted	7.27	7.31	7.87
	Cassette	7.27	6.87	6.83
SCOP	Ducted	4.08	5.19	5.50
	Cassette	4.11	4.66	5.21
Max. circuit/Fuse current	A	17.20	22.5	24.5
Power supply	V/Ph/Hz	380-415V 3N~ 50/60Hz		
Maximum drive IDU NO.	unit	13	17	20
Refrigerant charge volume	kg	5.5	7.1	8.5
Sound power level	dB(A)	77	80	81
Connecting pipe	Liquid mm	Φ9.52	Φ9.52	Φ12.7
	Gas mm	Φ19.05	Φ22.2	Φ25.4
Dimension (W×D×H)	Outline mm	940×320×1430	940×460×1615	940×460×1615
	Package mm	1038×438×1580	1038×578×1765	1038×578×1765
Net weight/ Gross weight	kg	133/144	163/175	174/187
Loading quantity	40'GP unit	56	44	44
	40'HQ unit	56	44	44

GMV5 Lineup (380-415V 3N~ 50/60Hz)

HP		Model		Product			
8		GMV-224WM/E-X					
		GMV-280WM/E-X					
10		GMV-280WM/E1-X					
		GMV-335WM/E-X					
12		GMV-335WM/E-X					
		GMV-400WM/E-X					
14		GMV-400WM/E-X					
		GMV-450WM/E1-X					
16		GMV-450WM/E-X					
		GMV-504WM/E-X					
18		GMV-504WM/E-X					
		GMV-560WM/E-X					
20		GMV-560WM/E-X					
		GMV-615WM/E-X					

GMV5 (Cooling Only) 380-415V, 50/60Hz

Model		-	GMVL-224 WM/D-X	GMVL-280 WM/D-X	GMVL-335 WM/D-X	GMVL-400 WM/D-X	GMVL-450 WM/D-X	GMVL-504 WM/D-X	GMVL-560 WM/D-X	GMVL-615 WM/D-X
Capacity range		HP	8	10	12	14	16	18	20	22
Capacity		kW	22.40	28.00	33.50	40.00	45.00	50.40	56.00	61.50
EER		W/W	4.31	4.00	3.76	3.74	3.49	3.29	3.20	3.15
Power supply		V/Ph/Hz	380V-415V 3N~ 50/60Hz							
Min.circuit/Max.fuse current		A	16.1/20	20.9/25	24.6/32	28.8/40	33.2/40	42.9/50	46.5/63	48.3/63
Power consumption		Cooling	kW	5.2	7	8.9	10.7	12.9	15.3	17.5
Maximum drive IDU NO.		unit	13	16	19	23	26	29	33	36
Refrigerant charge volume		kg	5.9	6.7	7.2	8.2	8.7	8.7	10.8	11.3
Sound pressure level		dB(A)	56	57	59	59	60	61	63	64
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
	Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6	Φ28.6
Dimension (W×D×H)		Outline	930×765×1605							
		Package	1010×840×1775							
Net weight/Gross weight		kg	211/224	211/224	211/224	325/343	325/343	325/343	354/372	354/372
Loading quantity	40' GP	unit	14	14	14	16	16	16	16	16
	40' HQ	unit	14	14	14	16	16	16	16	16

GMV5 (Cooling Only) 380-415V, 50/60Hz

HP	Model	Power supply	Cooling capacity	Power input	Dimension (W×D×H)	Airflow volume	ESP	Noise	Connecting pipe diameter		Oil balance pipe	Min. circuit current	Max.fuse current	Weight	
									Cooling	Cooling	Liquid	Gas			
			kW	kW	mm	m³/h	Pa	db(A)	db(A)	mm	mm	mm	A	A	kg
24HP	GMVL-680WM/D-X	380-415V 3N~ 50/60Hz	68.0	19.7	(930 × 765 × 1605)+(1340 × 765 × 1605)	11400+14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25+40	211+325
26HP	GMVL-730WM/D-X		73.0	19.9	(930 × 765 × 1605)+(1340 × 765 × 1605)	11400+14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25+40	211+325
28HP	GMVL-785WM/D-X		78.4	22.3	(930 × 765 × 1605)+(1340 × 765 × 1605)	11400+14000	82	66	43	Φ19.05	Φ31.8	Φ9.52	20.9+42.9	25+50	211+325
30HP	GMVL-850WM/D-X		84.0	24.5	(930 × 765 × 1605)+(1340 × 765 × 1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+46.5	25+63	211+354
32HP	GMVL-900WM/D-X		89.5	26.5	(930 × 765 × 1605)+(1340 × 765 × 1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+48.3	25+63	211+354
34HP	GMVL-960WM/D-X		95.0	28.4	(930 × 765 × 1605)+(1340 × 765 × 1740)	11400+16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	24.6+48.3	32+63	211+354
36HP	GMVL-1010WM/D-X		101.5	30.2	(1340 × 765 × 1605)+(1340 × 765 × 1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+48.3	40+63	325+354
38HP	GMVL-1065WM/D-X		106.5	32.4	(1340 × 765 × 1605)+(1340 × 765 × 1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+48.3	40+63	325+354
40HP	GMVL-1130WM/D-X		111.9	34.8	(1340 × 765 × 1605)+(1340 × 765 × 1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	42.9+48.3	50+63	325+354
42HP	GMVL-1180WM/D-X		117.5	37.0	(1340 × 765 × 1740)×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	46.5+48.3	63+63	354+354
44HP	GMVL-1235WM/D-X		123.0	39.0	(1340 × 765 × 1740)×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	48.3+48.3	63+63	354+354
46HP	GMVL-1300WM/D-X		129.0	37.4	(930 × 765 × 1605)+(1340 × 765 × 1605)+(1340 × 765 × 1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+46.5	25+40+63	211+325+354
48HP	GMVL-1350WM/D-X		134.5	39.4	(930 × 765 × 1605)+(1340 × 765 × 1605)+(1340 × 765 × 1740)	11400+									

GMV5 HR



Heat Recovery Series

GMV5 Heat Recovery System embodies the excellent features of GMV5(DC inverter technology, DC fan linkage control, precise control of capacity output, balancing control of refrigerant, original oil balancing technology with high pressure chamber, high-efficiency output control, low-temperature operation control technology, super heating technology, high adaptability for project, environmental refrigerant). Its energy efficiency is improved by 78% compared with conventional multi VRF.



- | | | | | | | | | |
|----------------------|------------------------|---------------------|------------------------|--------------------------|----------------|--------------------|--------------------------|--------------------|
| | | | | | | | | |
| Golden fin condenser | Inner groove copper | High efficiency | Intelligent defrosting | Long-distance monitoring | Quiet function | Modular operating* | Comprehensive protection | Wide voltage range |
| | | | | | | | | |
| Compact design | Easier maintainability | Centralized control | Wide operation range | | | | | |

- » All DC Inverter Technology. All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.
- » 82 Pa Wide Application Location.
- » Advanced Control Functions.
- » Better Reliability.
- » Wide Operation Range: Cooling: -5°C~52°C; Heating: -20°C~24°C; Cooling and heating: -10°C~20°C.
- » Flexible Piping Design.



HR Lineup

HP	Model	Product Outlook
8HP	GMV-Q224WM/E-X	
10HP	GMV-Q280WM/E-X	
12HP	GMV-Q335WM/E-X	
14HP	GMV-Q400WM/E-X	
16HP	GMV-Q450WM/E-X	

Model	Product Outlook
NCHS1C	
NCHS2C	
NCHS4C	
NCHS8C	

Specifications 50/60 Hz

Model		GMV-Q224WM/E-X	GMV-Q280WM/E-X	GMV-Q335WM/E-X	GMV-Q400WM/E-X	GMV-Q450WM/E-X	
Capacity range	HP	8	10	12	14	16	
Cooling capacity	Rated ¹	kW	22.4	28	33.5	40	
	Rated ¹	kW	22.4	28/31.5 ²	33.5	40	
Heating capacity	Max.	kW	25	31.5	37.5	45	
	Ducted	-	6.83	9.22	7.59	7.28	
SEER ¹	Cassette	-	6.15	5.78	5.88	6.19	
	Ducted	-	4.53	4.76	4.80	4.16	
SCOP ¹	Cassette	-	3.74	3.99	3.62	4.01	
						3.56	
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz				
Min. circuit current		A	16.3	20.9	24.7	28.8	33.2
Max. fuse current		A	20	25	32	40	40
Maximum drive IDU NO.		unit	13	16	19	23	26
Refrigerant charge volume		kg	6.2	7.1	9.6	11.1	11.6
Sound pressure level(Cooling)		dB(A)	60	61	63	63	63
Sound power level(Cooling)	Ducted	dB(A)	86	90	86	89	93
	Cassette	dB(A)	86	87	86	90	94
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
	High pressure gas	mm	Φ15.9	Φ19.05	Φ19.05	Φ22.2	Φ22.2
	Low pressure gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6
Dimension (W×D×H)	Outline	mm	930×765×1605	930×765×1605	1340×765×1605	1340×765×1605	1340×765×1605
	Package	mm	1010×840×1775	1010×840×1775	1420×840×1775	1420×840×1775	1420×840×1775
Net weight		kg	233	233	302	346	346
Gross weight		kg	243	243	317	361	361
Loading quantity	40' GP	unit	24	24	16	16	16
	40' HQ	unit	24	24	16	16	16

Note:

1. The data is Eurovent certified.

2. It's the certificate data of the unit which is matched with duct-type unit and cassette unit respectively.

50/60 Hz

Model		NCHS1C	NCHS2C	NCHS4C	NCHS8C	
Max.IDU branches	unit	1	2	4	8	
No. of connectable IDU of each branch	unit	8	8	8	8	
Total connectable IDU	unit	8	16	32	64	
Max. capacity of each branch	kW	14.2	14.2	14.2	14.2	
Max.capacity of connectable IDU	kW	14.2	28	45	68	
Power supply	V/Ph/Hz	220-240V ~ 50/60Hz				
Power consumption	W	8	28	44	80	
Max. branch quantity of connecting IDU	unit	1	2	4	8	
Outdoor unit piping connection	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	
	Gas(Low pressure)	mm	Φ22.2			Φ28.6
Indoor unit piping connection	Gas(High pressure)	mm	Φ15.9	Φ19.05	Φ22.2	Φ22.2
	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimensions (W×D×H)	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Dimensions (W×D×H)	Outline	mm	388×302×225	468×377×225	587×399×225	987×488×225
	Package	mm	805×403×305	946×646×365	1123×676×345	1524×861×315
Net weight/Gross weight	kg	9/12.2	15.6/23.4	18.6/24.6	37/46.6	

Note: GMV-Q**WM/E-X and NCHS*C are fixed match, which cannot match with the outdoor units and mode exchangers of other types.

ODU Combination Lineup

Model	GMV-Q224WM/E-X	GMV-Q280WM/E-X	GMV-Q335WM/E-X	GMV-Q400WM/E-X	GMV-Q450WM/E-X
GMV-Q224WM/E-X	◆				
GMV-Q280WM/E-X		◆			
GMV-Q335WM/E-X			◆		
GMV-Q400WM/E-X				◆	
GMV-Q450WM/E-X					◆
GMV-Q504WM/E-X	◆	◆			
GMV-Q560WM/E-X		◆◆			
GMV-Q615WM/E-X		◆	◆		
GMV-Q680WM/E-X		◆		◆	
GMV-Q730WM/E-X		◆			◆
GMV-Q785WM/E-X			◆		◆
GMV-Q850WM/E-X				◆	◆
GMV-Q900WM/E-X					◆◆
GMV-Q960WM/E-X		◆◆		◆	
GMV-Q1010WM/E-X		◆◆			◆
GMV-Q1065WM/E-X		◆	◆		◆
GMV-Q1130WM/E-X		◆		◆	◆
GMV-Q1180WM/E-X		◆			◆◆
GMV-Q1235WM/E-X			◆		◆◆
GMV-Q1300WM/E-X				◆	◆◆
GMV-Q1350WM/E-X					◆◆◆
GMV-Q1410WM/E-X		◆◆		◆	◆
GMV-Q1460WM/E-X		◆◆			◆◆
GMV-Q1515WM/E-X		◆	◆		◆◆
GMV-Q1580WM/E-X		◆		◆	◆◆
GMV-Q1630WM/E-X		◆			◆◆◆
GMV-Q1685WM/E-X			◆		◆◆◆
GMV-Q1750WM/E-X				◆	◆◆◆
GMV-Q1800WM/E-X					◆◆◆◆

Note*: The combination models of the outdoor units are not Eurovent certified.

Specification of ODU Combination

Model	Capacity range	Cooling capacity		Heating capacity		Power supply	Min. circuit current	Max. fuse current	Refrigerant charge volume	Connecting pipe			Net weight	Gross weight
		Rated	Rated	Max.	HP	kW	kW	V/Ph/Hz	A	A	kg	mm	mm	kg
GMV-Q504WM/E-X	18	50.4	50.4	56.5	380-415V 3N~50/60Hz	20.9+20.9	25+25	13.3	Φ15.9	Φ25.4	Φ28.6	466	486	
GMV-Q560WM/E-X	20	56	56	63		20.9+20.9	25+25	14.2	Φ15.9	Φ25.4	Φ28.6	466	486	
GMV-Q615WM/E-X	22	61.5	61.5	69		20.9+24.7	25+32	16.7	Φ15.9	Φ25.4	Φ28.6	535	560	
GMV-Q680WM/E-X	24	68	68	76.5		20.9+28.8	25+40	18.2	Φ15.9	Φ25.4	Φ28.6	579	604	
GMV-Q730WM/E-X	26	73	73	81.5		20.9+33.2	25+40	18.7	Φ19.05	Φ28.6	Φ31.8	579	604	
GMV-Q785WM/E-X	28	78.5	78.5	87.5		24.7+33.2	32+40	21.2	Φ19.05	Φ28.6	Φ31.8	648	678	
GMV-Q850WM/E-X	30	85	85	95		28.8+33.2	40+40	22.7	Φ19.05	Φ28.6	Φ31.8	692	722	
GMV-Q900WM/E-X	32	90	90	100		33.2+33.2	40+40	23.2	Φ19.05	Φ28.6	Φ31.8	692	722	
GMV-Q960WM/E-X	34	96	96	108		20.9+20.9+28.8	25+25+40	25.3	Φ19.05	Φ28.6	Φ31.8	812	847	
GMV-Q1010WM/E-X	36	101	101	113		20.9+20.9+33.2	25+25+40	25.8	Φ19.05	Φ31.8	Φ38.1	812	847	
GMV-Q1065WM/E-X	38	106.5	106.5	119		20.9+24.7+33.2	25+32+40	28.3	Φ19.05	Φ31.8	Φ38.1	881	921	
GMV-Q1130WM/E-X	40	113	113	126.5		20.9+28.8+33.2	25+40+40	29.8	Φ19.05	Φ31.8	Φ38.1	925	965	
GMV-Q1180WM/E-X	42	118	118	131.5		20.9+33.2+33.2	25+40+40	30.3	Φ19.05	Φ31.8	Φ38.1	925	965	
GMV-Q1235WM/E-X	44	123.5	123.5	137.5		24.7+33.2+33.2	32+40+40	32.8	Φ19.05	Φ31.8	Φ38.1	994	1039	
GMV-Q1300WM/E-X	46	130	130	145		28.8+33.2+33.2	40+40+40	34.3	Φ19.05	Φ31.8	Φ38.1	1038	1083	
GMV-Q1350WM/E-X	48	135	135	150		33.2+33.2+33.2	40+40+40	34.8	Φ19.05	Φ31.8	Φ38.1	1038	1083	
GMV-Q1410WM/E-X	50	141	141	158		20.9+20.9+28.8+33.2	25+25+40+40	36.9	Φ19.05	Φ38.1	Φ41.3	1158	1208	
GMV-Q1460WM/E-X	52	146	146	163		20.9+20.9+33.2+33.2	25+25+40+40	37.4	Φ19.05	Φ38.1	Φ41.3	1158	1208	
GMV-Q1515WM/E-X	54	151.5	151.5	169		20.9+24.7+33.2+33.2	25+32+40+40	39.9	Φ19.05	Φ38.1	Φ41.3	1227	1282	
GMV-Q1580WM/E-X	56	158	158	176.5		20.9+28.8+33.2+33.2	25+40+40	41.4	Φ19.05	Φ38.1	Φ41.3	1271	1326	
GMV-Q1630WM/E-X	58	163	163	181.5		20.9+33.2+33.2+33.2	25+40+40	41.9	Φ19.05	Φ38.1	Φ41.3	1271	1326	
GMV-Q1685WM/E-X	60	168.5	168.5	187.5		24.7+33.2+33.2+33.2	32+40+40	44.4	Φ19.05	Φ38.1	Φ41.3	1340	1400	
GMV-Q1750WM/E-X	62	175	175	195		28.8+33.2+33.2+33.2	40+40+40	45.9	Φ19.05	Φ38.1	Φ41.3	1384	1444	
GMV-Q1800WM/E-X	64	180	180	200		33.2+33.2+33.2+33.2	40+40+40	46.4	Φ19.05	Φ38.1	Φ41.3	1384	1444	

Note: The combination models of the outdoor units are not Eurovent certified.

GMV5 Max

INVERTER R410A

By adopting advanced technologies such as high-efficiency DC inverter compressor with large capacity and deep sub-cooling technology, the single unit of Gree GMV5 Max can expand its capacity to 90kW for saving space installation cost and device investment cost greatly. At the same time, CAN network communication technology enables the unit to response quickly and it can also improve the user's comfort experience. This unit can be widely used at small and medium office buildings, large-scale shopping malls and villas as well.



- | | | | | | | | | | | | | | | | |
|--|----------------------------|--|------------------------|--|----------------|--|-----------------------------|--|-----------------------------|--|----------------------|--|--------------------|--|----------|
| | All DC inverter technology | | Energy saving function | | Quiet function | | Human engineering operation | | Long connection pipe design | | Wide operation range | | Modular operating* | | High ESP |
|--|----------------------------|--|------------------------|--|----------------|--|-----------------------------|--|-----------------------------|--|----------------------|--|--------------------|--|----------|

- » DC inverter technology to improve compression efficiency.
- » Wide range of operation condition.
- » Sub-cooling control technology to ensure optimal cooling and heating.
- » High efficiency and more energy saving.
- » Energy-saving operation control technology.
- » G-type heat exchanger is adopted.
- » Intelligent defrosting control.

Item	Nominal operating condition (temperature)				Operation range (temperature)	
	Outdoor condition		Indoor condition		Outdoor condition	
	DB (°C)	WB (°C)	DB (°C)	WB (°C)	DB (°C)	
Cooling	35	24	27	19	-5~52	
Heating	7	6	20	15	-20~24	

HP	Model	Product
28	GMV-785W/B-X	
32	GMV-900W/B-X	

Specifications

Model	GMV-785W/B-X	GMV-900W/B-X
Capacity range	HP	28
Capacity	Cooling kW	78.5
	Heating kW	87.5
EER	W/W	3.35
COP	W/W	3.80
Power supply	V/Ph/Hz	380-415V 3N~ 50/60Hz
Min. circuit/Max. fuse current	A	55.4/63
	Cooling kW	23.4
	Heating kW	23
Power consumption	unit	46
Maximum drive IDU NO.	kg	18.9
Refrigerant charge volume	dB(A)	65
Sound pressure level	Liquid mm	Φ19.05
	Gas mm	Φ31.8
Connecting pipe	Outline mm	2200×880×1675
	Package mm	2267×952×1867
Dimension (WxDxH)	Net weight/Gross weight kg	500/535
	40'GP unit	12
	40'HQ unit	12
Net weight/Gross weight	12	535/565
Loading quantity	12	12

GMV5 CP



The GMV5 CP unit adopts corrosion-resistance materials on both metal and electronic parts, which enables it to be installed near the sea. Max. capacity of single outdoor unit reaches 22HP and the max. combination capacity is even up to 88HP, reaching industry leading level.

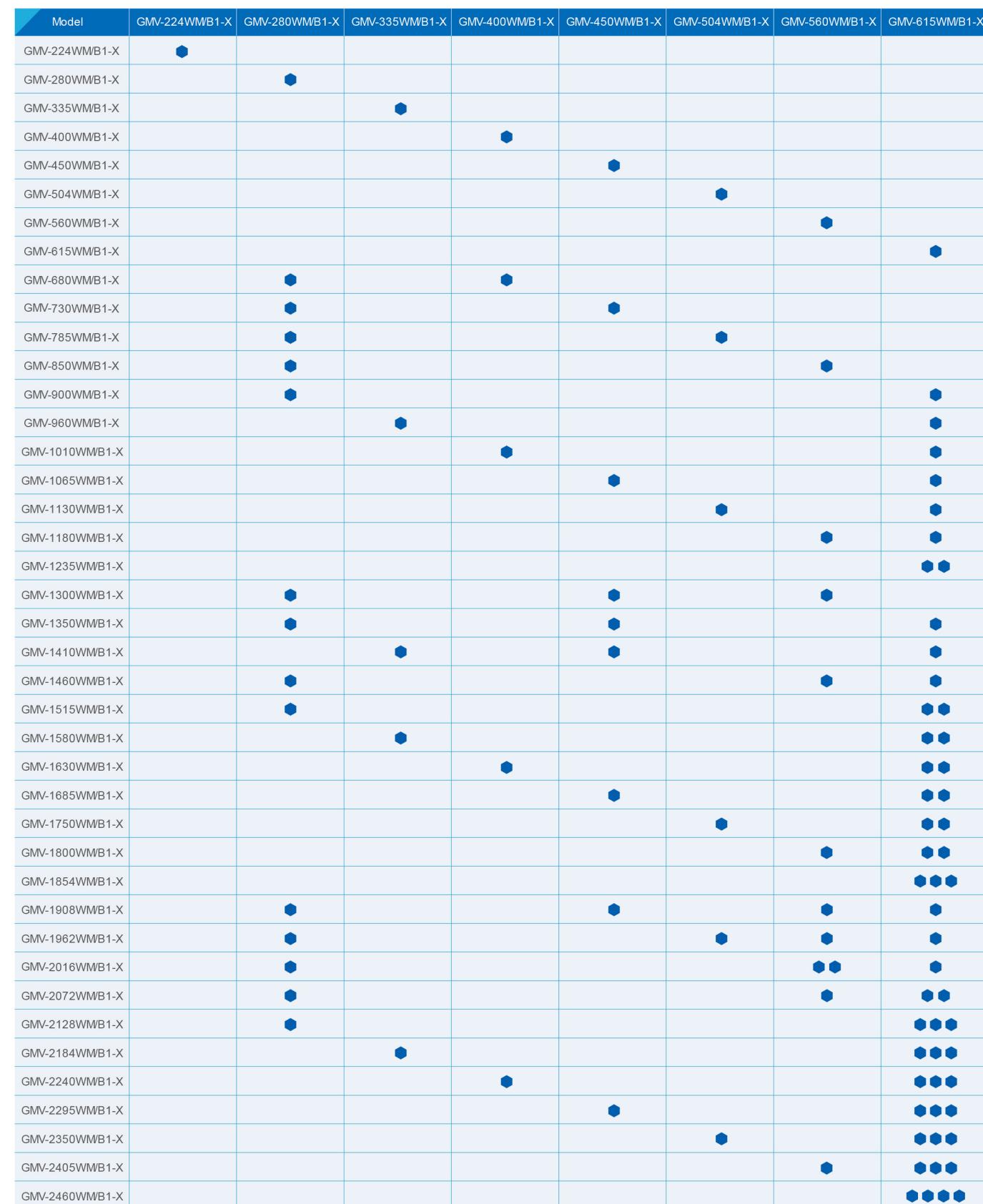


- » High corrosion resistant.
 - » High efficiency and more energy saving.
 - » 88HP max. capacity-the largest free combination.
 - » Intelligent defrosting control.

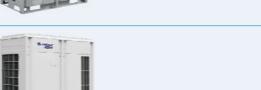
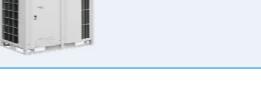
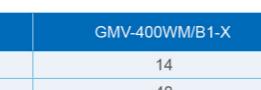
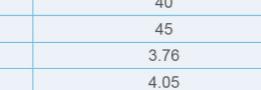
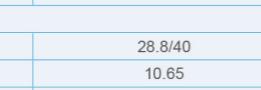


Item	Nominal operating condition (temperature)				Operation range (temperature)
	Outdoor condition		Indoor condition		Outdoor condition
	DB (°C)	WB (°C)	DB (°C)	WB (°C)	DB (°C)
Cooling	35	24	27	19	-5~52
Heating	7	6	20	15	-20~24

ODU Combination Lineup



Lineup

HP	Model	Product
8HP	GMVL-224WM/D-X	
10HP	GMVL-280WM/D-X	
12HP	GMVL-335WM/D-X	
14HP	GMVL-400WM/D-X	
16HP	GMVL-450WM/D-X	
18HP	GMVL-504WM/D-X	
20HP	GMVL-560WM/D-X	
22HP	GMVL-615WM/D-X	

Specifications

Model		GMV-224WM/B1-X	GMV-280WM/B1-X	GMV-335WM/B1-X	GMV-400WM/B1-X
Capacity range	HP	8	10	12	14
Capacity	Cooling kW	22.4	28	33.5	40
	Heating kW	25	31.5	37.5	45
EER	W/W	4.31	4.00	3.85	3.76
COP	W/W	4.55	4.32	4.84	4.05
Power supply	V/Ph/Hz	380-415V 3N~50/60Hz			
Min. circuit/Max. fuse current	A	15.7/20	20.9/25	22.5/32	28.8/40
Power consumption	Cooling kW	5.2	7	8.7	10.65
	Heating kW	5.5	7.3	7.75	11.1
Maximum drive IDU NO.	unit	13	16	19	23
Refrigerant charge volume	kg	5.9	6.7	9	9.8
Sound pressure level	dB(A)	60	61	61	63
Connecting pipe	Liquid mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7
	Gas mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4
	Oil balance mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension (W×D×H)	Outline mm	930×765×1605	930×765×1605	930×765×1605	1340×765×1605
	Package mm	1010×840×1775	1010×840×1775	1010×840×1775	1420×840×1775
Net weight/Gross weight	kg	225/235	225/235	235/250	360/375
Loading quantity	40' GP unit	28	28	28	22
	40' HQ unit	28	28	28	22

Model		GMV-450WM/B1-X	GMV-504WM/B1-X	GMV-560WM/B1-X	GMV-615WM/B1-X
Capacity range	HP	16	18	20	22
Capacity	Cooling kW	45	50.4	56	61.5
	Heating kW	50	56.5	63	69
EER	W/W	3.56	3.55	3.50	3.32
COP	W/W	3.85	4.01	3.80	3.65
Power supply	V/Ph/Hz	380-415V 3N~50/60Hz			
Min. circuit/Max. fuse current	A	33.2/40	45.4/50	51.1/63	59.2/63
Power consumption	Cooling kW	12.65	14.2	16	18.5
	Heating kW	13	14.1	16.6	18.9
Maximum drive IDU NO.	unit	26	29	33	36
Refrigerant charge volume	kg	10.3	11.3	14.3	14.3
Sound pressure level	dB(A)	63	63	63	64
Connecting pipe	Liquid mm	Φ12.7	Φ15.9	Φ15.9	Φ15.9
	Gas mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6
	Oil balance mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension (W×D×H)	Outline mm	1340×765×1605	1340×765×1740	1340×765×1740	1340×765×1740
	Package mm	1420×840×1775	1420×840×1910	1420×840×1910	1420×840×1910
Net weight/Gross weight	kg	360/375	360/375	385/400	385/400
Loading quantity	40' GP unit	22	22	22	22
	40' HQ unit	22	22	22	22

Specifications of ODU Combination of GMV5 CP

Model	Power supply	Capacity		Power input		Dimension(W×D×H)	Airflow volume	ESP	Sound pressure level	Operation sound pressure level at night	Connecting pipe			Min.circuit current	Max. fuse current	Weight
		Cooling KW	Heating KW	Cooling KW	Heating KW						Liquid mm	Gas mm	Oil mm			
		KW	KW	KW	KW	mm	m³/h	Pa	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-680WM/B1-X		68.0	76.5	17.7	18.4	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25+40	225+360
GMV-730WM/B1-X		73.0	81.5	19.7	20.3	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25+40	225+360
GMV-785WM/B1-X		78.4	88.0	21.2	21.4	(930×765×1605)+(1340×765×1740)	11400+16000	82	66	43	Φ19.05	Φ31.8	Φ9.52	20.9+45.4	25+50	225+360
GMV-850WM/B1-X		84.0	94.5	23.0	23.9	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+51.1	25+63	225+385
GMV-900WM/B1-X		89.5	100.5	25.5	26.2	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+59.2	25+63	225+385
GMV-960WM/B1-X		95.0	106.5	27.2	26.7	(930×765×1605)+(1340×765×1740)	11400+16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	22.5+59.2	32+63	235+385
GMV-1010WM/B1-X		101.5	114.0	29.2	30.0	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+59.2	40+63	360+385
GMV-1065WM/B1-X		106.5	119.0	31.2	31.9	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+59.2	40+63	360+385
GMV-1130WM/B1-X		111.9	125.5	32.7	33.0	(1340×765×1740)×2	16000×2	82	68	43	Φ19.05	Φ38.1	Φ9.52	45.4+59.2	50+63	360+385
GMV-1180WM/B1-X		117.5	132.0	34.5	35.5	(1340×765×1740)×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	51.1+59.2	63+63	385×2
GMV-1235WM/B1-X		123.0	138.0	37.0	37.8	(1340×765×1740)×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	59.2+59.2	63+63	385×2
GMV-1300WM/B1-X		129.0	144.5	35.7	36.9	(930×765×1605)+(1340×765×1740)×2	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+51.1	25+40+63	225+360+385
GMV-1350WM/B1-X		134.5	150.5	38.2	39.2	(930×765×1605)+(1340×765×1740)×2	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+59.2	25+40+63	225+360+385
GMV-1410WM/B1-X		140.0	156.5	39.9	39.7	(930×765×1605)+(1340×765×1740)×2	11400+14000+16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	22.5+33.2+59.2	32+40+63	

Indoor Units Lineup

Specifications of Indoor Units

Type of indoor unit	Specification	15	18	22	25	28	32	36	40	45	50	56	63	71	72	80	90	100	112	125	140	160	224	250	280	450	560
High Static Pressure Duct Type Unit																											
General Static Pressure Duct-type Indoor Unit																											
360° Air Discharge Cassette Indoor Unit																											
360° Air Discharge Compact Cassette Indoor Unit																											
2-way Cassette Indoor Unit																											
1-way Cassette Unit																											
Wall-mounted																											
Floor Ceiling Type Indoor Unit																											
Console Indoor Unit																											
Floor Standing Type Indoor Unit																											
Fresh Air Processing Indoor Unit																											
AHU KIT																											
Concealed Floor Standing Type																											

High Static Pressure Duct Type Indoor Unit

50/60 Hz

Capacity	Model		GMV-ND22PHS/B-T	GMV-ND25PHS/B-T	GMV-ND28PHS/B-T	GMV-ND32PHS/B-T	GMV-ND36PHS/B-T	GMV-ND40PHS/B-T
	Cooling	Heating	kW	2.2	2.5	2.8	3.2	3.6
Power supply V/Ph/Hz								
Power consumption W			55	55	55	65	65	85
Airflow volume(H/M/L) m³/h			550/480/400	550/480/400	550/480/400	600/500/420	600/500/420	850/700/600
Rated current	Cooling	A	0.5	0.5	0.5	0.5	0.5	0.5
	Heating	A	0.5	0.5	0.5	0.5	0.5	0.5
	Water heating	A	/	/	/	/	/	/
ESP Pa			60/0~150	60/0~150	60/0~150	60/0~150	60/0~150	60/0~150
Sound pressure level(H/M/L) dB(A)			33/30/28	33/30/28	33/30/28	33/31/29	33/31/29	36/34/32
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)	Outline	mm	700×700×300	700×700×300	700×700×300	700×700×300	700×700×300	700×700×300
	Package	mm	897×808×360	897×808×360	897×808×360	897×808×360	897×808×360	897×808×360
Net weight/Gross weight	kg		32/38	32/38	32/38	32/38	32/38	34/40
Loading quantity	40' GP	unit	168	168	168	168	168	168
	40' HQ	unit	196	196	196	196	196	196

Capacity	Model		GMV-ND45PHS/B-T	GMV-ND50PHS/B-T	GMV-ND56PHS/B-T	GMV-ND63PHS/B-T	GMV-ND71PHS/B-T	GMV-ND80PHS/B-T
	Cooling	Heating	kW	4.5	5.0	5.6	6.3	7.1
Power supply V/Ph/Hz								
Power consumption W			85	85	90	100	100	100
Airflow volume(H/M/L) m³/h			850/700/600	850/700/600	1000/800/700	1000/800/700	1250/1050/950	1250/1050/950
Rated current	Cooling	A	0.5	0.5	0.8	0.8	0.8	0.8
	Heating	A	0.5	0.5	0.8	0.8	0.8	0.8
	Water heating	A	/	/	/	/	/	/
ESP Pa			60/0~150	60/0~150	90/0~200	90/0~200	90/0~200	90/0~200
Sound pressure level(H/M/L) dB(A)			36/34/32	36/34/32	37/35/33	37/35/33	38/36/34	38/36/34
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)	Outline	mm	700×700×300	700×700×300	1000×700×300	1000×700×300	1000×700×300	1000×700×300
	Package	mm	897×808×360	897×808×360	1205×813×360	1205×813×360	1205×813×360	1205×813×360
Net weight/Gross weight	kg		34/40	34/40	43/49	43/49	43/49	43/49
Loading quantity	40' GP	unit	168	168	138	138	138	138
	40' HQ	unit	196	196	161	161	161	161

Capacity	Model		GMV-ND90 PHS/B-T	GMV-ND100 PHS/B-T	GMV-ND112 PHS/B-T	GMV-ND125 PHS/B-T	GMV-ND140 PHS/B-T	GMV-ND160 PHS/B-T	GMV-ND224 PH/A-T	GMV-ND280 PH/A-T
	Cooling	Heating	kW	9.0	10.0	11.2	12.5	14		

General Static Pressure Duct-type Indoor Unit

50/60 Hz

Model		GMV-ND18PLS/C-T	GMV-ND22PLS/C-T	GMV-ND25PLS/C-T	GMV-ND28PLS/C-T	GMV-ND32PLS/C-T	GMV-ND36PLS/C-T		
Capacity	Cooling	kW	1.8	2.2	2.5	2.8	3.2	3.6	
	Heating	kW	2.2	2.5	2.8	3.2	3.6	4.0	
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	/	28	28	28	37	37	
Airflow volume (H/M/L)		m³/h	450/350/200	450/350/200	450/350/200	450/350/200	550/400/300	550/400/300	
Rated current	Cooling	A	0.2	0.2	0.2	0.2	0.3	0.3	
	Heating	A	0.2	0.2	0.2	0.2	0.3	0.3	
ESP		Pa	15/30/0~30	15/30/0~30	15/30/0~30	15/30/0~30	15/30/0~30	15/30/0~30	
Sound pressure level(H/M/L)		dB(A)	30/25/22	30/25/22	30/25/22	31/27/25	31/27/25		
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35		
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7		
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25		
	Thickness	mm	2.5	2.5	2.5	2.5	2.5		
Dimension (W×D×H)	Outline	mm	710×462×200	710×462×200	710×462×200	710×462×200	710×462×200		
	Package	mm	1008×568×275	1008×568×275	1008×568×275	1008×568×275	1008×568×275		
Net weight/Gross weight		kg	18.5/23.5	18.5	18.5	19	19		
Loading quantity	40'GP	unit	386	386	386	386	386		
	40'HQ	unit	430	430	430	430	430		

Model		GMV-ND80PLS/C-T	GMV-ND90PLS/C-T	GMV-ND100PLS/C-T	GMV-ND112PLS/C-T	GMV-ND125PLS/C-T	GMV-ND140PLS/C-T		
Capacity	Cooling	kW	8	9	10	11.2	12.5	14	
	Heating	kW	9	10	11.2	12.5	14	16	
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	110	130	130	130	170	170	
Airflow volume (H/M/L)		m³/h	1250/1100/900	1500/1250/900	1500/1350/1000	1700/1500/1100	2000/1700/1400	2000/1700/1400	
Rated current	Cooling	A	0.53	0.63	0.63	0.63	0.8	0.8	
	Heating	A	0.53	0.63	0.63	0.63	0.8	0.8	
ESP		Pa	50/0~80	50/0~80	50/0~80	50/0~80	50/0~80	50/0~80	
Sound pressure level(H/M/L)		dB(A)	37/34/31	40/36/32	40/36/32	40/36/32	42/40/37	42/40/37	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	
Dimension (W×D×H)	Outline	mm	1200×655×260	1340×655×260	1340×655×260	1340×655×260	1340×655×260	1340×655×260	
	Package	mm	1448×858×315	1588×858×315	1588×858×315	1588×858×315	1588×858×315	1588×858×315	
Net weight/Gross weight		kg	39.0/48.0	45.5/54.5	45.5/54.5	45.5/54.5	46.5/55.5	46.5/55.5	
Loading quantity	40'GP	unit	154	105	105	105	105	105	
	40'HQ	unit	176	120	120	120	120	120	

Model		GMV-ND40PLS/C-T	GMV-ND45PLS/C-T	GMV-ND50PLS/C-T	GMV-ND56PLS/C-T	GMV-ND63PLS/C-T	GMV-ND71PLS/C-T		
Capacity	Cooling	kW	4	4.5	5.0	5.6	6.3	7.1	
	Heating	kW	4.5	5.0	5.6	6.3	7.1		
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	40	40	55	55	55		
Airflow volume (H/M/L)		m³/h	750/550/400	750/550/400	850/700/550	850/700/550	1100/850/650		
Rated current	Cooling	A	0.3	0.3	0.4	0.4	0.4	0.5	
	Heating	A	0.3	0.3	0.4	0.4	0.4	0.5	
ESP		Pa	15/30/0~30	15/30/0~30	15/30/0~30	15/30/0~30	15/30/0~30		
Sound pressure level(H/M/L)		dB(A)	33/29/27	33/29/27	35/31/29	35/31/29	37/32/30		
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52		
	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9		
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25		
	Thickness	mm	2.5	2.5	2.5	2.5	2.5		
Dimension (W×D×H)	Outline	mm	1010×462×200	1010×462×200	1010×462×200	1010×462×200	1310×462×200		
	Package	mm	1308×568×275	1308×568×275	1308×568×275	1308×568×275	1608×568×275		
Net weight/Gross weight		kg	25	25	25	25	31		
Loading quantity	40'GP	unit	288	288	288	288	229		
	40'HQ	unit	340	340	340	340	257		

360° Air Discharge Cassette Indoor Unit

50/60 Hz

Model		GMV-ND221/C-T	GMV-ND281/C-T	GMV-ND361/C-T	GMV-ND451/C-T	GMV-ND501/C-T	GMV-ND561/C-T	GMV-ND631/C-T	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5	5.6	6.3
	Heating	kW	2.5	3.2	4	5	5.6	6.3	7.1
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption	Cooling	W	26	26	26	26	28	35	35
	Heating	W	22	22	22	22	25	35	35
Airflow volume(H/M/L)		m³/h	800/700/600	800/700/600	800/700/600	800/700/600	900/800/700	950/850/750	950/850/750

Model			GMV-ND71T/C-T	GMV-ND80T/C-T	GMV-ND90T/C-T	GMV-ND100T/C-T	GMV-ND112T/C-T	GMV-ND125T/C-T	GMV-ND140T/C-T
Capacity	Cooling	kW	7.1	8	9	10	11.2	12.5	14
	Heating	kW	8	9	10	11.2	12.5	14	16
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption	Cooling	W	60	68	68	80	80	95	115
	Heating	W	56	68	68	76	76	92	111
Airflow volume(H/M/L)		m³/h	1150/950/850	1250/1000/900	1250/1000/900	1250/1000/900	1650/1300/1100	1650/1300/1100	1650/1300/1100
Input current	Cooling	A	0.4	0.4	0.4	0.4	0.4	0.5	0.6
	Heating	A	0.4	0.4	0.4	0.4	0.4	0.5	0.6
Sound pressure level(H/M/L)		dB(A)	37/34/31	39/37/34	39/37/34	39/37/34	43/41/39	43/41/39	43/41/39
Connecting pipe	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Main body	Outline	mm	840×840×240	840×840×240	840×840×240	840×840×240	840×840×290	840×840×290	840×840×290
	Package	mm	963×963×325	963×963×325	963×963×325	963×963×325	963×963×379	963×963×379	963×963×379
Net weight/Gross weight		kg	28/36	29/37	29/37	29/37	33/42	33/42	33/42
Panel	Dimension (W×D×H)	Outline	mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65
	Package	mm	1038×1038×112	1038×1038×112	1038×1038×112	1038×1038×112	1038×1038×112	1038×1038×112	1038×1038×112
Net weight/Gross weight		kg	6/9.5	6/9.5	6/9.5	6/9.5	6/9.5	6/9.5	6/9.5
Loading quantity	40'GP	unit	120	120	120	120	120	120	120
	40'HQ	unit	140	140	140	140	140	140	140

Fresh Air Ventilation Kit

Model			XF150A-T*					
Fresh Air Intake Volume		%	10					
Dimension (W×D×H)	Outline	mm	834×834×60					
	Package	mm	873×873×180					
Dimension of the connection	mm	150						2
	Pcs							
Net weight/Gross weight		kg	2.7/7.7					

*This model can be matched with 360° Air Discharge Cassette Indoor Units of GMV-ND**T/C-T series only.

Floor Standing Type

Model			GMV-ND100L/A-T		GMV-ND140L/A-T					
Capacity	Cooling	kW	10.0		14.0					
	Heating	kW	11.0		15.0					
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz							
Power consumption	W		200							
	m³/h		1850/1600/1400							
Airflow volume(H/M/L)		dB(A)	50/48/46		50/48/46					
Connecting pipe	Liquid	mm	Φ9.52		Φ9.52					
	Gas	mm	Φ15.9		Φ15.9					
Drain pipe	External dia.	mm	Φ31		Φ31					
	Thickness	mm	4.5		4.5					
Dimension (W×D×H)	Outline	mm	1870×580×400		1870×580×400					
	Package	mm	2083×738×545		2083×738×545					
Net weight/Gross weight		kg	54.0/74.0		57.0/77.0					
Loading quantity	40'GP	unit	67		67					
	40'HQ	unit	67		67					

360° Air Discharge Compact Cassette Indoor Unit (50/60Hz)

Model		GMV-ND15T/E-T	GMV-ND18T/E-T	GMV-ND22T/E-T	GMV-ND28T/E-T	GMV-ND36T/E-T	GMV-ND45T/E-T	GMV-ND50T/E-T	GMV-ND56T/E-T		
Capacity	Cooling	kW	1.5	1.8	2.2	2.8	3.6	4.5	5.0		
	Heating	kW	1.8	2.2	2.5	3.2	4.0	5.0	5.6		
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz								
Rated current	Power consumption	W	30	30	30	30	30	45	45	45	
	Airflow volume(H/M/L)	m³/h	460/420/370	460/420/370	500/460/370	570/480/420	620/550/480	730/650/560	730/650/560	730/650/560	
Sound pressure level(H/M/L)	Cooling	dB(A)	33/30/25	33/30/25	36/31/25	36/33/28	39/37/35	43/41/39	43/41/39	43/41/39	
	Heating	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	
Connecting pipe		Gas	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
Main body	Outline	mm	570×570×265	570×570×265	570×570×265	570×570×265	570×570×265	570×570×265	570×570×265	570×570×265	
	Package	mm	698×653×295	698×653×295	698×653×295	698×653×295	698×653×				

1-way Cassette Indoor Unit (50/60Hz)

Model		GMV-ND22TD/A-T	GMV-ND28TD/A-T	GMV-ND36TD/A-T	GMV-ND45TD/A-T	GMV-ND50TD/A-T	GMV-ND56TD/A-T		
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0		
	Heating	kW	2.5	3.2	4.0	5.0	5.6		
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	30	30	45	45	45		
Airflow volume(H/M/L)		m³/h	600/500/450	600/500/450	830/600/500	830/600/500	890/667/564		
Rated current	CFM	353/294/265	353/294/265	353/294/265	488/353/294	488/353/294	524/393/332		
	Cooling	A	0.2	0.2	0.2	0.3	0.3		
	Heating	A	0.2	0.2	0.2	0.3	0.3		
Sound pressure level(H/M/L)		dB(A)	36/32/28	36/32/28	36/32/28	40/35/30	41/38/35		
Connecting pipe		Liquid	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52		
		Gas	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9		
Drain pipe		External dia.	mm	25	25	25	25		
		Thickness	mm	2.5	2.5	2.5	2.5		
Main body	Dimension (W×D×H)	Outline	mm	987×385×178	987×385×178	987×385×178	987×385×178		
	Package	mm	1307×501×310	1307×501×310	1307×501×310	1307×501×310	1307×501×310		
	Net weight/Gross weight	kg	20.0/27.0	20.0/27.0	20.0/27.0	21.0/28.5	21.0/28.5		
Panel	Dimension (W×D×H)	Outline	mm	1200×460×55	1200×460×55	1200×460×55	1200×460×55		
	Package	mm	1265×536×121	1265×536×121	1265×536×121	1265×536×121	1265×536×121		
	Net weight/Gross weight	kg	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0		
Loading quantity		40'GP	unit	138	138	138	138		
		40'HQ	unit	138	138	138	138		

Model		GMV-ND56G/B4B-T ¹	GMV-ND63G/B4B-T ¹	GMV-ND71G/B4B-T ¹	GMV-ND80G/B4B-T ¹	GMV-ND90G/B4B-T ¹	GMV-ND100G/B4B-T ¹		
Capacity	Cooling	kW	5.6	6.3	7.1	8.0	9.0		
	Heating	kW	6.3	7.1	7.5	9.0	10.0		
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	50	50	65	80	80	100	
Airflow volume (H/M/L)		m³/h	1100/850/650	1100/850/650	1200/850/650	1550/1050/800	1550/1050/800	1650/1100/900	
Rated current	Cooling	A	0.24	0.24	0.31	0.41	0.41	0.41	
	Heating	A	0.24	0.24	0.31	0.41	0.41	0.41	
Sound pressure level(H/M/L)		dB(A)	43/41/37	43/41/37	44/41/37	49/46/40	49/46/40	52/48/40	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ20	
	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	
Dimension (W×D×H)	Outline	mm	1078×246×325				1350×258×326		
	Package	mm	1203×338×425				1496×357×433		
Net weight/Gross weight		kg	16/19				18.5/23.5		
Loading quantity	40'GP	unit	282				228		
	40'HQ	unit	329				266		

Wall-mounted Type Indoor Unit

Model		GMV-ND15G/B4B-T	GMV-ND18G/B4B-T	GMV-ND22G/B4B-T	GMV-ND28G/B4B-T	GMV-ND36G/B4B-T	GMV-ND45G/B4B-T	GMV-ND50G/B4B-T	
Capacity	Cooling	kW	1.5	1.8	2.2	2.8	3.6	4.5	
	Heating	kW	1.8	2.5	2.5	3.2	4	5	
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	/	/	20	20	25	35	
Airflow volume (H/M/L)		m³/h	500/440/300	500/440/300	500/440/300	630/460/320	850/580/500	850/580/500	
Rated current	Cooling	A	0.1	0.1	0.1	0.12	0.17	0.17	
	Heating	A	0.1	0.1	0.1	0.12	0.17	0.17	
Sound pressure level(H/M/L)		dB(A)	35/33/30	35/33/30	35/33/30	35/33/30	38/35/31	43/40/37	
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ20	
	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	
Dimension (W×D×H)	Outline	mm	845×209×289				970×224×300		
	Package	mm	976×281×379				1096×308×395		
Net weight/Gross weight		kg	10.5/12.5				12.5/15.5		
Loading quantity	40'GP	unit	576				448		
	40'HQ	unit	576				512		

Fresh Air Processing Indoor Unit

50/60 Hz

Model		GMV-NDX125P/A-T	GMV-NDX140P/A-T	GMV-NDX224P/A-T	GMV-NDX250P/A-T	GMV-NDX280P/A-T	GMV-NX450P/A(X4.0)-M		
Capacity	Cooling	kW	12.5	14.0	22.4	25.0	28.0		
	KW ¹		8.5	10.0	16.0	18.0	20.0		
	KW ²		10.5	12.0	20.0	20.0	22.0		
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption									

Console Indoor Unit

50/60 Hz

Model		GMV-ND22C/A-T	GMV-ND28C/A-T	GMV-ND36C/A-T	GMV-ND45C/A-T	GMV-ND50C/A-T
Capacity	Cooling	kW	2.2	2.8	3.6	4.5
	Heating	kW	2.5	3.2	4.0	5.0
Power supply	V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption	W	15	15	20	40	40
Airflow volume(H/M/L)	m³/h	400/320/270	400/320/270	480/400/310	680/600/500	680/600/500
Rated current	Cooling	A	0.17	0.17	0.25	0.4
	Heating	A	0.17	0.17	0.25	0.4
Water heating	A	/	/	/	/	/
ESP	Pa	0	0	0	0	0
Sound pressure level(H/M/L)	dB(A)	38/33/27	38/33/27	40/37/32	46/43/39	46/43/39
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	28	28	28	28
Thickness	mm	1	1	1	1	1
Dimension (W×D×H)	Outline	mm	700/215/600	700/215/600	700/215/600	700/215/600
Package	mm	788×283×777	788×283×777	788×283×777	788×283×777	788×283×777
Net weight/Gross weight	kg	16/19	16/19	16/19	16/19	16/19
Loading quantity	40' GP	unit	348	348	348	348
40' HQ	unit	348	348	348	348	348

Model		GMV-ND71ZD/A-T	GMV-ND90ZD/A-T	GMV-ND112ZD/A-T	GMV-ND125ZD/A-T	GMV-ND140ZD/A-T	GMV-ND160ZD/A-T
Capacity	Cooling	kW	7.1	9.0	11.2	12.5	14.0
	Heating	kW	8.0	10.0	12.5	14.0	16.0
Power supply	V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					
Power consumption	W	75	140	160	160	160	200
Airflow volume(H/M/L)	m³/h	1400/1150/1000	1600/1400/1200	2000/1800/1450	2000/1800/1450	2000/1800/1450	2300/2100/1900
Rated current	Cooling	A	0.6	1.1	1.4	1.4	1.9
	Heating	A	0.6	1.1	1.4	1.4	1.9
Water heating	A	/	/	/	/	/	/
Sound pressure level(H/M/L)	dB(A)	44/42/39	50/47/43	51/47/42	52/49/45	52/49/45	52/49/45
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17
Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75
Dimension (W×D×H)	Outline	mm	1420×700×245		1700×700×245		
Package	mm	1548×828×345		1828×828×345			
Net weight/Gross weight	kg	50/58	50/58	60/68	60/68	60/68	60/68
Loading quantity	40' GP	unit	90	90	84	84	84
40' HQ	unit	98	98	98	98	98	98

Floor Ceiling Type Indoor Unit

50/60 Hz

Model		GMV-ND28ZD/A-T	GMV-ND36ZD/A-T	GMV-ND50ZD/A-T	GMV-ND56ZD/A-T	GMV-ND63ZD/A-T	
Capacity	Cooling	kW	2.8	3.6	5.0	6.3	
	Heating	kW	3.2	4.0	5.6	7.1	
Power supply	V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					
Power consumption	W	40	40	50	50	75	
Airflow volume(H/M/L)	m³/h	650/580/500	650/580/500	950/850/700	950/850/700	1400/1150/1000	
Rated current	Cooling	A	0.3	0.3	0.4	0.6	
	Heating	A	0.3	0.3	0.4	0.6	
Water heating	A	/	/	/	/	/	
Sound pressure level(H/M/L)	dB(A)	36/34/32	36/34/32	42/38/33	42/38/33	44/42/39	
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	
	Gas	mm	Φ9.52	Φ12.7	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	
Thickness	mm	1.75	1.75	1.75	1.75	1.75	
Dimension (W×D×H)	Outline	mm	1220×700×225		1420×700×245		
Package	mm	1343×823×315			1548×828×345		
Net weight/Gross weight	kg	40/49	40/49	40/49	40/49	50/58	
Loading quantity	40' GP	unit	145	145	145	90	
40' HQ	unit	158	158	158	158	98	

Model		GMV-ND28ZD/B-T ¹	GMV-ND36ZD/B-T ¹	GMV-ND50ZD/B-T ¹	GMV-ND56ZD/B-T ¹	GMV-ND63ZD/B-T ¹	GMV-ND71ZD/B-T ¹
Capacity	Cooling	kW	2.8	3.6	5.0	5.6	6.3
	Heating	kw	3.2	4.0	5.6	6.3	7.1
Power supply	V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					
Power consumption	W	40	40	50	75	75	75
Airflow volume (SL/H/M/L)	m³/h	650/610/530/460	650/610/530/460	850/800/700/600	850/800/700/600	1300/1220/1090/940	1300/1220/1090/940
Rated current	Cooling	A	0.3	0.3	0.4	0.6	0.6
	Heating	A	0.3	0.3	0.4	0.6	0.6
Sound pressure level(H/M/L)	dB(A)	36/32/28	36/32/28	42/39/36	44/41/38	44/41/38	44/41/38
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17
Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75
Dimension (W×D×H)	Outline	mm	870×665×235	870×665×235	870×665×235	1200×665×235	1200×665×235
Package	mm	1033×770×300	1033×770×300	1033×770×300	1033×770×300	1363×770×300	1363×770×300
Net weight/Gross weight	kg	25.0/30.0	25.0/30.0	26.0/31.0	31.0/37.0	31.0/37.0	31.0/37.0
Loading quantity	40'GP	unit	144	144	144	98	98
40'HQ	unit	166	166	166	166	113	113

Note: *1 This product model is under development. Please confirm the final specifications with sales representatives.

Model		GMV-ND90ZD/B-T [*]	GMV-ND100ZD/B-T [*]	GMV-ND112ZD/B-T [*]	GMV-ND125ZD/B-T [*]	GMV-ND140ZD/B-T [*]	GMV-ND160ZD/B-T [*]		
Capacity	Cooling	kW	9.0	10.0	11.2	12.5	14.0	16.0	
	Heating	kW	10.0	11.2	12.5	14.0	16.0	17.0	
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	140	140	160	160	160	200	
Airflow volume (SL/H/M/L)		m ³ /h	1500/1380/1200/1020	1600/1500/1350/1260	1800/1700/1540/1400	1800/1700/1540/1400	2100/2000/1800/1480	2300/2200/1870/1590	
Rated current	Cooling	A	1.1	1.1	1.4	1.4	1.4	1.9	
	Heating	A	1.1	1.1	1.4	1.4	1.4	1.9	
Sound pressure level(H/M/L)		dB(A)	47/43/39	47/43/39	47/44/42	47/44/42	50/48/44	53/49/45	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05	
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17	
	Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75	
Dimension (W×D×H)	Outline	mm	1200×665×235	1200×665×235	1570×665×235	1570×665×235	1570×665×235	1570×665×235	
	Package	mm	1363×770×300	1363×770×300	1729×770×300	1729×770×300	1729×770×300	1729×770×300	
Net weight/Gross weight		kg	31.0/37.0	31.0/37.0	40.0/47.0	40.0/47.0	42.0/49.0	42.0/49.0	
Loading quantity	40'GP	unit	98	98	53	53	53	53	
	40'HQ	unit	113	113	64	64	64	64	

Note: *1 This product model is under development. Please confirm the final specifications with sales representatives.

Concealed Floor Standing Type

50/60 Hz

Model		GMV-ND22ZA/A-T	GMV-ND28ZA/A-T	GMV-ND36ZA/A-T	GMV-ND45ZA/A-T	GMV-ND56ZA/A-T	GMV-ND63ZA/A-T	GMV-ND71ZA/A-T	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	6.3	
	Heating	kW	2.5	3.2	4	5	6.3	7.1	
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	35	35	43	45	80	80	90
Airflow volume(H/M/L)		m ³ /h	450/350/250	450/350/250	550/450/350	650/500/400	900/750/600	900/750/600	1100/900/700
Rated current	Cooling	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
	Heating	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
ESP		Pa	10.0~40	10.0~40	10.0~40	15.0~60	15.0~60	15.0~60	15.0~60
Sound pressure level(H/M/L)		dB(A)	30/28/25	30/28/25	33/31/28	33/31/28	35/33/30	35/33/30	37/35/33
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)	Outline	mm	700×615×200	700×615×200	700×615×200	900×615×200	1100×615×200	1100×615×200	1100×615×200
	Package	mm	893×743×305	893×743×305	893×743×305	1123×743×305	1323×743×305	1323×743×305	1323×743×305
Net weight/Gross weight		kg	23/30	23/30	23/30	27/36	32/41	32/41	32/41
Loading quantity	40'GP	unit	273	273	273	217	175	175	175
	40'HQ	unit	312	312	312	248	200	200	200

50/60 Hz

Model		GMV-ND100L/A-T					GMV-ND140L/A-T							
Capacity	Cooling	kW					10				14			
	Heating	kW					11				15			
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V-230V ~ 60Hz							200				
Power consumption	W						200	220V-240V ~ 50Hz & 208V-230V ~ 60Hz						
	m ³ /h							1850/1600/1400				1850/1600/1400		
Airflow volume(H/M/L)	CFM							1089/942/824				1089/942/824		
	Cooling	A						1.5				1.5		
Rated current	Heating	A						1.5				1.5		
	Water heating	A						/				/		
ESP		Pa						0				0		
Sound pressure level(H/M/L)		dB(A)						50/48/46				50/48/46		
Connecting pipe	Liquid	mm						Φ9.52				Φ9.52		
	Gas	mm						Φ15.9				Φ15.9		
Drain pipe	External dia.	mm						31				31		
	Thickness	mm						4.5				4.5		
Dimension (W×D×H)		Outline							1870×580×400					
Package		Package							2083×738×545					
Net weight/Gross weight		kg							54/74			57/77		
Loading quantity	40'GP	unit							67			67		
	40'HQ	unit							67			67		

AHU KIT

Model		GMV-N36U/C-T	GMV-N71U/C-T	GMV-N140U/C-T	GMV-N280U/C-T	GMV-N560U/C-T
Defaulted capacity of ex-factory	Capacity		36	71	140	280
	Cooling	kW	3.6	7.1	14	56
Adjustable capacity	Heating	kW	4	8	16	63
	Cooling	kW	2.8	4.5	5.6	7.1
Power input	He					

Control System



Control System Lineup

Controlling systems		Outdoor series		GMV5		GMV5 HR	
Long-distance monitor	Intelligent remote eudemon	FE30-24/DF(B)		○		○	
		ME30-24/DF(B)			○		○
	Gateway of building protocol	ME30-24/E5(M)		○		○	
		ME30-24/E6(M)		○		○	
		ME30-24/D1(BM)		○		○	
		ME31-33/EH1(M)		○		○	
Intelligent billing eudemon	Intelligent billing eudemon	ME30-24/F1(K)		○		○	
		FE11-24/D4(B)			○		○
	G-Cloud	ME30-24/D1(T)			○		
		ME31-00C7 ME31-00C3		○		○	
Other modules	Optoelectronic isolated converter	GD02		○		○	
	Optoelectronic isolated signal multiplier	RS485-W		○		○	

Controlling system		Indoor series		Cassette type	(High ESP, Low ESP, Slim ducted) Duct type	Fresh air processing	Wall mounted type	Floor ceiling type	Console type	Floor standing type	Concealed floor standing type
Wireless controller	YAP1F		●	○	○	●	●	●	●	●	○
	YV1L1		○	○	○	○	○	○	○	○	○
Wired controller	XK46		○	●	●	○	○	○	○	○	●
	XK79		○	○	○	○	○	○	○	○	○
	XK55		○	○	○	○	○	○	○	○	○
	XE70-33/H		○	○	○	○	○	○	○	○	○
	JS05(receiver)		○	○							○
	Central controller		○	○	○	○	○	○	○	○	○
E-Smart zone controller	CE54-24/F(C)		○	○	○	○	○	○	○	○	○
Debugger	CE42-24/F(C)		○	○	○	○	○	○	○	○	○

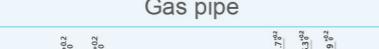
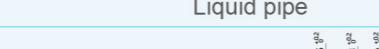
Note: ● means standard, ○ means optional.

Branching Joint (For GMV5 units)

For Indoor & Outdoor Units

Model	Total capacity (xkW)	Appearance	
		Gas pipe	Liquid pipe
FQ01A/A	X<20	<p>ID9.2 ± 0.2 ID9.6 ± 0.15 ID9.2 ± 0.15 ID9.2 ± 0.15</p>	<p>ID9.7 ± 0.15 ID9.7 ± 0.15 ID9.5 ± 0.15 ID9.5 ± 0.15</p>
FQ01B/A	20≤X≤30	<p>ID9.2 ± 0.2 ID9.2 ± 0.2 ID9.2 ± 0.2 ID9.2 ± 0.2</p>	<p>ID9.7 ± 0.15 ID9.5 ± 0.15 ID9.5 ± 0.15 ID9.5 ± 0.15</p>
FQ02/A	30<X≤70	<p>ID22.4 ± 0.2 ID22.4 ± 0.2 ID22.4 ± 0.2 ID22.4 ± 0.2</p>	<p>ID9.7 ± 0.15 ID9.5 ± 0.15 ID9.5 ± 0.15 ID9.5 ± 0.15</p>
FQ03/A	70<X≤135	<p>ID35.2 ID35.2 ID35.2 ID35.2</p>	<p>ID9.7 ± 0.15 ID9.7 ± 0.15 ID9.7 ± 0.15 ID9.7 ± 0.15</p>
FQ04/A	135<X	<p>ID41.7 ± 0.1 ID41.7 ± 0.1 ID41.7 ± 0.1 ID41.7 ± 0.1</p>	<p>ID9.3 ID22.6 ID19.3 ID19.3</p>

For Outdoor Units

Model	Appearance	
	Gas pipe	Liquid pipe
ML01/A	 <p>Dimensions for Gas pipe:</p> <ul style="list-style-type: none"> ID095.3 $\frac{3}{8}^{\frac{1}{2}}$ ID041.17 $\frac{1}{2}^{\frac{1}{2}}$ ID054.3 $\frac{1}{2}^{\frac{1}{2}}$ ID041.17 $\frac{1}{2}^{\frac{1}{2}}$ ID035.9 $\frac{1}{2}^{\frac{1}{2}}$ ID028.9 $\frac{1}{2}^{\frac{1}{2}}$ ID025.8 $\frac{1}{2}^{\frac{1}{2}}$ ID028.9 $\frac{1}{2}^{\frac{1}{2}}$ ID025.8 $\frac{1}{2}^{\frac{1}{2}}$ 	 <p>Dimensions for Liquid pipe:</p> <ul style="list-style-type: none"> ID016.3 $\frac{1}{2}^{\frac{1}{2}}$ ID09.5 $\frac{1}{2}^{\frac{1}{2}}$ ID02.5 $\frac{1}{2}^{\frac{1}{2}}$ ID02.5 $\frac{1}{2}^{\frac{1}{2}}$ ID012.9 $\frac{1}{2}^{\frac{1}{2}}$ ID012.9 $\frac{1}{2}^{\frac{1}{2}}$ ID012.9 $\frac{1}{2}^{\frac{1}{2}}$

Branching Joint (For GMV5 units)

For Indoor Uni

Model	Sort	Blueprint
FQ14/H1	Gas pipe	
	Liquid pipe	
FQ18/H1	Gas pipe	
	Liquid pipe	
FQ18/H2	Gas pipe	
	Liquid pipe	

Total rated capacity of downstream indoor units X(kW)	Upstream connecting pipe dimension		Model of manifold pipe
	Gas pipe(mm)	Liquid pipe(mm)	
X≤40.0	≤Φ25.4	≤Φ12.7	FQ14/H1
X≤68.0	≤Φ28.6	≤Φ15.9	FQ18/H1
68.0<X	≥Φ31.8	≥Φ19.05	FQ18/H2

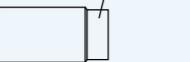
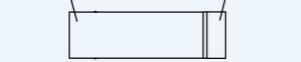
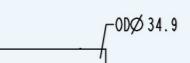
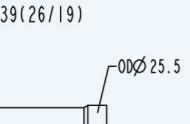
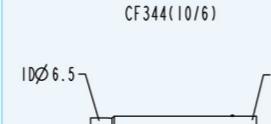
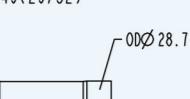
Branching Joint (For GMV5 HR)

For Outdoor Units and Mode Exchanger	
Model	Total capacity of the downstream indoor unit X(kW)
Appearance	
FQ01Na/A	X≤5.0
FQ02Na/A	5.0<X≤22.4
FQ03Na/A	22.4<X≤28.0
FQ04Na/A	28.0<X≤68
FQ05Na/A	68<X≤96
FQ06Na/A	96<X≤135
FQ07Na/A	135.0<X
High-pressure gas pipe	
Low-pressure gas pipe	
Liquid pipe	

For Indoor & Mode Exchanger	
Model	Total capacity of the downstream indoor units X(kW)
Appearance	
FQ01A/A	X≤14.2
FQ01B/A	14.2<X≤28.0
Gas pipe	
Liquid pipe	

For Outdoor Units	
Model	Module's capacity X(kW)
Appearance	
ML01R	50.4≤X≤96
ML02R	96<X
High-pressure gas pipe	
Low-pressure gas pipe	
Liquid pipe	

Reducer/expander pipe dimensions

CF333(54/45)	CF334(41/38)	CF335(35/32)	CF342(13/10)
			
CF336(35/29)	CF337(29/25)	CF338(26/22)	CF343(13/6)
			
CF339(26/19)	CF340(19/16)	CF341(16/13)	CF344(10/6)
			
CF345(13/16)	CF346(16/19)	CF347(19/22)	CF348(23/25)
			
CF349(29/32)			
			

Branching Joint (For AHU KIT)

Energy Recovery Ventilation(ERV)

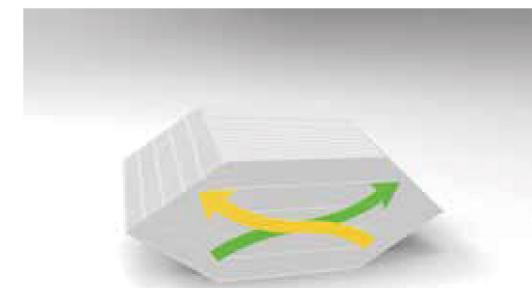


Gree Energy Recovery Ventilation System is designed especially for providing healthy and fresh indoor air, constant air volume and comfortable temperature and humidity with less power consumption. With F7-grade filter, it can effectively remove PM10, PM2.5 and other particles in the air;

Through the total heat exchange core that is made of high-polymer material, the air led from the outside will have efficient heat exchange with the discharged air. Heat exchange efficiency is up to 80%. It is applicable to houses, villas, banks, office buildings and other places with fresh air demand.

Adopts Hexahedral Total Heat Exchange Core

> It adopts hexahedral total heat exchange core, which provides reverse ventilation passage for fresh air and discharged air while preventing the mixture of fresh air and discharged air. Temperature exchange efficiency is 80% at most.



Air Volume Multi-selection Control

> 5 selections of air volume are available. Each selection differs obviously from another. It can satisfy different fresh air requirements under different housing areas and different pipe dimensions.

350 m ³ /h	High
300 m ³ /h	Medium high
250 m ³ /h	Medium
200 m ³ /h	Medium low
150 m ³ /h	Low

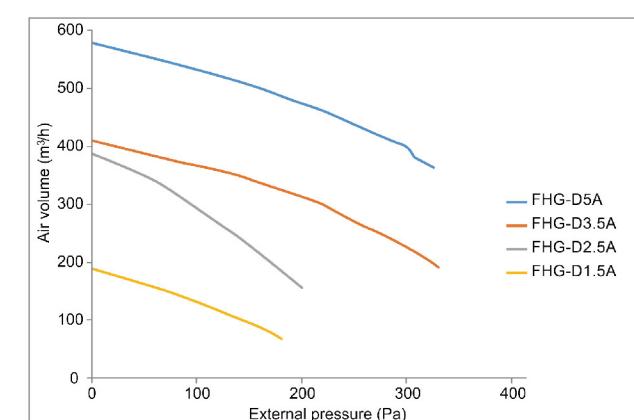
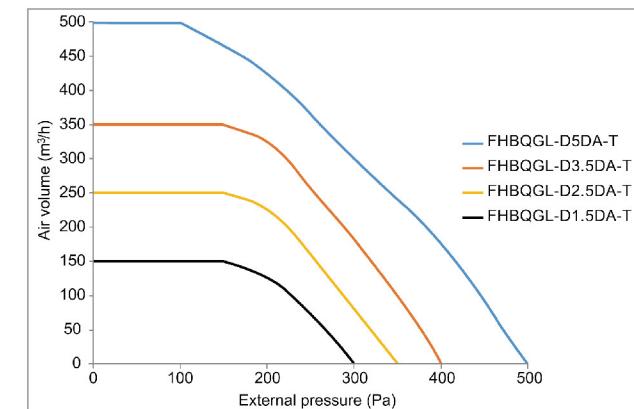
Note: The above air volume data is tested base on model FHBQGL-D3.5DA-T.



Constant Fresh Air Volume

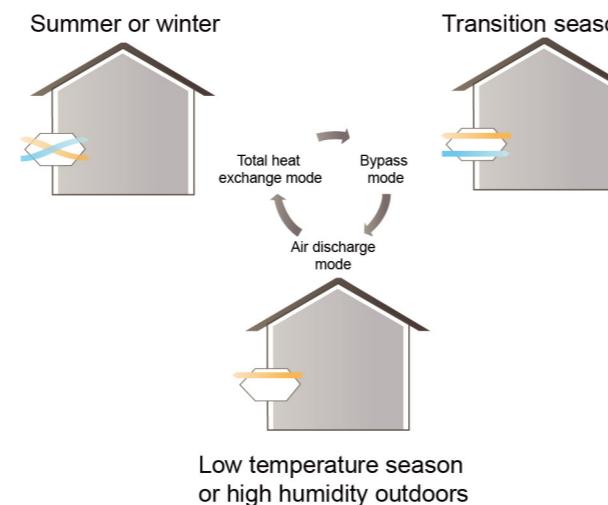
> System adopts DC motor and constant air volume control to realize air provision that will not be attenuated under certain range of static pressure. It can maintain sufficient supply of fresh air during operation, providing users with super comfortable experience.

> The right diagram shows the air volume/static pressure curve of common AC motor. We can see that as the static pressure increases (filter gets more dirty), the volume of fresh air is attenuated correspondingly. As the operation goes on and on, fresh air volume may not be able to satisfy the design requirement.



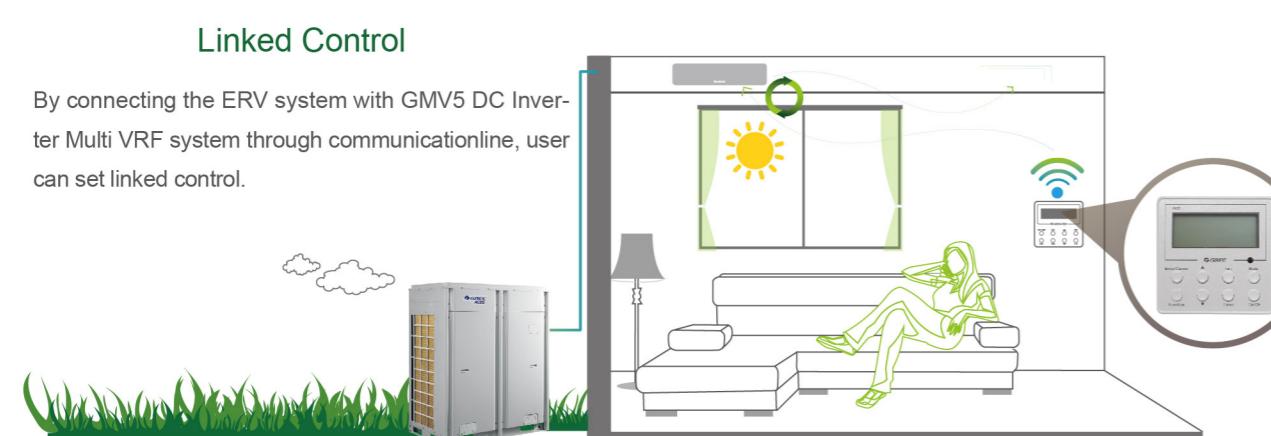
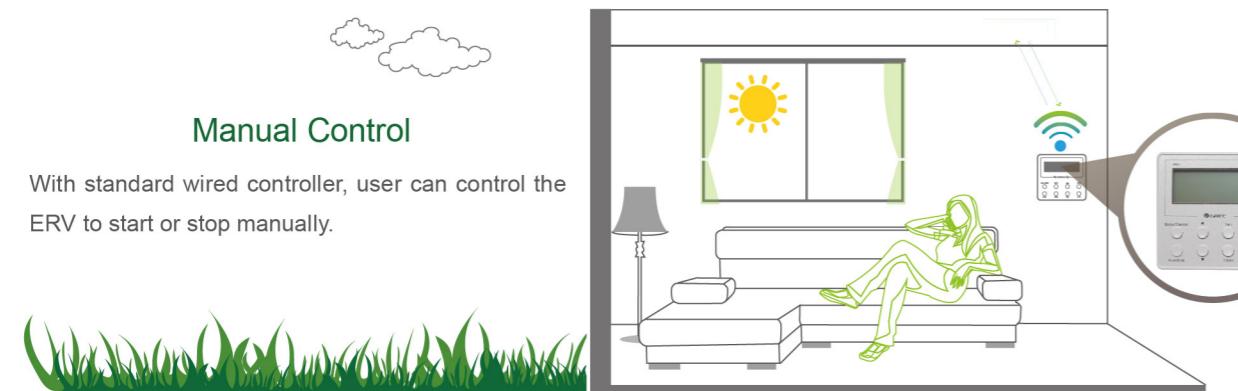
Comfortable Temperature and Humidity

> Temperature and humidity change a lot in different seasons. The system can automatically switch into bypass mode, air discharge mode, or total heat exchange mode during operation based on the detected temperature and humidity both indoors and outdoors, so you will enjoy comfortable air supply regardless of the seasons.



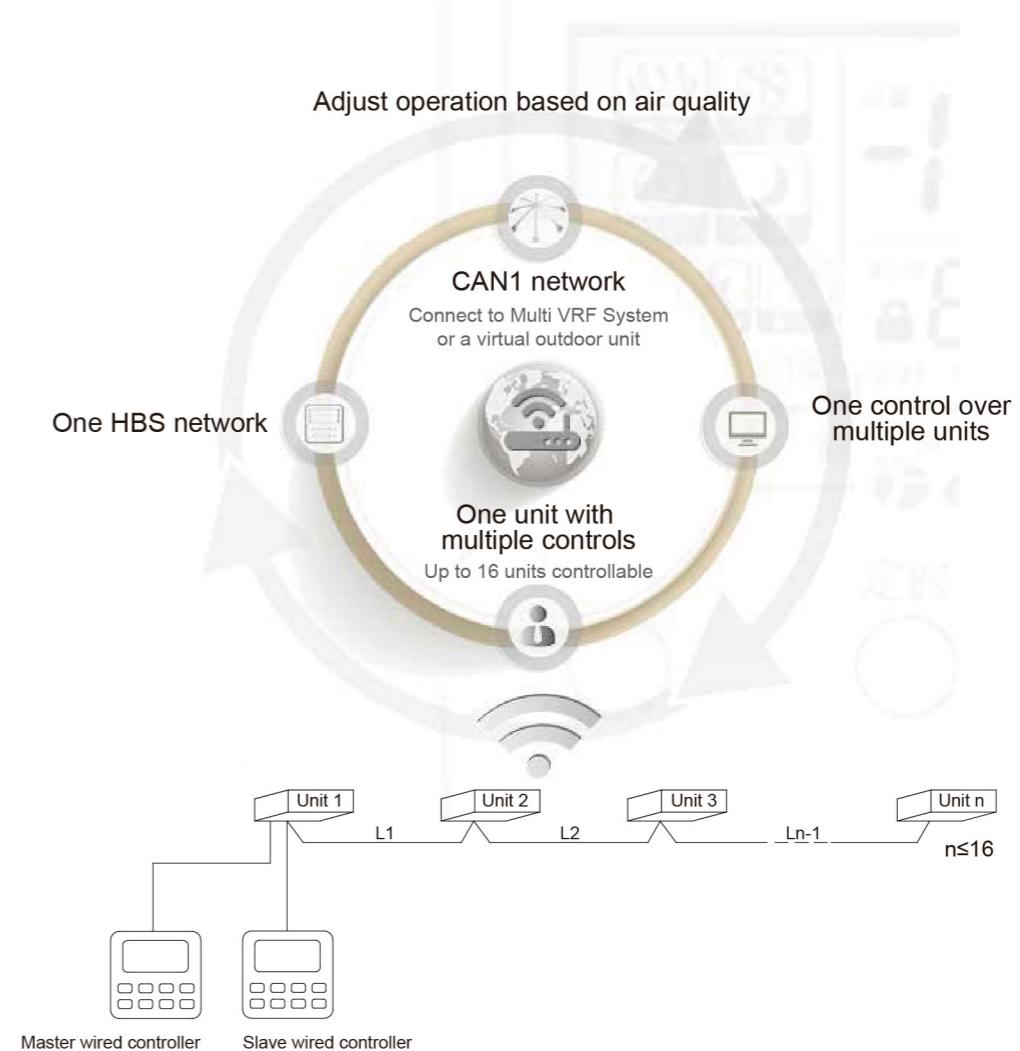
Intelligent Control

> System has manual control, linked control and auto control functions. When you connect the ERV with Multi VRF units, it can realize linked control; when you connect the ERV with air quality detection module, it can realize auto control function.



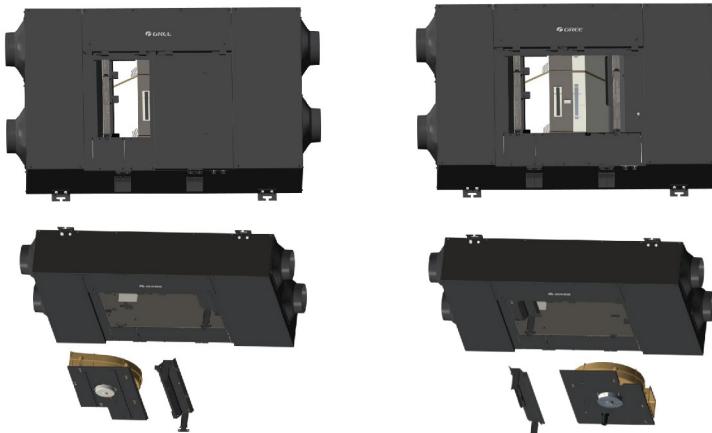
“One Unit With Multiple Controls” and “One Control Over Multiple Units”

> System can be connected with two wired controllers, i.e. master controller and slave controller. Both of them can control the system at the same time. When the Multi VRF System or a virtual outdoor unit is connected, one HBS network can control up to 16 units.



Smart Structural Design

The maintenance window adopts clasp design and hinge design, which is convenient for the maintenance of filter, total heat exchange core and the motor. The thickness of the device is only 220/240mm. It occupies less ceiling space, which is convenient for ceiling installation.



Model	FHBQGL-D1.5DA-T	FHBQGL-D2.5DA-T	FHBQGL-D3.5DA-T	FHBQGL-D5DA-T
Air flow volume	m³/h	150	250	350
ESP	Pa	100	100	100
Temperature exchange efficiency	%	80	75	76
Power supply	V/Ph/Hz	220-240V~50Hz & 208-230V~60Hz	220-240V~50Hz & 208-230V~60Hz	220-240V~50Hz & 208-230V~60Hz
Power input	kW	0.050	0.105	0.155
Sound power level	dB	43	50	55
Dimension (W×D×H)	Outline Package	1160×700×220 1468×873×285	1160×700×220 1468×873×285	1200×785×240 1528×973×305
Net weight/Gross weight	kg	50/58.5	50/58.5	60/70.5
Loading quantity	40GP/40HQ	unit	172/195	121/140

Control System Lineup

Control system	Product series		ERV
	Wired controller	Smart zone controller	
XK112			
●	○	○	●

Note: ● means standard, ○ means optional.

ERV+DX COIL

INVERTER R410A

This series are fresh air units with evaporators, which means they have total heat exchangers and evaporators. When it's used with outdoor units, they can deliver fresh air without increasing the indoor load. They have multiple operation modes and are widely applicable.



- » High-efficiency HR module: They are built with heat exchange chips for efficient energy recovery on the air discharge side. When they are in use, other air conditioning equipment will consume less power.
- » Constant air volume: Units adopt constant air volume control technology so that they can maintain constant air volume within a specific range of pipeline resistance.
- » Free cooling: When outdoor temperature is lower than the set temperature, units can automatically introduce the fresh outdoor air to make the room cooler.
- » Multiple air supply modes: Positive pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor positive pressure, which will help guarantee room cleanliness; Negative pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor negative pressure, which will help prevent leakage of indoor pollutants. Balanced air supply: The fresh air side and air discharge side can be set with the same air flow volume (default).
- » Linked control: Units can be connected to other indoor units in the same CAN and HBS networks for linked control.
- » Cooling and heating functions: With fan coils, they have cooling and heating functions like common air conditioners.
- » Multiple operation modes: Total heat exchange mode: The fresh air side and air discharge side can have heat exchange for efficient energy recovery. By-pass mode: Ventilation without heat exchange. Air discharge mode: Only air discharge side is turned on for ventilation.

Note*: Gree reserves the right to modify the specifications without prior notice. Please confirm the final specifications with sales representative.



Specifications

Indoor unit	Model		GMV-VDR5PH/SA-S	GMV-VDR8PH/SA-S	GMV-VDR10PH/SA-S
	Rated voltage	V	220-240		
	Rated frequency	Hz	50/60		
	Cooling capacity	kW	8.5	12.0	14.5
	Heating capacity	kW	4.0	10.6	12.0
	Power input	kW	0.27	0.44	0.64
	Current input	A	1.65	2.73	3.86
	Airflow volume		CFM m³/h	294 500	471 800
	ESP	Pa	150	150	150
	Thermal exchange efficiency	%	73	74	73
	Sound power level	dB	55	59	62
	Dimension (W×D×H)	Outline Package	1700×880×340 1988×1138×535	1800×1185×390 2110×1440×567	1800×1185×390 2110×1440×567
Ventiduct	Outer diameter	mm	120/175	158/225	158/225
Net weight/Gross weight	kg		200	250	250
Loading quantity	20'GP/40'GP/40'HQ	unit	20/44/44	16/32/32	16/32/32
Standard wired controller				XE70-33/H	



AIR-COOLED CHILLER

Inverter Mini Chiller
(Heat Pump, R410A Series)

Modular Air-cooled Scroll Chiller

Inverter Modular Air-cooled Chiller
(Heat Pump, R32)

Inverter Modular Air-cooled Chiller
(Heat Pump)

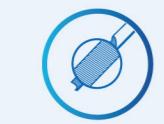
Inverter Mini Chiller (Heat Pump, R410 Series)

INVERTER R410A

Inverter mini chiller, is a kind of small-size air-cooled chiller that can be connected to all sorts of fan coil units to realize cooling and heating. It can be used in the temperature range of -20~48°C.



Wired controller Z263Q



Inner groove copper



Self-diagnosis



Comprehensive protection



Memory function

Compressor inverter control regulates water temperature precisely.

Integral installation is convenient and cost-saving.

Precise system pressure control improves the anti-freezing function of the system.

Two-stage compression technology is adopted to greatly improve the system's performance.



Item	Water side (water temperature)				Air side (outdoor temperature)		
	Nominal operating condition		Operating range		Nominal operating condition		Operating range
	Inlet(□)	Outlet(□)	Outlet(□)	I/O difference(□)	DB(□)	WB(□)	DB(□)
Cooling	12	7	7~25	2~10	35	24	10~48
Heating	40	45	25~60	2~10	7	6	-20~35

Model	Heat pump		HLR8Pd/Na-K	HLR10Pd/Na-K	HLR12Pd/Na-M	HLR14Pd/Na-M
Capacity	Cooling	kW	6.20	7.50	9.50	11.00
	Heating	kW	8	10	12	14
EER/COP	W/W		3.1/3.5	3.1/3.4	3.2/3.7	3.1/3.4
Power suppl	V/Ph/Hz		220-240V ~ 50Hz		380-415V 3N~ 50Hz	
Power input	Cooling	kW	2	2.4	2.97	3.55
	Heating	kW	2.25	2.9	3.24	4.12
Compressor	Type	-	Rotary	Rotary	Rotary	Rotary
	Quantity	-	1	1	1	1
Refrigerant charge volume	kg	3.5	3.5	4.0	4.0	
Water flow volume	l/s	1.25	1.25	1.25	1.25	
	GPM	16.515	16.515	16.515	16.515	
Build-in chilled water pump	Pump power input	kW	0.14	0.14	0.14	0.14
	Delivery lift	m	11	11	11	11
Build-in expansion vessel volume	L	10	10	10	10	
Chilled water outlet/inlet screw thread spec	inch	1	1	1	1	
Sound pressure level	dB(A)	53	55	54	54	
Dimension(W×D×H)	Outing	mm	1390×412×890	1390×412×890	1350×381×1438	1350×381×1438
	Package	mm	1463×438×1035	1463×438×1035	1443×433×1575	1443×433×1575
Net weight/Gross weight	kg	140/155	140/155	194/209	194/209	
Loading quantity	40'GP/40'HQ	unit	80/80	80/80	43/43	43/43

Modular Air-cooled Scroll Chiller

E Series



65/80kW



130/160kW

Thanks to the compact and flexible modularized structure, E Series Modular Type Scroll Chillers can be widely used for newly built and retrofitted large and small-sized industrial and civil air conditioning projects, like apartments, hotels, restaurants, office buildings, shopping malls, theaters, gyms, factories, hospital etc. It is also the ideal choice for where there is high requirement on noise and ambient environments and it is inconvenient to install the cooling tower.

Item	Water side (water temperature)				Air side (outdoor temperature)	
	Nominal operating condition		Operating range		Nominal operating condition	Operating range
	Inlet (°C)	Outlet (°C)	Outlet (°C)	I/O difference (°C)	DB (°C)	DB (°C)
Cooling	12	7	5~20	2.5~6	35	0~46

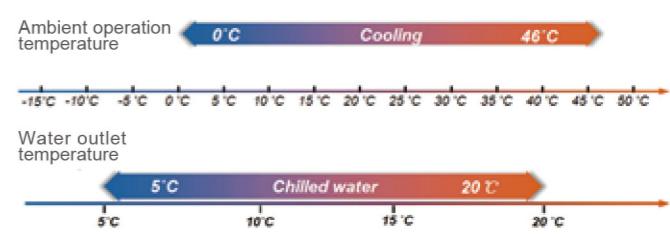
Features

New Appearance Design

- For the E series units, it is of beautiful appearance, highlighted outlines, and powerful visual impact.
- The zinc-nickel alloy screws have been put into use for higher corrosion-proof corrosion and reliability for the whole unit.

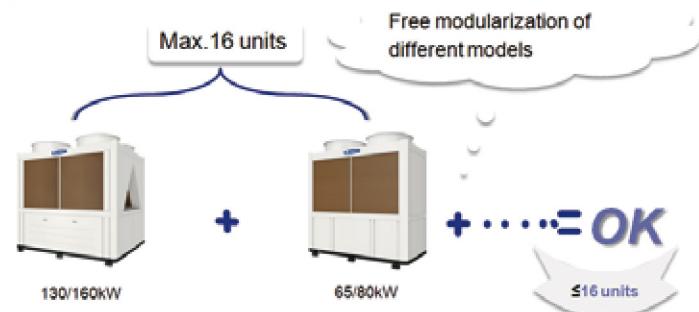
Wide Operation Range

Ambient operation temperature for E Series Modular unit is 0~46°C and temperature range of water outlet is 5~20°C;



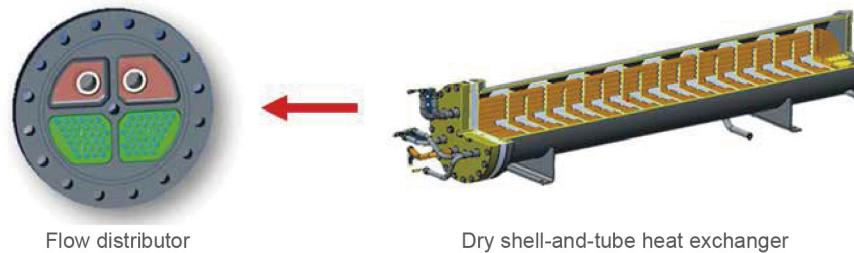
Powerful Compatibility

- Different models can be modularized freely and up to 16 units can be modularized in parallel.
- It can be modularized with any D series model.



High-efficiency Shell and Tube

- The dual-flow design can greatly improve the heat exchanging effect and the capacity of the unit.
- The specially designed header box and flow distributor can largely improve the evenness of refrigerant vapor-liquid mixture after throttling and then improve the heat exchanging capacity of the shell and tube.



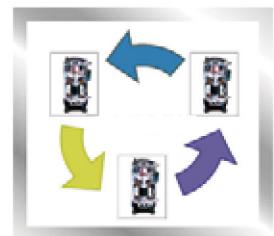
Low-noise Operation

Through active and passive noise reduction technologies, noise of the model 130 can be lowered to 69dB(A), for creating quite and comfortable environment for the user.



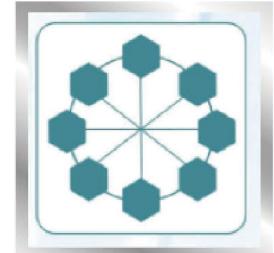
Compressor Operation Balance Technology

The unique compressor operation balance technology makes sure that each compressor operates in turn, which greatly prolongs the lifespan of compressor.



Free Master Module Design

Any single unit can operate as the master once connected with the wired controller. It overcomes the problem which would occur to the product of other manufacturer that the whole system would fail to work properly when the fixed master unit malfunctions.



Super Protection Functions

This series is equipped with advanced microcomputer control system, completed protection functions and powerful error diagnosis function. Main protection functions: compressor high pressure protection, compressor low pressure protection, compressor overload protection, antifreezing protection, waterflow switch protection, temperature sensor protection, phase sequence protection, high discharge temperature protection, etc.



50Hz

R410A

Model	Heat pump	LSQWF65M/NaE-M	LSQWF80M/NaE-M	LSQWF130M/NaE-M	LSQWF160M/NaE-M
Capacity	Cooling/Heating	kW RT	65 18.48	82 23.32	132 37.54
Capacity steps	%	0、50、100	0、50、100	0、50、100	0、25、50、75、100
EER	W/W	3.20	3.19	3.20	3.00
Power supply	V-Ph-Hz	400V~3N~50Hz	400V~3N~50Hz	400V~3N~50Hz	400V~3N~50Hz
Power input	Cooling	kW	20.3	25.7	41.2
Compressor	Type	—	Constant Speed Scroll		
	Starting mode	—	direct startup		
	Quantity	—	2	2	2
	Type	—	Dry Expansion Evaporator		
Water side heat exchanger	Water flow volume	m³/h GPM	11.20 49	14.10 62	22.70 100
	Pressure drop	kPa ft.WG	45 14.76	60 19.68	60 19.68
	Connection pipe	—	flange connection		
Air side heat exchanger	Type	—	Aluminum Fin-copper Tube		
	Fan type and quantity	—	Axial-flow		
	Total fan air flow	m³/h CFM	2×1.2×10⁴ 2×0.7056×104	2×1.4×10⁴ 2×0.8239×104	4×1.2×10⁴ 4×0.7056×104
	Total fan motor power	kW	2×0.65	2×0.75	4×0.65
	Sound pressure level	dB(A)	66	67	70
Dimension	Outline(W×D×H)	mm	2138×1025×2243	2138×1025×2243	2306×1980×2320
	Package(W×D×H)	mm	2198×1085×2243	2198×1085×2243	2366×2040×2320
Net/Gross/Operating weight	kg	730/735	770/775	1280/1285	1540/1545
Loading quantity	40'GP/40'HQ	set	11/11	11/11	5/5
					5/5

Inverter Modular Air-cooled Chiller (Heat Pump, R32)

INVERTER R32

All DC inverter, high efficiency and energy conservation, wide operation range, compact size and modular combination.



All DC inverter compressor and fan, high-efficiency and energy-saving;

Super quiet and wide operation range;

Convenient installation, modular combination and smart control;

With water pump switchover function, for prolonging service life of water pump;

Remote ON/OFF by one button, convenient for operation.



Item	Water side		Heat source/User side
	Leaving water temperature(°C)		Environment dry bulb temperature(°C)
Cooling	5~20		-15~52
Water heating	35~50		-20~40

Model	Heat pump		LSQWRF35VM/NhA-M	LSQWRF60VM/NhA-M	
Capacity	Cooling/Heating	kW	32/35	60/65	
		RT	9.10/9.95	17.06/18.48	
Capacity steps		%	0~100	0~100	
EER/COP		W/W	2.74/3.3	2.88/3.27	
Power supply		V/Ph/Hz	380-415V 3N~ 50Hz	380-415V 3N~ 50Hz	
Power input	Cooling	kW	11.7	20.8	
	Heating	kW	10.6	19.9	
Compressor	Type	-	InverterRotary	InverterRotary	
	Starting mode	-	Inverter starting	Inverter starting	
	Quantity	-	1	2	
Water side heat exchanger	Type	-	Dry Expansion Evaporator	Dry Expansion Evaporator	
	Water flow volume	l/s	1.53	2.87	
		GPM	24	46	
	Pressure drop	kPa	80	55	
Air side heat exchanger		ft.WG	26.24	18.04	
	Connection pipe	-	G1 1/2 external thread connection	G2 external thread connection	
Air side heat exchanger	Type	-	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube	
	Fan type and quantity	-	Axial-flow/2	Axial-flow/2	
	Total fan air flow	l/s	2×0.175×10 ⁴	2×0.333×10 ⁴	
	Total fan motor power	kW	0.75	0.75	
Sound pressure level		dB(A)	62	68	
Dimension	Outline(W×D×H)	mm	1340×845×1605	2200×965×1675	
	Package(W×D×H)	mm	1420×920×1775	2267×1030×1867	
Net weight/Gross weight		kg	405/422	686/722	
Loading quantity	40'GP/40'HQ	unit	16/16	11/11	

Inverter Modular Air-cooled Chiller (Heat Pump)

A Series Inverter Modular Air-cooled Chiller adopts all DC inverter and has wide operational range, compact design and can be modularized.



High-efficiency and energy-saving, with all DC inverter compressor and fan;

Quiet and wide operational range;

Easy installation, modularized combination, intelligent control;

With water pump switch function for prolonging service life of water pump;

Long-distance one-key ON/OFF control.

INVERTER R410A

Item	Water side (water temperature)				Air side (outdoor temperature)	
	Nominal operating condition		Operating range		Nominal operating condition	Operating range
	Inlet(C)	Outlet(C)	Outlet(C)	I/O difference(C)	DB(C)	DB(C)
Cooling	12	7	5~20	2.5~6	35	-15~52
Heating	40	45	35~50	2.5~6	7	-20~40

Model	Heat pump	LSQWRF35VM/Na-A-M	LSQWRF60VM/Na-A-M	LSQWRF65VM/Na-A-M
Capacity	Cooling/Heating	kW	32/36	60/65
		RT	9.1/10.24	17.06/18.48
Capacity steps	%	0~100	0~100	0~100
EER/COP	W/W	2.58/3.33	2.74/3.22	2.62/3.20
Power supply	V/Ph/Hz	380-415V 3N~ 50Hz	380-415V 3N~ 50Hz	380-415V 3N~ 50Hz
Power input	Cooling	kW	12.4	21.90
	Heating	kW	10.8	20.20
Compressor	Type	-	Inverter rotary	Inverter rotary
	Starting mode	-	Inverter starting	Inverter starting
	Quantity	-	1	2
Water side heat exchanger	Type	-	Dry expansion evaporator	Dry expansion evaporator
	I/s	1.53	2.87	3.11
	GPM	24	46	49
	kPa	75	55	60
Air side heat exchanger	ft.WG	24.6	18.04	19.68
	Connection pipe	-	G1 1/2 external thread connection	G2 external thread connection
	Type	-	Aluminum fin-copper tube	Aluminum fin-copper tube
	Fan type and quantity	-	Axial-flow/2	Axial-flow/2
Total fan air flow	I/s	2×0.175×10 ⁴	2×0.333×10 ⁴	2×0.333×10 ⁴
	CFM	2×0.371×10 ⁴	2×0.707×10 ⁴	2×0.707×10 ⁴
	Total fan motor power	kW	0.75	0.75
Sound pressure level	dB(A)	62	68	68
	Outline(W×D×H)	mm	1340×845×1605	2200×965×1675
	Package(W×D×H)	mm	1420×920×1775	2267×1030×1867
Net weight/Gross weight	kg	400/412	689/725	689/725
Loading quantity	40'GP/40'HQ	unit	16/16	11/11





SCREW CHILLER

High-efficiency Modular Air
-cooled Screw Chiller

High-efficiency Water-cooled
Screw Chiller

Parameters

Permanent Magnetic Synchronous
Inverter Screw Chiller

High-efficiency Modular Air-cooled Screw Chiller

R134a

It is a kind of high-efficiency air-cooled screw chillers that can be connected to all sorts of fan coil units to realize cooling/heating for civil or industrial buildings.



	Golden fin condenser		Inner groove copper		Comprehensive protection		Self-diagnosis		Memory function		24 hour timer		Long-distance monitoring		High efficiency		Intelligent defrosting		Modular structure
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- Thanks to V type fin structure, unit features small refrigerant pressure loss and high efficiency.
- With flooded type shell-and-tube design, evaporating temperature is increased, hence improving the heat exchanging efficiency and energy efficiency.
- Unit adopts low noise fan blades and specialized compressor noise reduction device, therefore sound level falls to 5dB(A) lower than the 2nd generation.
- Due to the totally-enclosed design, its appearance is harmonious and nice-looking.



Item	Water side (water temperature)				Air side (outdoor temperature)		
	Nominal operating condition		Operating range		Nominal operating condition		Operating range
	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	DB(°C)	WB(°C)	DB(°C)
Cooling	12	7	5~15	2.5~8	35	—	18~52

Model	Cooling only		LSBLGF320MH /NbA-M*	LSBLGF420MH /NbA-M*	LSBLGF520MH /NbA-M*	LSBLGF580MH /NbA-M*	LSBLGF650MH /NbA-M*	LSBLGF750MH /NbA-M*	
Capacity	Cooling	kW	320	420	520	580	650	750	
		TR	91.0	119.4	147.9	164.9	184.8	213.3	
Capacity steps		%	25%,50%~100%	25%,50%~100%	25%,50%~100%	25%,50%~100%	12.5%,25%~100%	12.5%,25%~100%	
EER		W/W	3.20	3.23	3.21	3.22	3.25	3.26	
Power supply		V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	
Power input	Cooling	kW	100	130	162	180	200	230	
	Type	-	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	
Compressor	Starting mode	-	Star delta start	Star delta start	Star delta start	Star delta start	Star delta start	Star delta start	
	Quantity	-	1	1	1	1	2	2	
Water side heat exchanger	Type	-	Flooded evaporator	Flooded evaporator	Flooded evaporator	Flooded evaporator	Flooded evaporator	Flooded evaporator	
	Water flow volume	m³/h	55.0	72.2	89.4	99.8	111.8	129.0	
	GPM		243	319	394	440	493	569	
	Pressure drop	kPa	≤35	≤45	≤45	≤45	≤55	≤55	
	ft.WG		≤11.7	≤15.1	≤15.1	≤15.1	≤18.4	≤18.4	
Air side heat exchanger	Connection pipe	-	DN100	DN125	DN125	DN125	DN150	DN150	
	Type	-	Aluminum fin-copper tube						
	Total fan air flow	m³/h	20000×6	20000×8	20000×10	20000×10	20000×12	20000×14	
	CFM		11772×6	11772×8	11772×10	11772×10	11772×12	11772×14	
Dimension	Total fan motor power	kW	1.5×6	1.5×8	1.5×10	1.5×10	1.5×12	1.5×14	
	Outline(W×D×H)	mm	3670×2250×2550	4890×2250×2550	6110×2250×2550	6110×2250×2550	7340×2250×2550	8560×2250×2550	
Net/Gross/Operting weight	Package(W×D×H)	mm	3750×2330×2550	4970×2330×2550	6190×2330×2550	6190×2330×2550	7420×2330×2550	8640×2330×2550	
	Cooling only	kg	3980/4020/4060	4990/5030/5090	5930/5970/6049	6100/6140/6222	7440/7480/7589	8350/8390/8517	
Loading quantity	40'GP/40'HQ	unit	0/2	0/2	0/1	0/1	0/1	0/1	

Note: *This product is under development. The parameters are estimated, please refer to the value on the nameplate.

Model	Cooling only		LSBLGF860MH /NbA-M*	LSBLGF950MH /NbA-M*	LSBLGF1050MH /NbA-M*	LSBLGF1160MH /NbA-M*	LSBLGF1320MH /NbA-M*	LSBLGF1520MH /NbA-M*	
Capacity	Cooling	kW	860	950	1050	1160	1320	1520	
		TR	244.5	270.1	298.6	329.9	375.4	432.2	
Capacity steps		%	12.5%,25%~100%	12.5%,25%~100%	12.5%,25%~100%	8.3%,16.7%~100%	6.25%,12.5%~100%	6.25%,12.5%~100%	
EER		W/W	3.31	3.39	3.28	3.31	3.34	3.38	
Power supply		V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	
Power input	Cooling	kW	260	280	320	350	395	450	
	Type	-	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	
Compressor	Starting mode	-	Star Delta Start	Star Delta Start	Star Delta Start	Star Delta Start	Star Delta Start	Star Delta Start	
	Quantity	-	2	2	2	3	4	4	
Water side heat exchanger	Type	-	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	
	Water flow volume	m³/h	147.9	163.4	180.6	199.5	227.0	261.4	
	GPM		652	720	796	880	1001	1153	
	Pressure drop	kPa	≤65	≤60	≤70	≤55	≤60	≤60	
	ft.WG		≤21.7	≤20.1	≤23.4	≤18.4	≤20.1	≤20.1	
Air side heat exchanger	Connection pipe	-	DN150	DN150	DN150	DN150+DN125	2×DN150	2×DN150	
	Type	-	Aluminum fin-copper tube						
	Total fan air flow	m³/h	20000×16	20000×18	21500×18	20000×22	20000×24	20000×28	
	CFM		11772×16	11772×18	12654×18	11772×22	11772×24	11772×28	
Dimension	Total fan motor power	kW	1.5×16	1.5×18	1.8×18	1.5×22	1.5×24	1.5×28	
	Outline(W×D×H)	mm	9780×2250×2550	11000×2250×2550	11000×2250×2550	13450×2250×2550	14670×2250×2550	17120×2250×2550	
Net/Gross/Operting weight	Package(W×D×H)	mm	9860×2330×2550	11080×2330×2550	11080×2330×2550	13530×2330×2550	14750×2330×2550	17200×2330×2550	
	Cooling only	kg	9130/9170/9313	10280/10320/10486	10510/10590/10720	13370/13450/13637	14880/14960/15178	16950/17030/17289	
Loading quantity	40'GP/40'HQ	unit	0/1	0/1	0/1	0/0	0/0	0/0	

Note: *This product is under development. The parameters are estimated, please refer to the value on the nameplate.

High-efficiency Water-cooled Screw Chiller

LHE Series



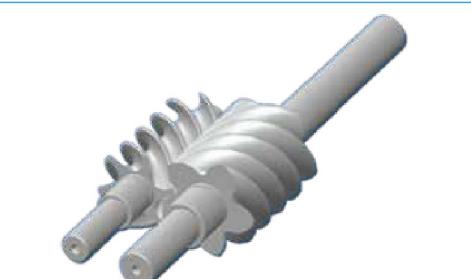
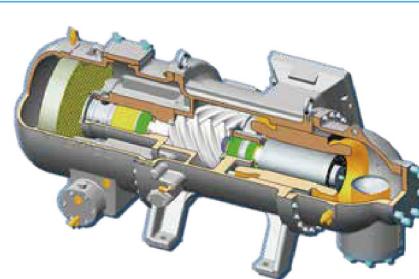
High-efficiency water-cooled screw chiller is specially designed for improving efficiency and reducing operation cost. This chiller adopts Gree own-developed semi-hermetic twin screw compressor, high-efficiency flooded heat exchanger and eco-friendly R134a. Its EER can be up to 6.3. The cooling capacity under nominal working condition is 260~2100kW. LHE series high-efficiency water-cooled screw chiller can be applicable for office, hospital, school, shopping mall, as well as factory.

Operating condition of nominal cooling (water temperature)		Operating range (water temperature)					
Chilled water		Cooling water		Chilled water		Cooling water	
Inlet(°C)	Outlet(°C)	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	Inlet(°C)	I/O difference(°C)
-	7	30	-	4~15	2.5~8	18~35	3.5~8

Features

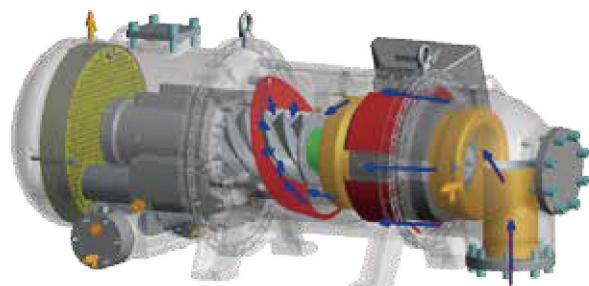
Semi-closed Dual Screw Compressor for High-efficiency Unit

- Design for Gree water-cooled screw chiller especially according to actual pressure ratio, high matching degree with the unit, reducing the overcompression and insufficient compressor during the operation of compressor effectively, thus enhancing system energy efficiency.
- Self-developed efficient rotor type line (patent No.: CN201120008270.9), interdigititation gap is optimized, connection cable is short and the efficiency is even higher.
- Three-level combined built-in oil separator, the efficiency is over 99.7%, making the system more stable with lower noise.
- Self-made closed motor to avoid refrigerant leakage, built-in PTC temperature protector for the motor, effectively detect motor winding temperature.
- Optimize cooling channel of the motor, cooling effect is better, which can enhance operation range of the compressor effectively.



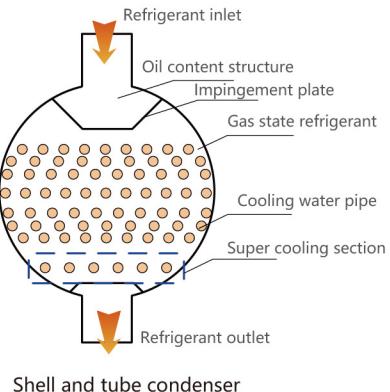
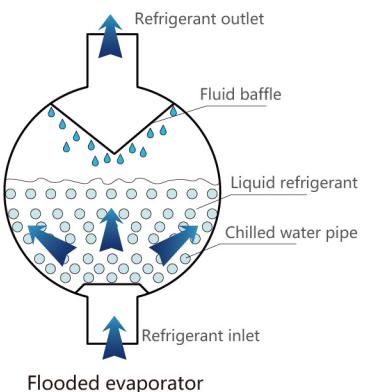
Low Pressure Loss Design

- Brand new design of "evaporation direct connection" air inlet structure, suction resistance is only 1kPa and cooling capacity of compressor will enhance 2%.
- Spiral air inlet structure of low pressure loss (patent No.: CN203796571U), streamline air suction mouth design reduces the loss of suction resistance; increases suction density of compressor and improves cooling capacity of compressor.
- Brand new air discharge low pressure loss pipeline design, resistance of the air discharge side is only 5kPa.



Heat Exchanger

- Flooded evaporator, built-in refrigerant uniform device and gas liquid separator device to make the refrigerant evenly distributed, during suction, the liquid refrigerant quantity is less, enhancing heat efficiency of evaporation and improving unit energy efficiency.
- A device to prevent the high-speed and high-pressure gas from impacting the heat exchanger tube is set at the upper condenser, containing the vibration of heat exchanger tube and improving the operation reliability of condenser; built-in subcooling device at the bottom, enhancing subcooling degree and improving refrigeration circulation efficiency of water chiller.
- Efficient heat exchanger, intensifying the heat transfer efficiency of water side and refrigerant side at the same time, further enhances energy efficiency of water chiller. Adopting mechanical expanded tube joint as the sealing method for heat exchange tube and tube plate, 3 sealed grooves are designed in the expanded tube joint, improving the sealing reliability.



Vertical Oil Separator

Adopt efficient vertical oil separator, the structure is tight, through cyclone separation, inertial impaction, natural settling and adsorption separation, oil and gas is separated thoroughly, oil separation efficiency is up to 99.98%.



New Throttling Structure

The high precision electronic expansion valve can adjust the flow of refrigerant accurately, keep track of the variation of evaporator liquid level timely; further optimizes the control logic, calculate the control liquid level automatically, and quickly adjust the actual value, realizing "output according to actual demand", ensuring high energy efficiency of some loads of the unit, making the unit operation range wider.



Strict Tests

Components are strictly tested before entering the factory. Impellers are made of high-strength aluminum alloy, which is highly anti-corrosive. They must pass strict tests after manufacturing. Heat exchangers are designed in strict accordance with relevant codes of pressure vessels and tested in 1.5 times of working pressure. The machine will take complete performance tests and reliability tests before leaving the factory.



Multiple Protections

The unit has multiple protections function, such as high temperature protection for air discharge, overheat protection for frequency converter, safety valve protection, overheating protection for motor winding, low pressure protection, high pressure protection, Anti-freezing protection, switch protection for water flow, Phase loss and phase failure protection and electronic component protection, ensuring stable operation under all kinds of conditions and avoiding the damage incurred.

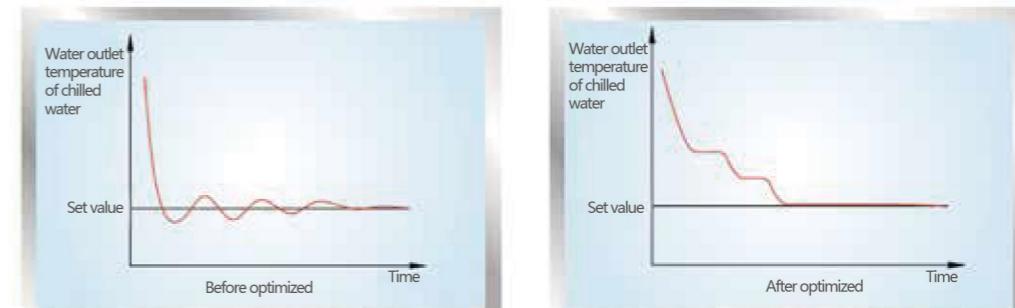


Convenient Installation and Maintenance

- Dual units and dual circuits design for unit maintenance.
- Tight structure design with small floor space.
- Parallel arrangement of evaporator and condenser to lower unit gravity center, ensuring transportation safety.
- Before leaving the factory, sufficient refrigerant and refrigerant oil has been charged, on-site charging is needless.
- Before leaving the factory, tests have been conducted according to national standard and the designated working conditions of the user; just connect the water pipe and power on site for operation.

Auto-adjusting Technology, Stable Output

The control system can not only adjust load according to cold water leaving temperature but also predict and compensate the change of air conditioning load based on the change rate of cold water entering temperature. The unit can achieve faster load adjustment and stable water leaving temperature. When the unit is under bad working condition, it will adjust the running parameters to keep itself running rather than frequently stop. The unit can operate stably and reliably to satisfy customers' refrigerating demand.



Color Touch Screen Display Control Center

Control: intelligent control system, friendly human-machine interaction interface, if the display screen is damaged accidentally, the unit can be operated manually through the equipped switch.

- Color touch screen of 12 inches
- Visual and dynamic information
- Intelligent image data
- Auto backup of parameter and synchronization
- Dual system control logic
- Auto detection protection



High-performance Digital Single Processing Platform

The control system adopts high-performance 32-bit CPU and DSP digital signal processor. The excellent data collection accuracy and data processing capability ensure timely and precise system control. The unit also adopts the intelligent Fuzzy-PID compound control algorithm, which is a control method comprising the intelligent technology, fuzzy technology and PID control algorithm, ensuring fast response and stable performance.

Authority Classification with Passwords

Control center has access passwords for operators so that set values won't be changed without authorization. Access authority is classified to user access and manufacturer access. User password is used to start up unit and enter the interface of user parameter setting. It is managed and can be changed by the user. Manufacturer password is used to enter the interface of manufacture parameter setting. Any change of the manufacture parameters may affect unit's reliability; therefore it must be kept by professional engineering and debugging personnel.

Model LHE_Nb		353CE5AE2	353CE4AE1E	533CE3CE3	553CE2CE2	553CE1CE1E	643EE7EE7	
Cooling capacity	kW	261.6	294.7	341.3	367.9	425.8	455.3	
	RT	74.4	83.8	97.0	104.6	121.1	129.4	
Capacity adjustment range %						25%-100%		
EER	W/W	5.89	5.94	6.01	6.05	6.06	6.02	
IPLV	W/W	6.94	7.04	7.11	7.16	7.11	7.04	
Power supply	V/Ph/Hz	380V 3~ 50Hz						
Power input	kW	44.4	49.6	56.8	60.8	70.3	75.6	
RLA	A	78.4	87.6	100.4	107.4	124.2	133.6	
Compressor	Type	-	Semi-closed permanent magnetic synchronous inverter screw compressor					
Starting mode	-	Y—△ /Soft start						
Quantity	-	1	1	1	1	1	1	
Refrigerant charge volume	kg	85	100	105	110	115	130	
Refrigeration oil CPI-Solest-170								
Evaporator	Type	-	Flooded shell and tube evaporator					
Fouling factor	m°C/kW	0.018	0.018	0.018	0.018	0.018	0.018	
Water flow rate	m³/h	41	46	53	58	125	71	
GPM	180	203	235	253	549	313		
kPa	36.6	37.8	32.5	35.6	32.1	33.7		
Pressure drop	ft.H₂O	12.0	12.4	10.7	11.7	10.5	11.1	
Connection pipe	mm	DN100	DN100	DN100	DN100	DN100	DN125	
Condenser	Type	-	Horizontal shell and tube condenser					
Fouling factor	m°C/kW	0.044	0.044	0.044	0.044	0.044	0.044	
Water flow volume	m³/h	51	57	66	71	83	88	
GPM	224	252	292	314	363	389		
Pressure drop	kPa	41.9	44.7	42.2	42.3	46.1	40.9	
ft.H₂O	13.7	14.7	13.8	13.9	15.1	13.4		
Connection pipe	mm	DN100	DN100	DN125	DN125	DN125	DN125	
Sound pressure level(Max.)	dB(A)	81	81.2	82	82.5	82.8	83	
Dimension	Outline(W×D×H)	3170×1188×1850	3170×1188×1850	3175×1365×1959	3175×1365×1959	3175×1365×1959	3240×1465×2040	
	Package(W×D×H)	3400×1350×1900	3400×1350×1900	3400×1550×2050	3400×1550×2050	3400×1550×2050	3400×1600×2200	
Net/Gross/Operating weight	kg	2300/2400/2450	2330/2430/2450	2730/2850/2900	2780/2880/2950	2800/2900/2950	3350/3450/3550	
Loading quantity	40'GP/40'HQ	set	1	1	1	1	1	

Model LHE_Nb		653EE6EE6	653EE5EE5E	822EE4EE4	832EE3EE3	832EE2EE2E	862EE1EE1E	
Cooling capacity	kW	484.6	544.7	593.7	663	698.0	744.9	
	RT	137.8	154.8	168.8	188.5	198.5	211.8	
Capacity adjustment range %						25%-100%		
EER	W/W	6.05	6.03	6.02	6.02	6.02	6.03	
IPLV	W/W	7.17	7.02	7.06	7.05	7.10	7.11	
Power supply	V/Ph/Hz	380V 3~ 50Hz						
Power input	kW	80.1	90.3	98.6	110.1	116.0	123.6	
RLA	A	141.5	159.5	174.2	194.5	204.8	218.4	
Compressor	Type	-	Semi-closed permanent magnetic synchronous inverter screw compressor					
Starting mode	-	Y—△ /Soft start						
Quantity	-	1	1	1	1	1	1	
Refrigerant charge volume	kg	140	150	180	190	180	180	
Refrigeration oil CPI-Solest-170								
Evaporator	Type	-	Flooded shell and tube evaporator					
Fouling factor	m°C/kW	0.018	0.018	0.018	0.018	0.018	0.018	
Water flow rate	m³/h	76	85	93	104	109	116	
GPM	334	375	409	456	481	513		
kPa	36.5	40.7	36.2	39.6	36.4	35.6		
Pressure drop	ft.H₂O	12.0	13.3	11.9	13.0	11.9	11.7	
Connection pipe	mm	DN125	DN125	DN150	DN150	DN150	DN150	
Condenser	Type	-	Horizontal shell and tube condenser					
Fouling factor	m°C/kW	0.044	0.044	0.044	0.044	0.044	0.044	
Water flow volume	m³/h	94	106	115	129	135	144	
GPM	414	465	507	566	596	636		
Pressure drop	kPa	43.1	45.3	41.8	44.2	43.1	36.3	
ft.H₂O	14.1	14.9	13.7	14.5	14.1	11.9		
Connection pipe	mm	DN125	DN125	DN150	DN150	DN150	DN150	
Sound pressure level(Max.)	dB(A)	83.5	83.8	85	86	88.8	87	
Dimension	Outline(W×D×H)	3240×1465×2040	3240×1465×2040	3240×1508×2100	3240×1508×2100	3240×1508×2100	3240×1508×2100	
	Package(W×D×H)	3400×1600×2200	3400×1600×2200	3400×1650×2250	3400×1650×2250	3400×1650×2250	3400×1650×2250	
Net/Gross/Operating weight	kg	3370/3470/3550	3400/3500/3600	3830/3930/4050	3880/3980/4100	3930/4030/4150	3980/4080/4200	
Loading quantity	40'GP/40'HQ	set	1	1	1	1	1	

Note: These models are not for EU.

Model LHE_Nb		932EE9EE9E	942HE3GE3	952HE2GE2	952HE1GE1E	533GF2EF2-2	553GF2EF2-2	
Cooling capacity	kW	842.0	911.8	971.7	1052.0	697.5	744.1	
	RT	239.4	259.2	276.5	299.1	198.3	211.5	
Capacity adjustment range %						25%-100%		
EER	W/W	5.78	5.79	5.83	5.90	6.02	6.03	
IPLV	W/W	7.72	7.65	7.50	7.56	7.10	7.14	
Power supply	V/Ph/Hz	380V 3~ 50Hz						
Power input	kW	145.8	157.4	166.8	178.4	115.9	123.5	
RLA	A	257.6	278.1	294.2	315.2	204.8	218.2	
Compressor	Type	-	Semi-closed permanent magnetic synchronous inverter screw compressor					
Starting mode	-	Y—△ /Soft start						
Quantity	-	1	1	1	1	2	2	
Refrigerant charge volume	kg	240	260	260	280	200	220	
Refrigeration oil CPI-Solest-170								
Evaporator	Type	-	Flooded shell and tube evaporator					
Fouling factor	m°C/kW	0.018	0.018	0.018	0.018	0.018	0.018	
Water flow rate	m³/h	132	143	152	164	109	116	
GPM	580	628	670	724	480			



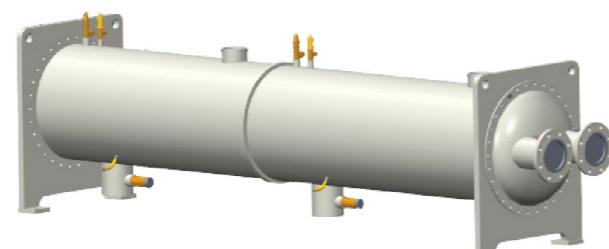
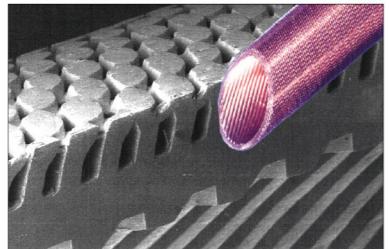
LMVE Series
Variable Speed Air-Cooled Screw Chiller

GREE CENTRAL AIR-CONDITIONING UNITS



Flooded Shell and Tube Design

- TURBO-BII ultra-high-efficiency evaporating tubes
- Immersed inside refrigerant, the heat exchanging tubes are of excellent heat exchanging effect
- Refrigerant flows in the tubes, which can facilitate service and maintenance.
- Pressure loss at the water side is low, which can reduce energy consumption for the water pump.



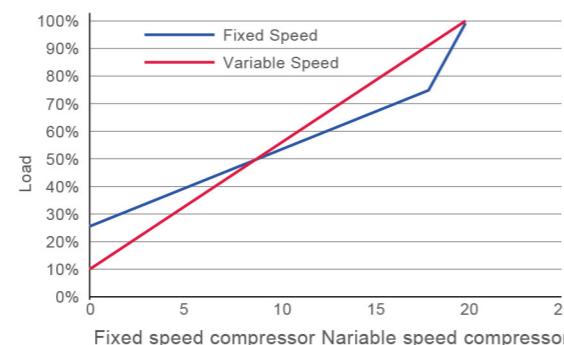
Electronic expansion valve control technology

- Realize flow adjustment accurately, the maximum stepping motor is 3,810, coarse and fine adjustment is combined;
- Improve the operation efficiency under the working conditions of deviation and low load;
- Control overheat of evaporator outlet dynamically, utilization efficiency of heat exchange area is higher.



High efficiency variable speed compressor

- Coordinated control by speed and volume, more precise control. Stepless adjustment in compressor range from 10% to 100%, wider range and faster adjustment.



Dedicated flooded compressor

- Dedicated flooded compressor;
- Designed for HFC-134a refrigerant;
- Direct linkage between motor and compressor;
- Specially design pressure ratio for the working condition of flooded unit;
- High precision processing assembly
Refrigeration efficiency is high under full load;
- Sliding valve electrodeless adjustment realizes accurate matching of compressor refrigeration output and load;
- High precision SKF bearing.

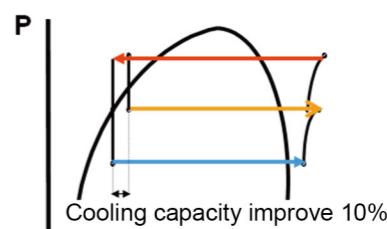


Cycled design for economizer

- The economizer circuit refrigerant throttles flashing, increases the refrigerant subcooling at the inlet of the main refrigeration circuit expansion valve, increases the suction capacity of compressor, and greatly increases the cooling capacity by 10%, while cooling efficiency is improved.



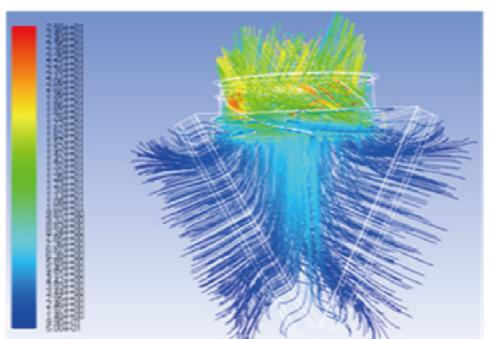
Economizer



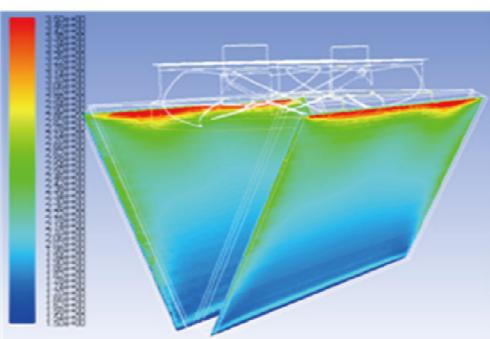
Cooling capacity improve 10%
Air make-up enthalpy-adding and enthalpy-compression chart

Optimized V-shaped Condenser & High Heat Exchanging Efficiency

- V-shaped arrangement, even flow distribution, high heat exchanging efficiency
- Rippled slotted aluminum fins, high heat exchanging efficiency
- Optimized V angle, optimized flow rate



Flow Pattern



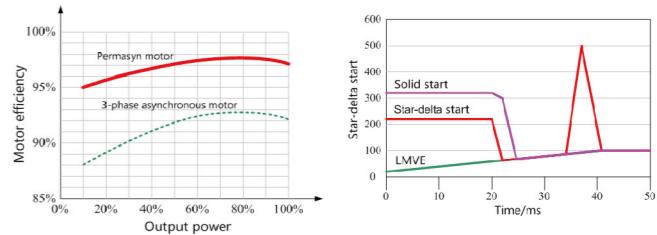
Nephogram of Face Velocity Distribution



Curve of Total Flow rate Versus V Angle

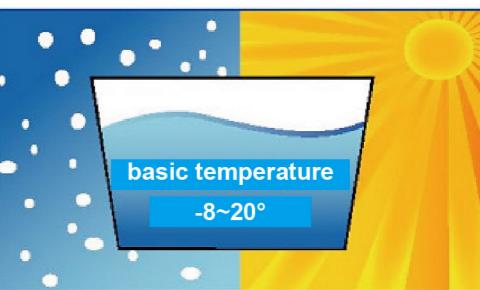
Energy-efficient and reliable

- Compared with conventional units, LMVE series chillers are more energy-efficient and reliable.



Advanced self-adaptive control

- Automatically adjust the water temperature according to the load change to ensure comfort in transition season;
- The chiller will always remain energy-saving operation by setting timer ON/OFF on the display panel;
- The display board has its own communication module and provides MODBUS protocol, which can realize group control among several units and optimize system operation efficiency;
- The fan controls startup quantity according to pressure to ensure energy efficient operation in transition season.

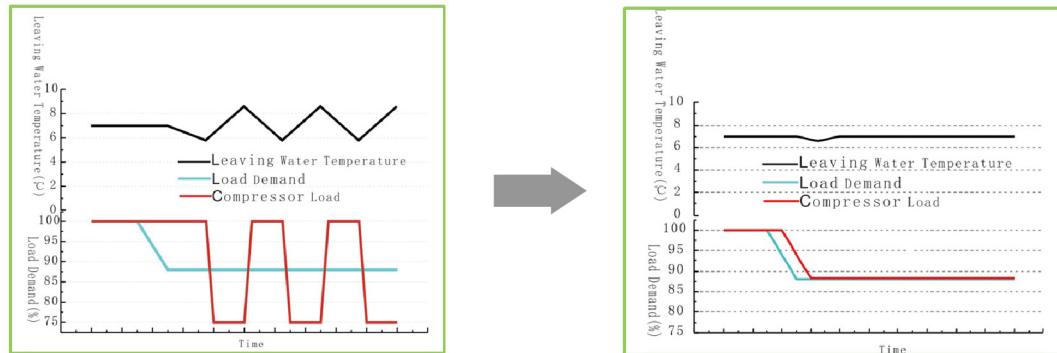


Automatically adjust the water temperature according to the fluctuation of the actual air conditioning load



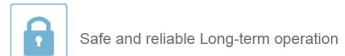
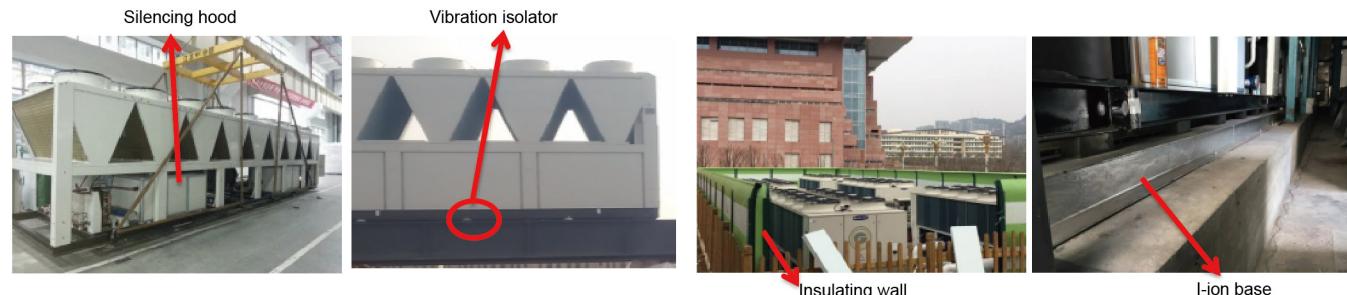
Energy Output as Required

- Stable leaving water temp, with temperature accuracy of $\pm 0.5^{\circ}\text{C}$.
- Output capacity perfectly matches with the load demand of the building.
- Exact capacity and water temperature control to make the user feel more comfort.



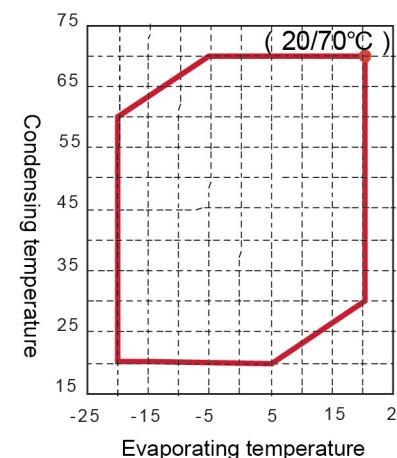
Full-Closed Structure, Low Noise and Low Vibration Design with Patent, Safe and Comfortable

- Stable leaving water temp, with temperature accuracy of $\pm 0.5^{\circ}\text{C}$.
- Output capacity perfectly matches with the load demand of the building.
- Exact capacity and water temperature control to make the user feel more comfort.



Reliable dual screw compressor

- The wide range and high reliability operation of dual screw compressors is achieved through the following technologies and control methods:
 - (1) A specially equipped motor that reaches Grade F and its temperature resistance is 155 degrees;
 - (2) Direct linkage between compressor and motor (no speed increase gear);
 - (3) Working temperature of compressor motor is low (suction for cooling);
 - (4) Built-in discharge check valve prevents the refrigerant from flowing back during shutdown;
 - (5) Built-in oil separator and oil heater design;
 - (6) The unit is self-equipped with a pressure sensor and mutual inductor. Through the comprehensive control to high pressure, low pressure, compressor current and discharge temperature, it ensures reliable operation of the compressor within the operating range.

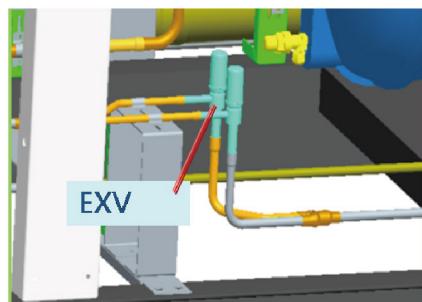


Compressor motor cooling technology

- Electronic expansion valve is used to control the temperature of the compressor motor, the control precision is high and control range is wide, thus controlling motor temperature accurately and ensuring the reliability and service life of compressor operation.

PD control method:

- (1) Give feedback earlier for quick adjustment;
- (2) Electronic expansion valve control, wide adjustment range to solve the spray requirements under different working conditions and loads;
- (3) Precisely control the amount of inhalation spray to cool the motor directly.



Vertical Oil Separator

- During operation of the compressor, refrigeration oil will go together with refrigerant into the refrigeration system and do not go back to the compressor, which then will result in oil starvation.
- With cyclone separation, impaction natural sedimentation, filtering by the filter, oil will be separated out effectively and go back to the compressor in time to make sure normal loading, unloading and lubricating of the compressor.
- Vertical structure, saving installation space
- Tested separation efficiency up to 99.97%



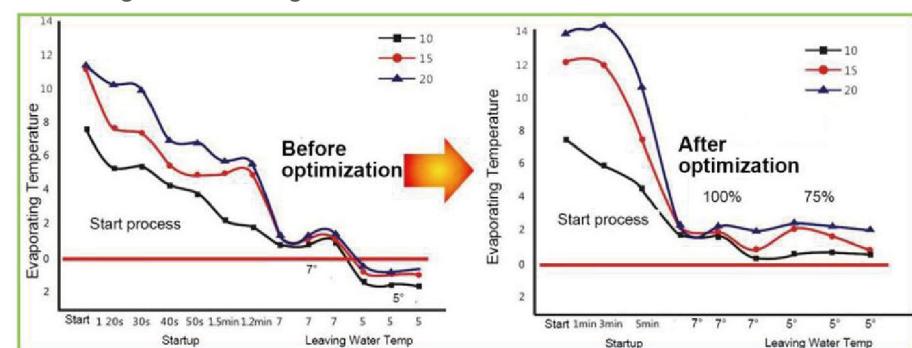
Patents
201210529933.0
201220673712.6
201320033018.2

Multiple anti-freezing design for shell and tube

- Adopt flooded evaporator structure, the design evaporation temperature is 5.5°C , higher than 0°C ;
- Water flows in the heat exchange tube, and there is no dead zone to avoid local freezing and cracking;
- The multi-slot tube plate design is adopted to improve the sealing structure and eliminate the hidden danger of leakage;
- At the intermediate baffle plate, the light pipe which is twice as thick as the threaded pipe is tightly expanded with the support plate to enhance the water protection of water flow switch. Evaporation temperature control technology.

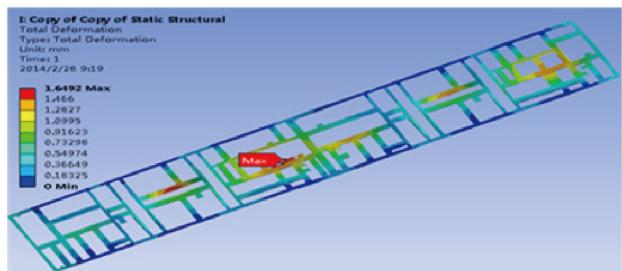


- Triple control of evaporation temperature, shell water outlet temperature and anti-freezing water temperature to ensure that the evaporation temperature in the shell tube is higher than 0°C , so as to prevent the shell tube from freezing and cracking.

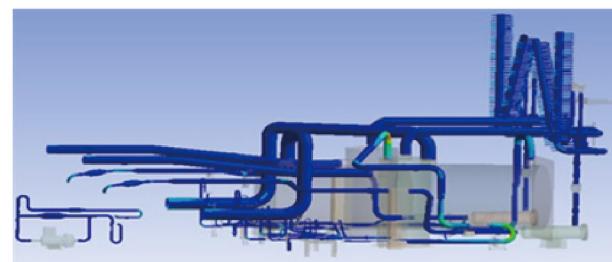


Advanced base design

- Introduce the calculation method of the strength and stiffness of the large unit base. Determine the lifting position and method by calculating the center of gravity, moment of inertia and deflection of the unit, ensuring the reliability and economy of the lifting of unit base.
- The unit design is based on the finite element algorithm to optimize key components and related components to ensure unit reliability during transportation.

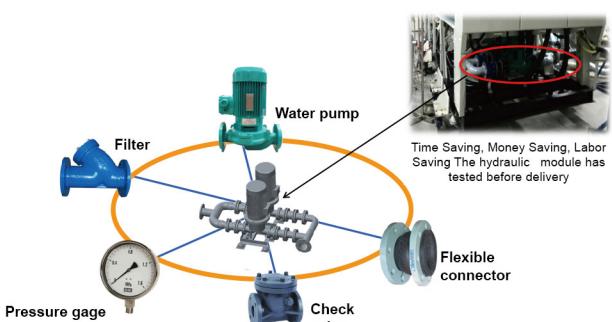


Finite Element Analysis to the Base



Transportation analysis

Built-in hydraulic module (optional)



On-site seamless stitching technology (optional)

- The technology can realize more than two modules for on-site combination according to user need, meeting the demand of different cooling requirements.



Corrosion prevention design to meet the requirement for marine climate

- Full-sealed structure design to avoid direct exposure of component;
- The fin adopts high corrosion-resistant material, neutral salt spray test reaches 2,000 hours;
- The base adopts the 3-layer corrosion-resistant coating for protection;
- Component of the pipeline shall have corrosion-resistant coating treatment;
- The self-made sheet metal parts adopt high corrosion-resistant and weather-proof powder for spray painting treatment.

DC inverter controller

- More efficient**
High efficiency refrigerant cooling, inverter efficiency >98.5%;
- Wider voltage range**
323-528V , 50/60Hz
- More adaptable**
Protection level: IP54; Applicable ambient temperature : -10°C-50°C
- Safer**
24V DC; Less DC electromagnetic interference, no conversion, fast response



Operating range



- More efficient
High efficiency refrigerant cooling, inverter efficiency >98.5%
- Wider voltage range
323-528V , 50/60Hz
- More adaptable
Protection level:IP54
Applicable ambient temperature:-10°C-50°C
- Safer
24V DC;Less DC electromagnetic interference, no conversion,fast response

Item	operating range					
	Water side (water temperature)			Air side (outdoor temperature)		
	Nominal operating condition	Operating range		Nominal operating condition	Operating range	
Cooling	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	DB(°C)	WB(°C)
Cooling	12	7	5~15	2.5~8	35	/
						15~52



Anti-freezing notices

Anti-freezing notices for shell and tube of the unit

When ambient temperature is below 5 °C, if the unit is not in use, the solution are as follows:

- (1) Drainage operation: firstly cut off the power of the unit, then drain the water in the shell and tube heat exchanger and the pipe (the drainage point is the drain valve at the bottom of the shell and tube heat exchanger and the lowest drain valve in the pipeline).
- (2) No drainage operation: in order to prevent the water in the shell and tube from freezing, it is forbidden to cut off the power, and the automatic anti-freezing operation function in the display panel shall be turned on (defaulted), so that the unit has auto anti-freezing function. If it is not possible to ensure that the unit is always powered, it is necessary to add anti-freezing solution to the water system of the unit to ensure that the freezing point of the water in the system is lower than the local minimum ambient temperature. Anti-freezing purpose can also be achieved.

Correction after using anti-freezing solution

After using ethylene glycol, the performance and water volume of the unit, as well as the pressure drop of the waterway when passing through the unit will change and should be corrected. The correction coefficient is shown in the following table:

Percentage of ethylene glycol and water	Ice point	Cooling(Heating) capacity correction	Water flow correction	Pressure drop correction
10	-3.6	0.990	1.015	1.06
20	-7.9	0.980	1.040	1.12
30	-14	0.970	1.080	1.18
40	-22.3	0.965	1.135	1.24

Notes: Never use a salt mixture in antifreeze to avoid corroding the unit and damaging the equipment.

Parameters

R134a

Operating range

Item	operating range						
	Water side (water temperature)			Air side (outdoor temperature)			
	Nominal operating condition		Operating range		Nominal operating condition		Operating range
	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	DB(°C)	WB(°C)	DB(°C)
Cooling	12	7	5~15	2.5~8	35	/	15~52

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Notes: Never use a salt mixture in antifreeze to avoid corroding the unit and damaging the equipment.

Models	LMVEB30JD3/Nb-M	LMVED30JD2/Nb-M	LMVED30JD2E/Nb-M	LMVED30JD1E/Nb-M	LMVED40LE3/Nb-M
Cooling capacity	kw	320	350	385	410
Cooling power input	kw	100	109	120	137
COP	kw/kw	3.20	3.21	3.12	3.00
Rated power input	kw	130	142	160	178
Power	V/Ph/Hz	380~460V 3Ph 50Hz			
Cooling adjustment range		20%~100%			
Operating control		Automatic microcomputer control, operating status display, error alarms			
Safety protection		High pressure protection, low pressure protection, compressor over-load protection, compressor internal protection, phase loss/reversal protection, low oil level protection, water flow switch protection, low flow alarm, differential pressure protection, high oil pressure difference protection, fan over-current protection, freeze protection, sensor protection, low discharge superheating degree protection.			
Compressor	Type	High efficiency variable frequencyvariable volume screw compressor			
	Quantity	1	1	1	1
Refrigerant Type		R134a	R134a	R134a	R134a
Air side heat ex - changer	Heat exchanger type	Aluminum Fin-copper Tube			
	Fan rated power	kW	6×1.5	6×1.5	6×1.5
	Water flow volume	m³/h	55.04	60.2	66.22
Water side heat exchanger	Water flow volume	kPa	≤35	≤35	≤35
	Type	Flooded Evaporator			
	Inlet/outlet tube diameter	mm	DN100	DN100	DN100
Outline dimensions	Width	mm	3670	3670	3670
	Depth	mm	2250	2250	2250
	Height	mm	2550	2550	2550
Package dimensions	Width	mm	3870	3870	3870
	Depth	mm	2330	2330	2330
	Height	mm	2550	2550	2550
	Net weight	kg	3840	3940	4280
	Gross weight	kg	3880	3980	4320
	Operating weight	kg	3958	4060	4406

Models	LMVED40LE2E/Nb-M	LMVED50LE1/Nb-M	LMVED50LE1E/Nb-M	LMVED33LF6/Nb-M	LMVED33LF3E/Nb-M
Cooling capacity	kw	520	580	630	700
Cooling power input	kw	167	181	197	218
COP	kw/kw	3.11	3.20	3.20	3.21
Rated power input	kw	219.5	249.7	262.5	283.5
Power	V/Ph/Hz	380~460V 3Ph 50Hz			
Cooling adjustment range		20%~100%			
Operating control		Automatic microcomputer control, operating status display, error alarms			
Safety protection		High pressure protection, low pressure protection, compressor over-load protection, compressor internal protection, phase loss/reversal protection, low oil level protection, water flow switch protection, low flow alarm, differential pressure protection, high oil pressure difference protection, fan over-current protection, freeze protection, sensor protection, low discharge superheating degree protection.			
Compressor	Type	High efficiency variable frequencyvariable volume screw compressor			
	Quantity	1	1	1	2
Refrigerant Type		R134a	R134a	R134a	R134a
Air side heat ex - changer	Heat exchanger type	Aluminum Fin-copper Tube			
	Fan rated power	kW	8×1.5	10×1.5	10×1.5
	Water flow volume	m³/h	89.44	99.76	108.36
Water side heat exchanger	Water flow volume	kPa	≤45	≤45	≤45
	Type	Flooded Evaporator			
	Inlet/outlet tube diameter	mm	DN125	DN125	DN125
Outline dimen - sions	Width	mm	4890	6110	6110
	Depth	mm	2250	2250	2250
	Height	mm	2550	2550	2550
Package dimensions	Width	mm	5090	6310	6310
	Depth	mm	2330	2330	2330
	Height	mm	2550	2550	2550
	Net weight	kg	5520	5890	6410
	Gross weight	kg	5560	5930	6450
	Operating weight	kg	5630.4	6007.8	6538.2

Models		LMVED33LF7E/Nb-M	LMVED43LF5E/Nb-M	LMVED44NF4E/Nb-M	LMVED44NF2E/Nb-M	LMVED54NG2E/Nb-M
Cooling capacity	kW	820	905	940	1040	1150
Cooling power input	kW	262	288	294	334	364
COP	kW/kW	3.13	3.14	3.20	3.11	3.16
Rated power input	kW	319.8	329.9	343.7	395.1	436.9
Power	V/Ph/Hz	380~460V 3Ph 50Hz				
Cooling adjustment range		20%~100%				
Operating control		Automatic microcomputer control, operating status display, error alarms				
Safety protection		High pressure protection, low pressure protection, compressor over-load protection, compressor internal protection, phase loss/reversal protection, low oil level protection, water flow switch protection, low flow alarm, differential pressure protection, high oil pressure difference protection, fan over-current protection, freeze protection, sensor protection, low discharge superheating degree protection.				
Compressor	Type	High efficiency variable frequency variable volume screw compressor				
	Quantity	2	2	2	2	2
Refrigerant Type		R134a	R134a	R134a	R134a	R134a
Air side heat exchanger	Heat exchanger type	Aluminum Fin-copper Tube				
	Fan rated power kW	12×1.5	14×1.5	16×1.5	16×1.5	18×1.5
	Water flow volume m³/h	141.04	155.66	161.68	178.88	197.8
Water side heat exchanger	Water flow volume kPa	≤60	≤65	≤60	≤70	≤70
	Type	Flooded Evaporator				
	Inlet/outlet tube diameter mm	DN150	DN200	DN200	DN200	DN200
Outline dimensions	Width mm	7340	8560	9780	9780	11000
	Depth mm	2250	2250	2250	2250	2250
	Height mm	2550	2550	2550	2550	2550
Package dimensions	Width mm	7540	8760	9980	9980	11200
	Depth mm	2330	2330	2330	2330	2330
	Height mm	2550	2550	2550	2550	2550
Net weight	kg	9350	9500	10780	11150	11930
Gross weight	kg	9390	9540	10820	11230	12010
Operating weight	kg	9537	9690	10995.6	11373	12169

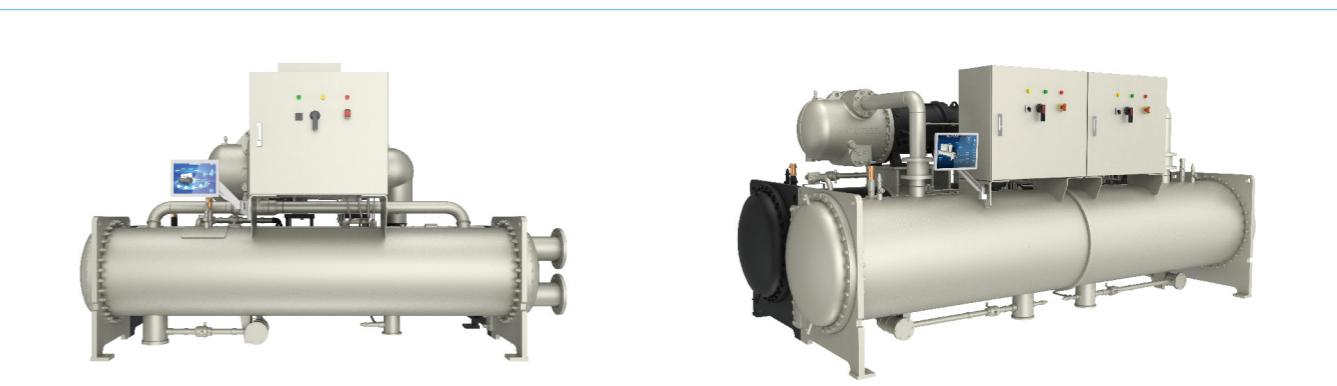
Notes:

1. GB/T 18430.1-2007 is taken as an example for design, manufacturing and inspection;
2. The cooling capacity is measured under the following condition: outdoor dry-bulb temperature: 35°C, water discharge: 0.172m³/(h·kW) and leaving water temperature: 7°C;
3. The heating capacity is measured under the following condition: outdoor dry-bulb temperature: 7°C, wet bulb temperature: 6°C, water discharge: 0.172m³/(h·kW) and leaving water temperature: 45°C;
4. Cooling only unit has no heating capacity and heating power item;
5. The operation weight is about 102% of the net weight.
6. Noise of the unit meets the general requirement, if higher noise requirement is required, please select the units with special noise reduction measures;
7. Please refer to the nameplate for concrete unit parameter;
8. The unit parameter is the parameter for standard unit, if there's non-standard parameter requirement, please contact local sales company for consultation.

Permanent Magnetic Synchronous Inverter Screw Chiller

LHVE Series

Gree LHVE Series Permanent Magnetic Synchronous Inverter Screw Chiller (R134a) is specially designed to improve efficiency and reduce operation cost. Adopting the advanced semi-closed permanent magnetic synchronous inverter screw compressor, the latest efficient falling film heat exchanger and the eco-friendly refrigerant R134a, the product is energy-saving with high reliability, ensuring long-term stable operation, which is energy-efficient. Cooling capacity range under nominal condition is 120 ~ 600RT. It is widely applied to all kinds of office buildings, hospitals, schools and malls, besides, it can be adopted in cooling occasions of technological process.



- » Adjust the load with rotate speed to realize consecutive adjustment of 20%-100% of one single compressor load;
- » The consecutive adjustment structure of discharge volume can adjust the discharge volume according to actual operation condition, realizing consistent internal and external pressure ratio, heat insulation of compressor has enhanced about 8.4%;
- » Under some load conditions, lower the operation power of compressor, which can be up to 60%.
- » The GRZ-type curve has decreased the leaked triangle area of 50%, reduced the leakage capacity of refrigerant and improved compressor performance;
- » The GRZ-type curve improves the stiffness of female rotor and decreased about 28.3% of the deformation;
- » Drive point is set in both high and low pressure side, the male and female rotor will increase/decrease speed at the same time, ensuring a stable mesh.
- » The permanent magnetic synchronous motor adopts the built-in method of V-shape magnetic steel, by taking advantage of the saliency effect of magnetic circuit, it enhances the motor torque;
- » Inverter startup, the starting current is below 10A, the impact to the overall power grid is small;
- » Under full load working condition, motor efficiency is above 95%; under rated power, compared with traditional 3-phase asynchronous motor, it has enhanced 3%, in some other loads, it has enhanced 5% ~ 7%.
- » The control circuit adopts 24V full DC electronic control component, which effectively reduces electromagnetic interference, safe and reliable;
- » Meet the wide voltage input between 328-528V, 50/60Hz is compatible.

Operating range	Chilled water			Cooling water		
	Water outlet temperature (°C)	Temperature difference of water inlet and outlet(°C)	Water inlet temperature (°C)	Temperature difference of water inlet and outlet(°C)		
Cooling	4~15	2.5~8	18~33	3.5~8		

Model		LHVE432GE8GE8/Nb-M	LHVE432GE7GE7/Nb-M	LHVE432GE6GE6/Nb-M	LHVE532GE5GE5/Nb-M	LHVE532GE4GE4/Nb-M
Cooling capacity	kW	348.6	421.4	470.7	522.5	574.7
	RT	99.1	119.9	133.9	148.6	163.5
Capacity adjustment range	%	10%-100%				
EER	W/W	5.94	5.93	5.88	5.88	5.88
IPLV	W/W	9.93	10.08	10.10	9.96	10.04
Power supply	V/Ph/Hz	380V 3N~ 50/60Hz;400-415V 3N~ 50/60Hz				
Power input	kW	58.6	71.0	80.0	88.9	97.7
Compressor	Type	Semi-closed permanent magnetic synchronous inverter screw compressor				
	Starting mode	Inverter startup				
	Quantity	1	1	1	1	1
Refrigerant charge volume	kg	140	140	140	180	180
Refrigeration oil	Type	CPI-Solest-170				
	Charge volume	L	20	20	20	23
	Type	Mixed falling film evaporator				
Evaporator	Fouling factor	m ² ·°C/kW	0.0176	0.0176	0.0176	0.0176
	Water flow rate	m ³ /h	54	65	73	81
		GPM	238	286	321	357
	Pressure drop	kPa	38.3	38.4	39.2	40.0
		ft.H2O	12.6	12.6	12.9	13.1
	Connection pipe	mm	DN125	DN125	DN125	DN125
Condenser	Type	Horizontal shell and tube condenser				
	Fouling factor	m ² ·°C/kW	0.044	0.044	0.044	0.044
	Water flow volume	m ³ /h	68	82	92	102
		GPM	299	361	405	449
	Pressure drop	kPa	45.6	45.6	45.7	44.8
		ft.H2O	15.0	15.0	15.0	14.7
	Connection pipe	mm	DN150	DN125	DN150	DN150
Sound pressure level(Max.)	dB(A)	84.3	84.5	85.2	84.6	84.9
Dimension	Outline(W×D×H)	mm	3320×1560×1980	3320×1560×1980	3320×1560×1980	3320×1570×1980
	Package(W×D×H)	mm	3400×1600×2100	3400×1600×2100	3400×1600×2100	3400×1650×2100
Net/Gross/Operating weight	kg	3500/3650/3710	3550/3700/3770	3600/3750/3820	3680/3830/3900	3700/3850/3930
Loading quantity	40'GP/40'HQ	unit	1	1	1	1

Model		LHVE832HE3JE3/Nb-M	LHVE832HE2JE2/Nb-M	LHVE532LJ4LJ4-2/Nb-M	LHVE532LJ3LJ3-2/Nb-M	LHVE532LJ2LJ2-2/Nb-M
Cooling capacity	kW	931.2	991.6	1045.0	1149.0	1271.0
	RT	264.8	282.0	297.2	326.8	361.5
Capacity adjustment range	%	10%-100%				
EER	W/W	5.63	5.62	6.21	6.17	6.11
IPLV	W/W	9.70	9.71	10.58	10.61	10.61
Power supply	V/Ph/Hz	380V 3N~ 50/60Hz;400-415V 3N~ 50/60Hz				
Power input	kW	165.4	176.5	168.3	186.2	207.9
Compressor	Type	Semi-closed permanent magnetic synchronous inverter screw compressor				
	Starting mode	Inverter startup				
	Quantity	1	1	2	2	2
Refrigerant charge volume	kg	250	280	360	360	400
Refrigeration oil	Type	CPI-Solest-170				
	Charge volume	L	28	28	46	46
	Type	Mixed falling film evaporator				
Evaporator	Fouling factor	m ² ·°C/kW	0.0176	0.0176	0.0176	0.0176
	Water flow rate	m ³ /h	144	154	162	178
		GPM	634	678	713	784
	Pressure drop	kPa	40.0	34.3	37.9	39.6
		ft.H2O	13.1	11.3	12.4	13.0
	Connection pipe	mm	DN150	DN150	DN200	DN200
Condenser	Type	Horizontal shell and tube condenser				
	Fouling factor	m ² ·°C/kW	0.044	0.044	0.044	0.044
	Water flow volume	m ³ /h	182	194	202	222
		GPM	801	854	889	997
	Pressure drop	kPa	42.8	43.7	43.0	46.3
		ft.H2O	14.0	14.3	14.1	15.2
	Connection pipe	mm	DN200	DN200	DN200	DN200
Sound pressure level(Max.)	dB(A)	85.3	85.6	86.6	86.5	86.8
Dimension	Outline(W×D×H)	mm	3400×1860×2040	3400×1860×2040	4600×1920×2090	4600×1920×2090
	Package(W×D×H)	mm	3450×1900×2150	3450×1900×2150	4650×1950×2300	4650×1950×2300
Net/Gross/Operating weight	kg	5100/5300/5400	5150/5350/5460	7850/8100/8320	7900/8150/8370	7950/8200/8430
Loading quantity	40'GP/40'HQ	unit	1	1	1	1

Model	LHVE532GE3GE3/Nb-M	LHVE732HE7JE7/Nb-M	LHVE732HE6JE6/Nb-M	LHVE732HE5JE5/Nb-M	LHVE832HE4Nb-M	
	kW	644.4	696.6	757.6	817.7	870.9
Cooling capacity	RT	183.3	198.1	215.5	232.6	247.7
Capacity adjustment range	%	10%-100%				
EER	W/W	5.86	5.86	5.84	5.82	5.65
IPLV	W/W	10.08	10.00	10.03	10.04	9.68
Power supply	V/Ph/Hz	380V 3N~ 50/60Hz;400-415V 3N~ 50/60Hz				
Power input	kW	110.1	118.9	129.8	140.6	154.2
Compressor	Type	Semi-closed permanent magnetic synchronous inverter screw compressor				
	Starting mode	Inverter startup				
Refrigerant charge volume	Quantity	1	1	1	1	1
	kg	200	220	220	250	250
Refrigeration oil	Type	CPI-Solest-170				
	Charge volume	L	23	23	23	28
Evaporator	Type	Mixed falling film evaporator				
	Fouling factor	m ² ·°C/kW	0.0176	0.0176	0.0176	0.0176
Condenser	Water flow rate	m ³ /h	100	108	117	127
	GPM	440	476	515	559	594
Condenser	Pressure drop	kPa	40.9	40.8	40.8	35.1
	ft.H2O	13.4	13.4	13.4	11.5	12.3
Condenser	Connection pipe	mm	DN125	DN150	DN150	DN150
	Type	Horizontal shell and tube condenser				
Condenser	Fouling factor	m ²				



CENTRIFUGAL CHILLER

CE Series Centrifugal Chiller

CVE Series Permanent Magnet Synchronous Inverter Centrifugal Chiller

CC Series Magnetic Bearing Inverter Centrifugal Chiller

Integrated Water Chilling Package



CE Series Centrifugal Chiller

R134a

A new generation of fixed-speed centrifugal chiller, with two-stage compression technology, is highly efficient, energy-saving, safe and reliable.



- » Two-stage compression enthalpy-adding technology and economizer are adopted to improve efficiency by 5~6% compared with one-stage cooling circulation system. Rotation speed of compressor is reduced, operation reliability is improved and lifespan is prolonged. Meanwhile, surge margin is wide and operation range is wide.
- » Variable-area diffuser is adopted to effectively improve surge margin and system operation range, and reduce noise and vibration.
- » With integrated startup cabinet and wire connection in the factory, user only needs to provide power cord, so wire connection during installation is simplified and floor area of startup cabinet is reduced.
- » Semi-enclosed motor and helical refrigerant ejecting cooling technology is adopted to not only reduce the risk of refrigerant and lubricant leakage, but also prevent heat dissipation in machine room, reducing the cooling device cost and operation cost.
- » New heat exchanger specially designed for centrifugal chiller contributes to even distribution of refrigerant, rational temperature field and heat exchange rate improvement; meanwhile, the heat exchanger adopts high-efficiency heat exchange tube for reducing heat transfer resistance and improving the system's cooling capacity and energy efficiency ratio.
- » User-friendly touch screen is adopted for convenient operation.
- » High-performance digital signal processing and intelligent control technology is adopted.
- » Vaned diffuser with the optimized ratio between the vane width and spacing.



Operating condition of nominal cooling (water temperature)				Operating range (water temperature)			
Chilled water		Cooling water		Chilled water		Cooling water	
Inlet(°C)	Outlet(°C)	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	Inlet(°C)	I/O difference(°C)
12.2	6.7	29.4	34.9	5~15	2.5~8	12~35	3.5~8

Model		CE310LG2HG2	CE311LG1HG1	CE320MH4HH2	CE321MH3HH1	CE330MH2JH2	CE331MH1JH1
Cooling capacity	kW	1231	1406	1582	1758	1934	2110
	RT	350	400	450	500	550	600
EER	W/W	6.10	6.09	6.38	6.42	6.54	6.55
	W/W	6.64	6.63	6.69	6.97	6.91	7.11
Power supply	V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz
	kW	201.7	230.9	248.0	273.8	295.7	322.1
RLA	A	344.40	394.20	423.40	467.50	504.80	549.80
Compressor	Type	-	Centrifugal				
	Starting mode	-	Y-△				
	Quantity	-	1	1	1	1	1
Refrigerant charge volume	kg	425	450	550	575	600	625
	Type	-	No.68 synthetic fatty oil				
	Charge volume	L	50	50	50	50	50
Evaporator	Type	-	Flooded				
	Fouling factor	m ² ·°C/kW	0.018	0.018	0.018	0.018	0.018
	Water flow rate	L/s	53.05	60.62	68.2	75.78	83.36
	GPM	840.9	961	1081	1201.0	1321.0	1442.0
	kPa	54.2	57.3	62.4	62.5	68.2	67.9
Condenser	Pressure drop	ft.WG	17.8	18.8	20.5	20.5	22.4
	Connection pipe	mm	DN200	DN200	DN250	DN250	DN250
	Type	-	Shell and tube				
	Fouling factor	m ² ·°C/kW	0.044	0.044	0.044	0.044	0.044
	Water flow volume	L/s	66.28	75.77	84.69	94.02	103.20
Dimension	GPM	1051	1201	1343	1490.0	1635.0	1784.0
	Pressure drop	kPa	62.7	62.8	63.1	65.8	63.5
	ft.WG	20.6	20.6	20.7	21.6	20.8	20.6
	Connection pipe	mm	DN200	DN200	DN250	DN250	DN250
	Sound pressure level(Max.)	dB(A)	82	82	82	82	82
Net/Gross/Operating weight	Outline(W×D×H)	mm	3850×1810×2220	3850×1810×2220	4300×1850×2310	4300×1850×2310	4250×1910×2370
	Package(W×D×H)	mm	3950×1950×2450	3950×1950×2450	4400×1900×2550	4400×1900×2550	4400×2000×2600
Net/Gross/Operating weight	kg	6800/7100/7450	7100/7400/7750	7300/7800/8200	7500/8000/8400	7850/8350/8800	8100/8600/9100
Loading quantity	40'GP/40'HQ	unit	1	1	1	1	1

Model		CE410PIEKIE	CE411PIDKID	CE420PICKIC	CE421PIBKIB	CE510PIAKIA	CE511QCJMJD
Cooling capacity	kW	2285	2461	2637	2813	2989	3164
	RT	650	700	750	800	850	900
EER	W/W	6.40	6.44	6.50	6.53	6.50	6.52
	W/W	6.82	7.02	6.94	7.12	7.09	6.98
IPLV	W/W	6.82	7.02	6.94	7.12	7.09	6.98
	W/W	6.82	7.02	6.94	7.12	7.09	6.98
Power supply	V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz
	kW	357.1	382.2	405.7	430.8	459.8	485.3
RLA	A	609.60	652.40	692.60	735.30	784.90	828.50
Compressor	Type	-	Centrifugal				
	Starting mode	-	Y-△				
	Quantity	-	1	1	1	1	1
Refrigerant charge volume	kg	650	675	750	775	800	900
	Type	-	No.68 synthetic fatty oil				
	Charge volume	L	60	60	60	60	80
Evaporator	Type	-	Flooded				
	Fouling factor	m ² ·°C/kW	0.018	0.018	0.018	0.018	0.018
	Water flow rate	L/s	98.51	106.1	113.7	121.2	128.8
	GPM	1562.0	1682.0	1802.0	1922.0	2042.0	2162.0
	kPa	63.3	61.5	64.9	60.2	61.8	60.2
Condenser	Pressure drop	ft.WG	20.8	20.2	21.3	19.8	20.3
	Connection pipe	mm	DN250	DN250	DN250	DN250	DN300
	Type	-	Shell and tube				
	Fouling factor	m ² ·°C/kW	0.044	0.044	0.044	0.044	0.044
	Water flow volume	L/s	122.30	131.60	140.80	150.10	159.60
Dimension	GPM	1938.0	2086.0	2232.0	2379.0	2529.0	2677.0
	kPa	57.2	57	58.2	58.5	60.2	66.1
	ft.WG	18.8	18.7	19.1	19.2	19.7	21.7
	Connection pipe	mm	DN250	DN250	DN250	DN250	DN300
	Sound pressure level(Max.)	dB(A)	83	83	83	84	84
Net/Gross/Operating weight	Outline(W×D×H)	mm	4550×2010×2390	4550×2010×2390	4550×2010×2390	4550×2010×2390	4550×2010×2390
	Package(W×D×H)	mm	4700×2100×2600	4700×2100×2600	4700×2100×2600	4700×2100×2600	5100×2300×2850
Net/Gross/Operating weight	kg	9600/10100/10700	9850/10350/10950	10100/10600/11300	10350/10950/11550	10800/11300/12050	12000/12600/13450
Loading quantity							

Model	CE512QJBMJC	CE520QJAMJB	CE521RJAMJA	CE522RJAMJA	CE610SKNQKN	CE611SKMQKM	
Cooling capacity	kW	3340	3516	3692	3868	4219	
	RT	950	1000	1050	1100	1200	
EER	W/W	6.54	6.55	6.60	6.60	6.54	
IPLV	W/W	7.12	6.93	7.07	7.19	6.95	
Power supply	V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	
Power input	kW	510.7	536.8	559.4	586.0	645.1	
RLA	A	871.90	916.40	954.90	1000.00	1101.30	
Compressor	Type	-	Centrifugal				
	Starting mode	-	Y- △		Soft starting		
	Quantity	-	1	1	1	1	1
Refrigerant charge volume	kg	925	950	950	975	1250	1300
Refrigeration oil	Type	-	No.68 synthetic fatty oil				
	Charge volume	L	80	80	80	100	100
Evaporator	Type	-	Flooded				
	Fouling factor	m ² °C/kW	0.018	0.018	0.018	0.018	0.018
	Water flow rate	L/s	144.00	151.60	159.10	166.70	181.90
		GPM	2282.0	2403.0	2523.0	2643.0	2883.0
	Pressure drop	kPa	59.2	59.3	55.4	60.1	56
		ft.WG	19.4	19.4	18.2	19.7	18.4
	Connection pipe	mm	DN300	DN300	DN300	DN350	DN350
	Type	-	Shell and tube				
Condenser	Fouling factor	m ² °C/kW	0.044	0.044	0.044	0.044	0.044
	Water flow volume	L/s	178.20	187.50	196.70	206.10	225.10
		GPM	2825.0	2973.0	3118.0	3267.0	3568.0
	Pressure drop	kPa	66.7	66.9	62.4	67.7	42
		ft.WG	21.9	21.9	20.5	22.2	13.8
	Connection pipe	mm	DN300	DN300	DN300	DN350	DN350
Sound pressure level(Max.)	dB(A)	84	84	84	84	85	85
Dimension	Outline(W×D×H)	mm	4980×2210×2610	4980×2210×2610	4980×2310×2710	4980×2310×2710	5250×2530×2880
	Package(W×D×H)	mm	5100×2300×2850	5100×2300×2850	5100×2300×2950	5100×2300×2950	5600×2900×3100
Net/Gross/Operating weight	kg	12250/12850/13750	12500/13100/14000	13156/13756/14750	13429/14029/15050	16600/17200/18700	17000/17600/19150
Loading quantity	40'GP/40'HQ	unit	1	1	1	1	1

Model	CE620SKLQKL	CE621TKNRKN-G	CE630TKMRKM-G	CE631TKLRKL-G	CE710TLNRLL-G	CE711TLMSP-L-G	CE720TLRRL-G
Cooling capacity	kW	4922	5274	5626	5977	6329	6680
	RT	1400	1500	1600	1700	1800	1900
EER	W/W	6.52	6.55	6.62	6.65	6.66	6.66
IPLV	W/W	6.95	7.13	7.08	7.24	7.12	7.27
Power supply	V/Ph/Hz	380V 3N~ 50Hz	10000V 3N~ 50Hz	10000V 3N~ 50Hz	10000V 3N~ 50Hz	10000V 3N~ 50Hz	10000V 3N~ 50Hz
Power input	kW	755.0	805.2	849.8	898.8	950.3	1000.0
RLA	A	1288.80	52.20	55.10	58.30	61.60	64.90
Compressor	Type	-	Centrifugal				
	Starting mode	-	soft starting	Direct starting			
	Quantity	-	1	1	1	1	1
Refrigerant charge volume	kg	1350	1400	1450	1500	1600	1650
Refrigeration oil	Type	-	No.68 synthetic fatty oil				
	Charge volume	L	100	100	100	120	120
Evaporator	Type	-	Flooded				
	Fouling factor	m ² °C/kW	0.018	0.018	0.018	0.018	0.018
	Water flow rate	L/s	212.20	227.30	242.50	257.60	272.80
		GPM	3364.0	3604.0	3844.0	4084.0	4325.0
	Pressure drop	kPa	56.9	54.4	45.5	45.5	56.9
		ft.WG	18.7	17.8	14.9	14.9	18.7
	Connection pipe	mm	DN350	DN350	DN350	DN400	DN400
	Type	-	Shell and tube				
Condenser	Fouling factor	m ² °C/kW	0.044	0.044	0.044	0.044	0.044
	Water flow volume	L/s	262.70	281.30	299.60	318.20	336.80
		GPM	4165.0	4459.0	4750.0	5044.0	5339.0
	Pressure drop	kPa	44.2	42.9	44.4	44.4	63.7
		ft.WG	14.5	14.1	14.6	14.6	20.9
	Connection pipe	mm	DN350	DN400	DN400	DN450	DN450
Sound pressure level(Max.)	dB(A)	85	85	85	85	86	86
Dimension	Outline(W×D×H)	mm	5250×2530×2880	5400×2750×3000	5400×2750×3000	5400×2750×3000	5800×2750×3100
	Package(W×D×H)	mm	5600×2900×3100	5800×3200×3200	5800×3200×3200	5800×3200×3200	6400×3100×3300
Net/Gross/Operating weight	kg	17400/18000/19600	18600/19400/21250	19000/19800/21500	19500/20300/22050	23500/24300/26150	24000/24800/26800
Loading quantity	40'GP/40'HQ	unit	1	1	1	1	1

Model	CE721ULNSLN-G	CE730ULMSLM-G	CE731ULLSLL-G	CE610UN4SN4-2-G	CE611UN3SN3-2-G	CE620UN2SN2-2-G	CE621UN1SN1-2-G
Cooling capacity	kW	7384	7735	8087	8438	9142	9845
	RT	2100	2200	2300	2400	2600	2800
EER	W/W	6.68	6.70	6.71	6.68	6.67	6.68
IPLV	W/W	7.27	7.17	7.30	8.19	8.18	8.20
Power supply	V/Ph/Hz	10000V 3N~ 50Hz	10000V 3N~ 50Hz	10000V 3N~ 50Hz	10000V 3N~ 50Hz	10000V 3N~ 50Hz	10000V 3N~ 50Hz
Power input	kW	1105.0	1155.0	1205.0	1263.0	1371.0	1474.0
RLA	A	71.70	74.90	78.20	81.90	88.90	95.60
Compressor	Type	-	Centrifugal				
	Starting mode	-	Direct starting				
	Quantity	-	1	1	1	2	2
Refrigerant charge volume	kg	2000	2100	2200	2300	2500	2700
Refrigeration oil	Type	-	No.68 synthetic fatty oil				
	Charge volume	L	120	120	120	200	200
Evaporator	Type	-	Flooded				
	Fouling factor	m ² °C/kW	0.018	0.018	0		

CVE Series Permanent Magnet Synchronous Inverter Centrifugal Chiller

It adopts high-efficiency DC inverter centrifugal compressor with internationally leading coefficient of performance. It provides high-efficiency and stable operation, and can be connected to all sorts of fan coil units to realize cooling for large civil and industrial buildings.



- 》 As it adopts high-efficiency motor direct-driven two-stage impellers with simpler structure and more reliable operation, the size and weight of compressor is only 40% of the conventional compressor with the same cooling capacity.
- 》 It adopts high-efficiency permanent magnet synchronous inverter motor, whose power is over 400kW and rotation speed is over 18000rp. Meanwhile, the helical refrigerant ejecting cooling technology is adopted to ensure high-efficiency operation of the motor.
- 》 The design of impeller and diffuser is optimized for achieving high-efficiency operation of compressor in various loads.
- 》 It adopts patented sensor control technology to control the position of motor precisely and improve the reliability.
- 》 It adopts the unique diffuser with wide blade spacing to achieve high-efficiency recycle of pressure.
- 》 Two-stage compression enthalpy-adding technology and economizer are adopted to improve efficiency by 5~6% compared with one-stage cooling circulation system. Rotation speed of compressor is reduced, operation reliability is improved and lifespan is prolonged. Meanwhile, surge margin and operation range are wide.
- 》 User-friendly touch screen is adopted for convenient operation, precise control and stable output.
- 》 Vaned diffuser with the optimized ratio between the vane width and spacing.



Operating condition of nominal cooling (water temperature)				Operating range (water temperature)			
Chilled water		Cooling water		Chilled water		Cooling water	
Inlet(°C)	Outlet(°C)	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	Inlet(°C)	I/O difference(°C)
12.2	6.7	29.4	34.9	5~15	2.5~8	12~35	3.5~8

R134a INVERTER

Model	kW	CVE210HG4GG4D	CVE210HG3GG3D	CVE220HG2GG2D	CVE220HG1GG1D	CVE310LG1HG1D	CVE320MH4HH2D	
Cooling capacity	kW	879	967	1055	1231	1406	1582	
	RT	250	275	300	350	400	450	
EER	W/W	6.17	6.09	6.46	6.36	6.47	6.59	
IPLV	W/W	10.06	10.31	10.37	10.77	10.95	10.70	
Power supply	V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	
Power input	kW	142.5	158.8	163.3	193.5	217.4	240.1	
RLA	A	218.6	243.7	250.6	296.9	333.6	368.5	
Compressor	Type	-	Centrifugal					
	Starting mode	-	Variable frequency drives					
	Quantity	-	1	1	1	1	1	1
Refrigerant charge volume	kg	350	375	400	425	450	550	
Refrigeration oil	Type	-	No.68 synthetic fatty oil					
	Charge volume	L	30	30	30	40	40	40
Evaporator	Type	-	Flooded					
	Fouling factor	m ² ·°C/kW	0.018	0.018	0.018	0.018	0.018	0.018
	Water flow rate	L/s	37.89	41.68	45.47	53.05	60.62	68.20
	GPM	600.6	660.7	720.8	840.9	961.0	1081.0	
	kPa	58.3	58.4	58.4	62.6	57.3	62.4	
	ft.WG	19.1	19.2	19.2	20.5	18.8	20.5	
	Connection pipe	mm	DN200	DN200	DN200	DN200	DN200	DN250
Condenser	Type	-	Shell and tube					
	Fouling factor	m ² ·°C/kW	0.044	0.044	0.044	0.044	0.044	0.044
	Water flow volume	L/s	47.27	52.09	56.37	65.90	75.14	84.32
	GPM	749.3	825.7	893.5	1045.0	1191.0	1337.0	
	Pressure drop	kPa	54.2	54.4	53.6	58.0	53.1	62.6
	ft.WG	17.8	17.8	17.6	19	17.4	20.5	
	Connection pipe	mm	DN200	DN200	DN200	DN200	DN200	DN250
	Sound pressure level(Max.)	dB(A)	80	80	80	82	82	82
Dimension	Outline(W×D×H)	mm	3770×1590×1850	3770×1590×1850	3770×1590×1850	3770×1590×1850	3850×1810×2220	4300×1850×2150
	Package(W×D×H)	mm	3900×1750×2050	3900×1750×2050	3900×1750×2050	3900×1750×2050	3950×1950×2350	4450×1950×2350
Net/Gross/Operating weight	kg	5150/5450/5700	5240/5540/5800	5500/5800/6050	5700/6000/6600	6100/6450/6400	6800/7200/7650	
Loading quantity	40'GP/40'HQ	unit	1	1	1	1	1	1

Model	kW	CVE320MH3HH1D	CVE410MH2JH2D	CVE410MH1JH1D	CVE510PIEKIE	CVE510PIDKID	CVE520PICKIC	
Cooling capacity	kW	1758	1934	2110	2285	2461	2637	
	RT	500	550	600	650	700	750	
EER	W/W	6.48	6.67	6.58	6.66	6.57	6.73	
IPLV	W/W	10.96	10.88	11.12	10.94	11.14	10.90	
Power supply	V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	
Power input	kW	271.3	289.9	320.6	343.2	374.6	391.3	
RLA	A	416.4	444.9	492.0	526.6	574.9	600.4	
Compressor	Type	-	Centrifugal					
	Starting mode	-	Variable frequency drives					
	Quantity	-	1	1	1	1	1	1
Refrigerant charge volume	kg	575	600	625	650	675	700	
Refrigeration oil	Type	-	No.68 synthetic fatty oil					
	Charge volume	L	40	40	40	40	40	40
Evaporator	Type	-	Flooded					
	Fouling factor	m ² ·°C/kW	0.018	0.018	0.018	0.018	0.018	0.018
	Water flow rate	L/s	75.78	83.36	90.93	98.51	106.10	113.70
	GPM	1201.0	1321.0	1442.0	1562.0	1682.0	1802.0	
	kPa	62.5	68.2	67.9	62.0	60.3	64.9	
	ft.WG	20.5	22.4	22.3	20.3	19.8	21.3	
	Connection pipe	mm	DN250	DN250	DN250	DN250	DN250	DN250
Condenser	Type	-	Shell and tube					
	Fouling factor	m ² ·°C/kW	0.044	0.044	0.044	0.044	0.044	0.044
	Water flow volume	L/s	93.90	102.90	112.50	121.67	131.20	140.10
	GPM	1489.0	1631.0	1783.0	1928.0	2080.0	2221.0	
	Pressure drop	kPa	65.6	63.3	62.8	56.7	56.8	57.8
	ft.WG	21.5	20.7	20.6	18.6	18.6	18.9	
	Connection pipe	mm	DN250	DN250	DN250	DN250	DN250	DN250
Sound pressure level(Max.)	dB(A)	85	85	85	85	88	88	
Dimension	Outline(W×D×H)	mm	4300×1850×2150	4250×1910×2210	4250×1910×2210	4550×2010×2300	4550×2010×2300	4550×2010×2300
	Package(W×D×H)	mm	4450×1950×2350	4400×2100×2450	4400×2100×2450	4700×2100×2500	4700×2100×2500	4700×2100×2500
Net/Gross/Operating weight	kg	6880/7280/7750	7710/8160/8600	7820/8270/8750	8860/9360/9900	8970/9470/10050	9270/9770/10400	
Loading quantity	40'GP/40'HQ	unit	1	1	1	1	1	1

Model	CVE520PIBKIB	CVE520PIAKIA	CVE610QJCMJD	CVE610QJBMJC	CVE620QJAMJB	CVE620RJAMJA	
Cooling capacity	kW	2813	2989	3164	3340	3516	
	RT	800	850	900	950	1000	
EER	W/W	6.72	6.63	6.83	6.75	6.84	
IPLV	W/W	11.10	11.24	11.30	11.45	11.16	
Power supply	V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	
Power input	kW	418.6	450.8	463.3	494.8	514	
RLA	A	642.4	691.8	711.0	758.3	788.9	
Compressor	Type	-	Centrifugal				
	Starting mode	-	Variable frequency drives				
Quantity	-	1	1	1	1	1	
Refrigerant charge volume	kg	725	730	900	925	950	
Refrigeration oil	Type	-	No.68 synthetic fatty oil				
	Charge volume	L	40	40	50	50	50
Evaporator	Type	-	Flooded				
	Fouling factor	m ² ·°C/kW	0.018	0.018	0.018	0.018	0.018
Water flow rate	L/s	121.10	128.80	136.40	144.00	151.60	166.70
	GPM	1922.0	2042.0	2162.0	2282.0	2403.0	2643.0
Pressure drop	kPa	60.2	61.8	60.2	59.2	59.3	60.1
	ft.WG	19.8	20.3	19.7	19.4	19.4	19.7
Connection pipe	mm	DN250	DN250	DN300	DN300	DN300	DN300
Condenser	Type	-	Shell and tube				
	Fouling factor	m ² ·°C/kW	0.044	0.044	0.044	0.044	0.044
Water flow volume	L/s	149.50	159.20	167.90	177.40	186.50	205.50
	GPM	2370.0	2523.0	2661.0	2813.0	2956.0	3257.0
Pressure drop	kPa	58.1	59.9	65.4	66.2	66.2	67.4
	ft.WG	19.1	19.7	21.5	21.7	21.7	22.1
Connection pipe	mm	DN250	DN250	DN300	DN300	DN300	DN300
Sound pressure level(Max.)	dB(A)	88	88	88	88	88	88
Dimension	Outline(W×D×H)	mm	4550×2010×2300	4550×2010×2300	4980×2210×2500	4980×2210×2500	4980×2210×2500
	Package(W×D×H)	mm	4700×2100×2500	4700×2100×2500	5100×2370×2750	5100×2370×2750	5100×2600×2850
Net/Gross/Operating weight	kg	9370/9870/10500	9480/9980/10600	10730/11230/12150	10860/11360/12250	11010/11510/12500	11670/12170/13200
Loading quantity 40'GP/40'HQ	unit	1	1	1	1	1	1

Notes:

1. Above model selection is applicable to the condition in which leaving chilled water temperature is 6.7°C and entering cooling water temperature is 29.4°C.
2. Standard unit's water side bearing pressure is 1.0MPa; 1.6MPa is an available option.
3. Scale factors of chilled water and cooling water are 0.018m²·°C/kW and 0.044m²·°C/kW respectively.
4. Above water flow is indicated according to ARI 550/590-2015; IPLV is the test value obtained based on the working condition specified in ARI 550/590-2015.
5. For compressor using inverter starter, starting current< rated current; power factor is 0.99; cooling capacity: 250~600RT. The diode inverter startup cabinet (type code: D) is the standard part for the unit, while the four-quadrant inverter startup cabinet (type code: null) is the optional one.
6. The unit's performance parameters may be changed without prior notice due to product improvement. For the specific parameters, please refer to product nameplate.
7. The product models are not for EU.

CC Series Magnetic Bearing Inverter Centrifugal Chiller

Gree CC series magnetic bearing inverter centrifugal chiller adopts the magnetic bearing compressor for aeronautic industry, which achieves oil-free operation of cooling system, avoids complicated lubricant system and greatly improves system's reliability. This series can be widely adopted in hotels, office buildings, etc.



Energy-saving and eco-friendly



Stable and reliable



Convenient operation



Multiple protections



Quite function



Long-distance monitoring

- » It adopts magnetic bearing to achieve oil-free operation and reduce the heat exchange influence of lubricant.
- » The system adopts flooded heat exchange design and build-in subcooler in condenser.
- » Impellers directly driven by the motor with gearless design, improving the reliability of the system.
- » With advanced and reliable microcomputer control system, powerful group control modules and building communication interface.
- » User-friendly touch screen is adopted for convenient operation, precise control and stable output.
- » Multiple protection function.
- » Noise of this entire unit is 10 dB(A) lower than the traditional ones.



Model	CC210FE5EE5	CC220FE4EE4	CC220FE3EE3	CC230GE2FE2	CC230GE1FE1	CC310HG5GG5	
Cooling capacity	kW	352	457	527	633	703	
	RT	100	130	150	180	200	
EER	W/W	5.81	5.87	5.76	6.16	6.04	
IPLV	W/W	9.84	9.41	9.76	9.98	10.24	
Power supply	V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	
Power input	kW	60.52	77.87	91.56	102.7	116.4	
RLA	A	92.9	119.5	140.5	157.7	178.7	
Compressor	Type	-	Centrifugal				
	Starting mode	-	Variable frequency drives				
Quantity	-	1	1	1	1	1	
Refrigerant charge volume	kg	170	200	200	220	250	
Evaporator	Type	-	Falling film				
	Fouling factor	m ² ·°C/kW	0.018	0.018	0.018	0.018	0.018
Water flow rate	L/s	15.16	19.7	22.73	27.28	30.31	
	GPM	240.3	312.3	360.4	432.5	480.5	540.6
Pressure drop	kPa	30.5	31.4	31.2	31.9	31.5	
	ft.WG	10	10.3	10.2	10.5	10.3	18.7
Connection pipe	mm	DN150	DN150	DN150	DN150	DN200	
Condenser	Type	-	Shell and tube				
	Fouling factor	m ² ·°C/kW	0.044	0.044	0.044	0.044	0.044
Water flow volume	L/s	19.07	24.75	28.64	34.04	37.93	
	GPM	302.3	392.4	454.0	539.6	601.2	675.1
Pressure drop	kPa	35.5	36.2	34.9	33.9	33.9	
	ft.WG	11.6	11.9	11.5	11.1	11.1	17.6
Connection pipe	mm	DN150	DN150	DN150	DN150	DN200	
Sound pressure level(Max.)	dB(A)	78	78	78	78	78	
Dimension	Outline(W×D×H)	mm	3350×1140×1900	3350×1140×1900	3350×1140×1900	3350×1180×1900	3770×1590×1950
Package(W×D×H)	mm	3500×1360×2100	3500×1360×2100	3500×1360×2100	3500×1400×2100	3900×1750×2050	
Net/Gross/Operating weight	kg	2695/2995/3050	3329/3629/3700	3500/3800/3900	3738/4038/4200	3905/4205/4350	4796/5196/5300
Loading quantity 40'GP/40'HQ	unit	1	1	1	1	1	

Model		CC310HG4GG4	CC310HG3GG3	CC320HG2GG2	CC320HG1GG1
Cooling capacity	kW	879	967	1055	1231
	RT	250	275	300	350
EER	W/W	6.16	6.06	6.34	6.24
IPLV	W/W	10.03	10.27	10.16	10.58
Power supply	V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz
Power input	kW	142.7	159.6	166.4	197.2
RLA	A	219.0	244.9	255.3	302.7
Compressor	Type	-	Centrifugal		
	Starting mode	-	Variable frequency drives		
	Quantity	-	1	1	1
Refrigerant charge volume	kg	250	275	275	300
Evaporator	Type	-	Falling film		
	Fouling factor	m ² · °C /kW	0.018	0.018	0.018
	Water flow rate	L/s	37.89	41.68	45.47
		GPM	600.6	660.7	720.8
	Pressure drop	kPa	57.0	56.8	56.8
		ft.WG	18.7	18.6	18.6
Connection pipe	mm	DN200	DN200	DN200	DN200
Condenser	Type	-	Shell and tube		
	Fouling factor	m ² · °C /kW	0.044	0.044	0.044
	Water flow volume	L/s	47.28	52.13	56.51
		GPM	749.4	826.3	895.8
	Pressure drop	kPa	53.6	53.9	53.3
		ft.WG	17.6	17.7	17.5
Connection pipe	mm	DN200	DN200	DN200	DN200
Sound pressure level(Max.)	dB(A)	78	78	78	78
Dimension	Outline(W×D×H)	mm	3770×1590×1950	3770×1590×1950	3770×1590×1950
	Package(W×D×H)	mm	3900×1750×2050	3900×1750×2050	3900×1750×2050
Net/Gross/Operating weight	kg	4833/5233/5350	4941/5341/5450	5008/5408/5600	5146/5646/5700
Loading quantity	40'GP/40'HQ	unit	1	1	1

Notes:

1. Above model selection is applicable to the condition in which leaving chilled water temperature is 6.7°C and entering cooling water temperature is 29.4°C.
2. Standard unit's water side bearing pressure is 1.0MPa; 1.6MPa is an available option.
3. Scale factors of chilled water and cooling water are 0.018m² · °C /kW and 0.044m² · °C /kW respectively.
4. Above water flow is indicated according to ARI 550/590-2015; IPLV is the test value obtained based on the working condition specified in ARI 550/590-2015.
5. For compressor using inverter starter, starting current<rated current; power factor is 0.995.
6. The unit's performance parameters may be changed without prior notice due to product improvement. For the specific parameters, please refer to product nameplate.
7. The product models are not for EU.

Operating condition of nominal cooling (water temperature)				Operating range (water temperature)			
Chilled water		Cooling water		Chilled water		Cooling water	
Inlet(°C)	Outlet(°C)	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	Inlet(°C)	I/O difference(°C)
12.2	6.7	29.4	34.9	5~15	2.5~8	12~35	3.5~8

Product series				Air-cooled Chiller		Screw Chiller		Centrifugal Chiller	
				Inverter Mini Chiller(Heat Pump, R410A Series)	Inverter Mini Chiller(Heat Pump, R32 Series)	Inverter Modular Air-cooled Chiller (Heat Pump)	High-efficiency Heat Pump Air-cooled Screw Chiller	High-efficiency Modular Air-cooled Screw Chiller	High-efficiency Water-cooled Screw Chiller
Control system	Z263Q								
	Z26301HJ								
	Z2F3Q								
	Z2K3								
Display panel ^{**1}	CM18-GZ12/A3(M)								
	CM27-GZ12/A1(M)								
Others	Optoelectronic isolated converter	RS232-RS422/485							
	Optoelectronic isolated signal repeater	RS-422/485							

Notes:

● means standard, ○ means optional.

^{**1} with BMS (modbus) function.

Integrated Water Chilling Package

YLZ Series



Gree YLZ Series Integrated Water Chilling Package is a new and efficient air conditioning product which integrates the cold source equipment of the whole central air conditioning system. The water chilling package adopts Gree efficient water-cooled screw chiller or inverter centrifugal chiller, integrates water system equipment such as high-efficient fixed speed/inverter water pump, water disposer, constant pressure water makeup equipment, cooling tower and so on and configures energy management system of Gree machine room, thus realizing the integral, efficient and intelligent operation of water chilling package.

Operating range	Operating range (water temperature)			
	Evaporator		Condenser	
	Inlet(°C)	I/O difference(°C)	Inlet(°C)	I/O difference(°C)
Cooling	5~15	2.5~8	12~35	3.5~8

Features

High Flexibility

Through the optimized design of pipeline structure and reasonable layout, Gree integrated water chilling package has decreased the floor space of 50% compared with conventional water chilling package. With the highly integrated structure, the mobility of Gree integrated water chilling package is quite convenient.



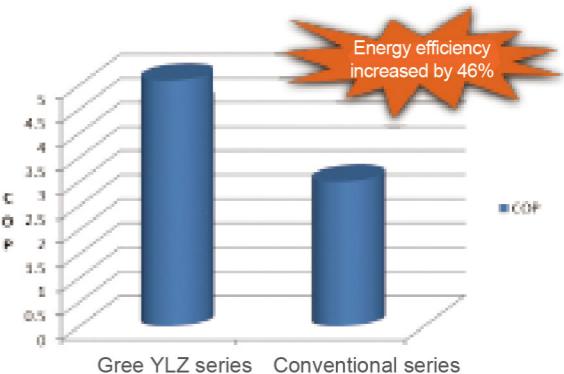
Zero Construction

Traditional water chilling package is preliminarily designed by the design institute, and the electromechanical contractor is responsible for the on-site construction, the construction volume is quite large; while Gree integrated water chilling package has completed the entire construction in the factory, therefore, it is available only with simple pipe connection on site. For traditional water chilling package, it's difficult to control the construction quality, however, for the integrated water chilling package, strict cutting and welding standards are followed for operation and assembling inside the factory. Rust-proof treatment is conducted for pipeline components. Gree integrated water chilling package has truly transformed water chilling package project to water chilling package product.



High Energy Efficiency

Through reasonable and optimized model selection, Gree YLZ Series Integrated water chilling package conducts efficient and energy-saving control, overall COP of cold station is up to over 4.5. According to energy efficiency standard for the water chilling package put forward by American ASHRAE, energy efficiency of Gree YLZ Series integrated water chilling package has reached a high level.



High Reliability

The structure of custom box ensures the requirements of rain-proof, water-proof, heat preservation and maintenance of the overall water chilling package. After equipment installation, for traditional water chilling package, the equipment manufacturer and related technicians of the manufacturer need to go to the site for individual debugging and coordination, therefore, workload and time consumed in the whole debugging process are quite large and long, besides, it's difficult to coordinate problems among the personnel. However, test and commissioning in the factory are able to optimize the equipment performance, with reasonable operation of each equipment, overall operation performance of the water chilling package is enhanced.



50Hz R410A

GLZ_YLGP		100	120	135	150	165	185	200	215	
Cooling capacity	kW	351.6	425.4	475.2	527.8	580.1	650.5	704.7	764.8	
	RT	100.0	121.0	135.1	150.1	164.9	185.0	200.4	217.5	
Cooling main unit COP	-	6.20	5.80	5.78	5.80	6.08	6.02	5.82	5.99	
Cooling main unit IPLV ¹	-	9.32	9.15	9.23	9.26	9.38	9.44	9.19	9.06	
Cooling main unit power input	kW	56.7	73.4	82.2	91	95.4	108.1	121	127.7	
Integrated cooling station power input	kW	75.2	95.4	106.2	117	128.9	141.6	158	168.2	
Noise	dB	68	68	68	68	69	69	69	69	
Power supply	V/Ph/Hz	380V 3N~50Hz								
Rated current	A	180	229	255	281	309	340	379	404	
Compressor	Compressor type	-	Semi-open screw compressor							
	Quantity	set	1	1	1	1	1	1	1	
Chilled water side	Starting way	-	Inverter starting							
	Water pump quantity	set	2	2	2	2	2	2	2	
Chilled water side	Water pump power	kW	7.5	11	11	11	15	15	18.5	
	Water pump flow	m ³ /h	60	73	82	91	100	112	132	
Chilled water side	Water pump head	m	35	35	35	35	35	35	35	
	Loss inside unit	kPa	110	115	122	129	136	112	117	
Chilled water side	Pipe connection size	-	DN125	DN125	DN125	DN125	DN125	DN150	DN150	
	Pipe connection method	-	Flange type							
Chilled water side	Water pump quantity	set	2	2	2	2	2	2	2	
	Water pump power	kW	5.5	5.5	7.5	7.5	11	11	11	
Chilled water side	Water pump flow	m ³ /h	76	91	102	113	125	140	152	
	Water pump head	m	15	15.5	16	15	15.5	16.2	16.5	
Chilled water side	Pipe connection size	-	DN125	DN125	DN125	DN150	DN150	DN150	DN150	
	Pipe connection method	-	Flange type							
Chilled water side	Fan type	-	Fixed speed/Inverter							
	Fan power	kW	5.5	5.5	5.5	7.5	7.5	7.5	11	
Chilled water side	Tower head	m	3.7	3.7	3.7	3.7	4	4	4	
Safety protection		-	Low waterflow protection, high pressure protection, low pressure protection, overcurrent protection, electrical leakage protection							
Optional configuration		-	Group control kit, water pump inverter control, constant-pressure water makeup device, shell and tube online cleaning device, water processing device, energy consumption calculation, cooling (heating) capacity calculation							
Outline dimension	Width	mm	8000	8000	8000	8500	8500	8500	9000	9000
	Depth	mm	3000	3000	3000	3000	3000	3000	3000	3000
	Height	mm	3000	3000	3000	3000	3000	3000	3000	3000
Unit weight	kg	13370	13500	13800	14790	15150	15650	16600	16850	
Operating weight	kg	15000	15500	15950	16980	17330	17790	18850	19350	

GLZ_YLGP		235	250	265	285	300	330	365	400	
Cooling capacity	kW	825.4	879.1	940	1001	1060	1160	1283	1407	
	RT	234.7	250.0	267.3	284.6	301.4	329.8	364.8	400.1	
Cooling main unit COP	-	6.08	5.81	6.07	6.04	5.82	6.32	6.32	5.87	
Cooling main unit IPLV ¹	-	9.23	8.90	9.02	9.10	8.84	9.38	9.56	9.31	
Cooling main unit power input	kW	135.7	151.4	154.9	165.7	182.1	183.5	203	239.5	
Integrated cooling station power input	kW	180.2	199.4	202.9	213.7	237.6	250.5	270	306.5	
Noise	dB	69	69	70	70	70	70	70	70	
Power supply	V/Ph/Hz	380V 3N~50Hz								
Rated current	A	432	479	487	513	570	601	648	736	
Compressor	Compressor type	-	Semi-open screw compressor							
	Quantity	set	1	1	1	1	2	2	2	
Chilled water side	Starting way	-	Inverter starting							
	Water pump quantity	set	2	2	2	2	2	2	2	
Chilled water side	Water pump power	kW	18.5	22	22	22	22	30	30	
	Water pump flow	m ³ /h	142	151	162	172	182	200	221	
Chilled water side	Water pump head	m	35	35	35	35	35	35	35	
	Loss inside unit	kPa	128	134	139	146	105	109	114	
Chilled water side	Pipe connection size	-	DN150	DN150	DN150	DN150	DN200	DN200	DN200	
	Pipe connection method	-	Flange type							
Chilled water side	Water pump quantity	set	2	2	2	2	2	2	2	
	Water pump power	kW	15	15	15	15	18.5	22	22	
Chilled water side	Water pump flow	m ³ /h	177	189	202	215	228	249	276	
	Water pump head	m	19	21	16.5	17	17.5	18	19	
Chilled water side	Pipe connection size	-	DN150	DN150	DN200	DN200	DN200	DN200	DN200	
	Pipe connection method	-	Flange type							
Chilled water side	Fan type	-	Fixed speed/Inverter							
	Fan power	kW	11	11	11	11	15	15	15	
Chilled water side	Tower head	m	4	4	4.5	4.5	4.5	4.5	4.5	
Safety protection		-	Low waterflow protection, high pressure protection, low pressure protection, overcurrent protection, electrical leakage protection							
Optional configuration		-	Group control kit, water pump inverter control, constant-pressure water makeup device, shell and tube online cleaning device, water processing device, energy consumption calculation, cooling (heating) capacity calculation							
Outline dimension	Width	mm	9500	9500	10000	10000	11000	11000	11000	11000
	Depth	mm	3000	3000	3000	3000	3000	3000	3000	3000
	Height	mm	3000	3000	3000	3000	3000	3000	3000	3000
Unit weight	kg	17350	17840	18600	19000	20120	20900	21560	22830	
Operating weight	kg	19850	20390	21220	21720	22950	23940	24760	26440	

50Hz R410A

GLZ_YLXP		250	300	350	400	450	500	550	600

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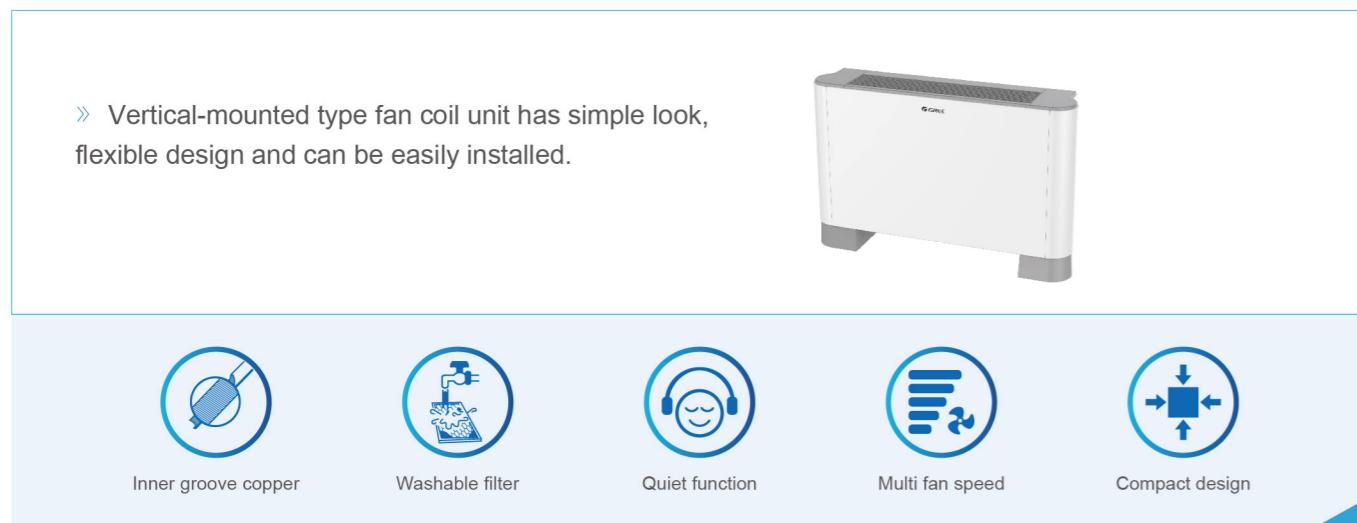
TERMINAL

Fan Coil Unit

Air Curtain

Fan Coil Unit

INVERTER



- » Vertical-mounted type fan coil unit has simple look, flexible design and can be easily installed.
- » Optimize and design volute molded lines, impair the incision effect of high-speed air flow discharged from impeller, achieve good noise reduction effect; optimize and design angle of centrifugal fan blade and internal and external circle diameter of impeller, which can increase the air volume and lower the fan noise as well.
- » Add noise-absorbing heat insulation material in the duct to improve the vortex and lower the noise.
- » The body is small for easy installation and occupying less space, which is applicable to multiple installing locations.
- » User can freely select fan coil temperature controller, which can be flexibly installed.
- » Unique electric box sub-assy structure design: motor and capacitor are separated, external capacitor for easy maintenance and replacement; the capacitor is plug-in type for easily removing and maintaining.

Nominal test condition (temperature)				
Item	DB(°C)	WB (°C)	Inlet (°C)	Outlet (°C)
Cooling	27	19	7	12
Heating	20	≤15	45	40

Model		FP-22LM/D-K	FP-34LM/D-K	FP-51LM/D-K	FP-68LM/D-K	FP-85LM/D-K	FP-102LM/D-K	FP-119LM/D-K
Air flow volume (H/M/L)	m³/h	220/165/110	340/255/170	510/382/255	680/510/340	850/637/425	1020/765/510	1190/892/595
	CFM	130/97/65	200/150/100	300/225/150	400/300/200	500/375/250	600/450/300	700/525/350
ESP	Pa	0	0	0	0	0	0	0
Capacity	Cooling/Heating	kW	1.1	1.7	2.6	3.3	4.2	5.2
Power system	Type	V/Ph/Hz	220-240V ~ 50Hz					
Input	W	30	36	50	60	74	93	112
Water flow volume	l/s	0.062	0.086	0.136	0.173	0.215	0.268	0.301
Water system	kPa	3.7	8	9.4	17.5	20.5	17.3	27.1
Pressure drop	Ft.WG	1.2	2.6	3.1	5.7	6.7	5.7	8.9
Sound pressure level	dB(A)	33	36	38	40	42	44	45
Dimension (W×D×H)	Outline	mm	895×680×230	895×680×230	1050×680×230	1050×680×230	1350×680×230	1350×680×230
Connection pipe	Water inlet & outlet (inner groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	Condensed water drain (outer groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"

Note*: This product model is under development. Gree reserves the right to modify the specifications without prior notice. Please confirm the final specifications with sales representatives.

Fan Coil Unit

Concealed Ceiling Type

It is a kind of fan coil unit that is connected to the chillers to realize cooling/heating for civil or residential use.



- » Thanks to optimized air flue design that greatly improve the fan efficiency and lower the operation noise.
- » Flexible air inlet/outlet directions, meet different installation requirements.
- » Washable filter is optional when equipped with air return box.



Nominal test condition (temperature)				
Item	DB (°C)	WB (°C)	Inlet (°C)	Outlet (°C)
Cooling	27	19	7	12
Heating	20	—	45	40

2 Pipes/2 Rows/Standard Type

Model		FP-34WA/GHL-K	FP-51WA/GHL-K	FP-68WA/GHL-K	FP-85WA/GHL-K	FP-102WA/GHL-K	FP-136WA/GHL-K	FP-170WA/GHL-K	FP-204WA/GHL-K
Air flow volume(H/M/L)	m³/h	370/278/185	570/428/285	720/540/360	870/653/435	1020/765/510	1360/1020/680	1600/1200/800	1900/1425/950
	CFM	218/163/109	335/251/168	424/318/212	512/384/256	600/450/300	800/600/400	941/706/471	1118/838/559
ESP	Pa	0	0	0	0	0	0	0	0
Capacity	Cooling/Heating	kW	1.75/2.2	2.9/3.4	3.4/4.2	4.3/4.7	4.9/6	6.7/8	7.0/9
Power system	Type	V/Ph/Hz	220-240V ~ 50Hz						
Input	W	35	54	66	84	101	150	154	198
Water system	Water flow volume	l/s	0.08	0.14	0.16	0.21	0.23	0.32	0.33
Pressure drop	Ft.WG	kPa	15	36	31	27	42	47	34
Sound pressure level	dB(A)	37	38	40.5	44	46	47	50.5	
Dimension (W×D×H)	Outline	mm	680×520×235	800×520×235	900×520×235	1000×520×235	1080×520×235	1380×520×235	1520×520×235
	Package	mm	773×313×615	890×313×615	990×313×615	1090×313×615	1170×313×615	1470×313×615	1605×313×615
Net weight/Gross weight	kg	14.5/19.2	17/21.9	18.9/24	20.8/26.2	21.9/27.5	31.5/37.5	34.1/41.6	38/44.5
Connection pipe	Water inlet & outlet (inner groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	Condensed water drain (outer groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Loading quantity	40'GP/40'HQ	unit	318/424	273/364	255/340	225/300	210/280	168/224	135/204
Optional	Wired remote control	-	Luxury wired controller:WK-010PA-K/LCD controller:WK-110PA0						

Note: This parameter is obtained based on the test standard of Eurovent and under 0Pa static pressure with circle bellows & filter.

2 Pipes/2 Rows/High ESP Type

Model	FP-34WAH/GHL-K	FP-51WAH/GHL-K	FP-68WAH/GHL-K	FP-85WAH/GHL-K	FP-102WAH/GHL-K	FP-136WAH/GHL-K	FP-170WAH/GHL-K	FP-204WAH/GHL-K		
Air flow volume(H/M/L)	m³/h	450/338/225	570/428/225	750/563/375	930/698/465	1100/825/550	1400/1050/700	1700/1275/850	2000/1500/1000	
	CFM	265/119/132	347/251/168	440/330/221	547/410/274	647/458/324	824/618/412	1000/750/500	1176/882/588	
ESP	Pa	0	0	0	0	0	0	0		
Capacity	Cooling/Heating	kW	2/2.3	3.1/3.5	3.55/4.5	4.5/4.9	5.2/6.3	6.9/8.2	7.2/9.2	10.2/12
Power system	Type	V/Ph/Hz			220-240V ~ 50Hz					
	Input	W	48	57	72	90	111	152	185	222
Water system	Water flow volume	l/s	0.10	0.15	0.17	0.22	0.25	0.33	0.34	0.49
	Pressure drop(cooling)	kPa	18	41	32	30	37	47	42	34
	Ft.WG	4.92	9.84	7.544	9.84	11.48	8.2	11.808	9.84	
Sound pressure level	dB(A)	39	39	41	46	49	48	49	52	
Dimension (WxDxH)	Outline	mm	680×520×235	800×520×235	900×520×235	1000×520×235	1080×520×235	1380×520×235	1520×520×235	1620×520×235
	Package	mm	773×313×615	890×313×615	990×313×615	1090×313×615	1170×313×615	1470×313×615	1605×313×615	1710×313×615
Net weight/Gross weight	kg	14.5/19.2	17/21.9	18.9/24	20.8/26.2	21.9/27.5	31.5/37.5	34.1/41.6	38/44.5	
Connection pipe	Water inlet & outlet (inner groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"		
	Condensed water drain (outer groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"		
Loading quantity	40'GP/40'HQ	unit	318/424	273/364	255/340	225/300	210/280	168/224	135/204	138/184
Optional	Wired remote control	-			Luxury wired controller:WK-010PA-K/LCD controller:WK-110PA0					

2 Pipes/3+1 Rows Type

Model	FP-34WAHT/BHL-K	FP-51WAHT/BHL-K	FP-68WAHT/BHL-K	FP-85WAHT/BHL-K	FP-102WAHT/BHL-K	FP-136WAHT/BHL-K	FP-170WAHT/BHL-K	FP-204WAHT/BHL-K		
Air flow volume(H/M/L)	m³/h	430/323/215	640/480/320	740/555/370	910/683/455	1040/780/520	1600/1200/800	1980/1485/990	2100/1575/1050	
	CFM	253/190/126	376/282/188	435/326/218	535/401/268	612/459/306	941/706/471	1165/874/582	1235/926/618	
ESP	Pa	0	0	0	0	0	0	0		
Capacity	Cooling/Heating	kW	2.45/3.4	3.7/4.7	4.55/5.7	5.4/6.35	6.35/7.55	8.30/9.90	10.0/11.5	10.2/11.9
Power system	Type	V/Ph/Hz			220-240V ~ 50Hz					
	Input	W	45	66	71	90	113	169	186	216
Water system	Water flow volume	l/s	0.12	0.18	0.22	0.26	0.30	0.40	0.48	0.49
	Pressure drop(cooling)	kPa	8	15	24	35	56	17	32	31
	Ft.WG	2.30	4.92	7.87	11.48	18.37	5.58	10.50	10.17	
Sound pressure level	dB(A)	40	42	44	46	47	48	50	52	
Dimension (WxDxH)	Outline	mm	881×510×245	1011×510×245	1131×510×245	1211×510×245	1371×510×245	1761×510×245	1921×510×245	1921×510×245
	Package	mm	900×275×610	1030×275×610	1150×275×610	1230×275×610	1390×275×610	1780×275×610	1940×275×610	1940×275×610
Net weight/Gross weight	kg	19/22.5	22.5/27	25/29.5	27/31.5	30.5/35	43.5/48.5	47/53	47/53	
Connection pipe	Water inlet & outlet (inner groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	
	Condensed water drain (outer groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	
Loading quantity	40'GP/40'HQ	unit	321/428	270/360	252/336	271/317	198/264	156/208	144/192	144/192
Optional	Wired remote control	-			Luxury wired controller:WK-010PA-K/LCD controller:WK-110PA0					

2 Pipes/3 Rows Type

Model	FP-34WAS/GHL-K	FP-51WAS/GHL-K	FP-68WAS/GHL-K	FP-85WAS/GHL-K	FP-102WAS/GHL-K	FP-136WAS/GHL-K	FP-170WAS/GHL-K	FP-204WAS/GHL-K		
Air flow volume(H/M/L)	m³/h	370/278/185	570/428/285	720/540/60	870/653/435	1020/765/510	1360/1020/680	1600/1200/800	1900/1425/650	
	CFM	218/163/109	335/251/168	424/318/212	512/384/256	600/450/300	800/600/400	941/706/470	1118/838/559	
ESP	Pa	0	0	0	0	0	0	0		
Capacity	Cooling/Heating	kW	2.1/2.4	3.2/3.7	4.1/4.8	4.8/5.5	5.9/6.6	7.6/8.9	8.8/10.2	10.4/12.1
Power system	Type	V/Ph/Hz			220-240V ~ 50Hz					
	Input	W	35	58	66	78	102	161	150	192
Water system	Water flow volume	l/s	0.10	0.15	0.20	0.23	0.28	0.36	0.42	0.50
	Pressure drop(cooling)	kPa	20	27	25	35	45	44	32	39
	Ft.WG	6.56	6.888	7.216	11.48	19.68	9.84	10.824	11.48	
Sound pressure level	dB(A)	37	39	40.5	44	48	47	48	50.5	
Dimension (WxDxH)	Outline	mm	680×520×235	800×520×235	900×520×235	1000×520×235	1080×520×235	1380×520×235	1520×520×235	1620×520×235
	Package	mm	773×313×615	890×313×615	990×313×615	1090×313×615	1170×313×615	1470×313×615	1605×313×615	1710×313×615
Net weight/Gross weight	kg	14.9/19.6	17.4/22.3	19.3/24.4	21.3/26.7	22.7/28.3	30.9/36.9	34.5/42	38/44.5	
Connection pipe	Water inlet & outlet (inner groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"		
	Condensed water drain (outer groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"		
Loading quantity	40'GP/40'HQ	unit	318/424	273/364	255/340	225/300	210/280	168/224	135/204	138/184
Optional	Wired remote control	-			Luxury wired controller:WK-010PA-K/LCD controller:WK-110PA0					

2 Pipes/4 Rows Type

Model	FP-34WAHF/BHL-K	FP-51WAHF/BHL-K	FP-68WAHF/BHL-K	FP-85WAHF/BHL-K	FP-102WAHF/BHL-K	FP-136WAHF/BHL-K	FP-170WAHF/BHL-K	FP-204WAHF/BHL-K
Air flow volume(H/M/L)	m³/h	430/323/215	640/480/320	740/555/370	870/653/435	1		

Fan Coil Unit

Cassette Type



- Thanks to optimized air flue design that greatly improve the fan efficiency and lower the operation noise.
- Four directions airflow that makes an even temperature and humidity distribution.
- Evaporator moisture auto cleaning after power off to avoid mildew.
- Forced high speed fan operation under emergency condition.



Nominal test condition (temperature)				
Item	DB (°C)	WB (°C)	Inlet (°C)	Outlet (°C)
Cooling	27	19	7	12
Heating	20	—	45	40

2 Pipes & 4 Ways

Model		FP-51XD/A-K	FP-68XD/A-K	FP-85XD/B-T (E)	FP-102XD/B-T (E)	FP-125XD/B-T (E)
Air flow volume(H/M/L)	m³/h	510/400/300	680/560/460	800/665/590	940/770/670	1090/860
Capacity	CFM	300/235/176	400/330/270	470/385/347	553/453/394	641/506/447
Power system	Cooling/Heating	kW	2.75/3.4	3.3/3.8	4.5/5.4	5.0/6.1
	Type	V/Ph/Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Power system	Input	W	73	73	81	110
Water system	Water flow volume	l/s	0.13	0.18	0.22	0.24
	Pressure drop	kPa	30	30	27	34
		Ft.WG	9.84	9.84	8.86	11.15
Sound pressure level	dB(A)	46	46	39	49	43.00
Body	Dimension (W×D×H)	mm	664×594×292	664×594×292	840×840×190	840×840×240
	Package	mm	776×730×285	776×730×285	960×960×257	960×960×310
	Net weight/Gross weight	kg	20/24	20/24	25/33	27/35
Panel	Dimension (W×D×H)	mm	670x670x25	670x670x25	950×950×85	950×950×85
	Package	mm	670x670x60	670x670x60	1030×1030×118	1030×1030×118
	Net weight/Gross weight	kg	7/11	7/11	7/11	7/11
Connection pipe size	Water inlet & outlet	inch(mm)	3/4"	3/4"	3/4"	3/4"
	Condensed water drain	mm	25	25	33	33
Loading quantity	40'GP/40'HQ	unit	329/376	329/376	131/147	117/133
Standard controller	Wireless remote	-	YB1FA (X-FAN)	YB1FA (X-FAN)	YB1FA (X-FAN)	YB1FA (X-FAN)
Optional controller	Wired remote	-	Z4E351B	Z4E351B	Z4E351B	Z4E351B

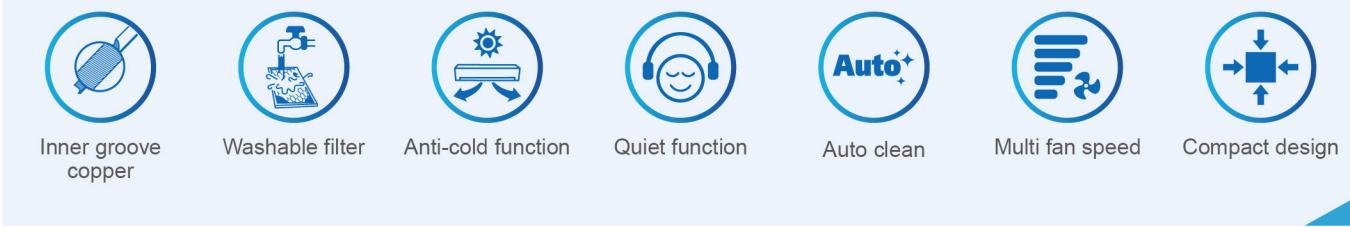
Model		FP-140XD/B-T (E)	FP-160XD/B-T (E)	FP-180XD/B-T (E)
Air flow volume(H/M/L)	m³/h	1400/1160/1000	1500/1200/1000	1640/1360/1200
	CFM	823/682/588	882/706/588	964/800/706
Capacity	Cooling/Heating	kW	7.4/8.4	8.4/9.0
Power system	Type	V/Ph/Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
	Input	W	143	152
Water system	Water flow volume	l/s	0.35	0.40
	Pressure drop	kPa	30	33
		Ft.WG	9.84	10.82
Sound pressure level	dB(A)	50	51	50
Body	Dimension (W×D×H)	mm	840×840×240	840×840×240
	Outline Package	mm	960×960×310	960×960×310
	Net weight/Gross weight	kg	27/35	32/41
Panel	Dimension (W×D×H)	mm	950×950×85	950×950×85
	Outline Package	mm	1030×1030×118	1030×1030×118
	Net weight/Gross weight	kg	7/11	7/11
Connection pipe size	Water inlet & outlet	inch(mm)	3/4"	3/4"
	Condensed water drain	inch(mm)	33	33
Loading quantity	40'GP/40'HQ	unit	117/133	117/133
Standard controller	Wireless remote	-	YB1FA (X-FAN)	YB1FA (X-FAN)
Optional controller	Wired remote	-	Z4E351B	Z4E351B

4 Pipes & 4 Ways

Model		FP-68XDT/B-K(E)	FP-85XDT/B-K(E)	FP-125XDT/B-K(E)	FP-180XDT/B-K(E)
Air flow volume(H/M/L)	m³/h	680/510/340	850/665/590	1250/940/760	1700/1360/1200
	CFM	400/300/200	500/390/347	641/552/447	1000/800/706
Capacity	Cooling/Heating	kW	3.5/5.8	4.5/6.8	6.0/9.2
Power system	Type	V/Ph/Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
	Input	W	82	90	135
Water system	Water flow volume	l/s	0.16	0.21	0.28
	Pressure drop(cooling)	kPa	44	33	41
		Ft.WG	14.45	17.38	13.45
Sound pressure level	dB(A)	39	40	27	50
Body	Dimension (W×D×H)	mm	840×840×190	840×840×190	840×840×240
	Outline Package	mm	960×960×257	960×960×257	960×960×310
	Net weight/Gross weight	kg	25/33	25/33	32/41
Panel	Dimension (W×D×H)	mm	950×950×85	950×950×85	950×950×85
	Outline Package	mm	1030×1030×118	1030×1030×118	1030×1030×118
	Net weight/Gross weight	kg	7/11	7/11	7/11
Connection pipe size	Water inlet & outlet	inch(mm)	3/4"	3/4"	3/4"
	Condensed water drain	inch(mm)	33	33	33
Loading quantity	40'GP/40'HQ	unit	131/147	131/147	117/133
Standard controller	Wireless remote	-	YB1FA (X-FAN)	YB1FA (X-FAN)	YB1FA (X-FAN)
Optional controller	Wired remote	-	Z4E351B	Z4E351B	Z4E351B

Fan Coil Unit

Wall Mounted Type



》 Thanks to optimized air flue design that greatly improve the fan efficiency and lower the operation noise.

》 Reasonable airflow that makes an even temperature and humidity distribution.

》 The unit is with air valve for more reliable operation.



Nominal test condition (temperature)				
Item	DB(°C)	WB(°C)	Inlet(°C)	Outlet(°C)
Cooling	27	19	7	12
Heating	20	—	45	40

2 Pipes

Model		FP-34BA2/D-K (E)	FP-51BA2/D-K (E)	FP-68BA2/D-K (E)	FP-85BA2/D-K (E)
Air flow volume(H/M/L)	m³/h	360/320/280	550/410/360	680/590/530	850/700/600
	CFM	212/189/166	324/243/216	400/348/311	500/411/352
Capacity	Cooling	kW	2	2.5	3.6
	Heating	kW	2.3	2.8	4.1
Power system	Type	V/Ph/Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
	Input	W	50	50	60
Water system	Water flow volume	l/s	0.10	0.12	0.17
	Pressure drop	kPa	18	25	52
		Ft.WG	5.90	8.20	17.06
Sound pressure level		dB(A)	35	40	43
	Outline	mm	845×180×275	845×180×275	940×200×298
Dimension (W×D×H)	Pressure drop	mm	915×255×355	915×255×355	1010×285×380
		kg	10/12.5	10/12.5	12/16
Net weight/Gross weight	Water inlet & outlet	inch(mm)	Φ1/2(12.7)	Φ1/2(12.7)	Φ1/2(12.7)
	Condensed water drain	inch(mm)	Φ5/8(15.6)	Φ5/8(15.6)	Φ5/8(15.6)
Connection pipe	40'GP/40'HQ	unit	765/850	765/850	595/671
	Standard controller	Wireless remote	-	YB1FA(XFAN)	YB1FA(XFAN)
Optional controller	Wired remote	-	Z4E351B	Z4E351B	Z4E351B

Model		FP-34BA3/B-K	FP-51BA3/B-K	FP-68BA3/B-K	FP-85BA3/B-K
Air flow volume(H/M/L)	m³/h	360/322/282	510/413/367	680/591/532	830/708/616
	CFM	212/189/166	300/243/216	400/348/313	488/417/363
Capacity	Cooling	kW	1.85	2.65	3.5
	Heating	kW	2.45	3.05	3.85
Power system	Type	V/Ph/Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
	Input	W	30	30	40
Water system	Water flow volume	l/s	0.11	0.13	0.17
	Pressure drop	kPa	13	25	40
		Ft.WG	4.26	8.20	13.11
Sound pressure level		dB(A)	35	40	43
	Outline	mm	845×180×275	845×180×275	940×200×298
Dimension (W×D×H)	Pressure drop	mm	915×255×355	915×255×355	1010×285×380
		kg	8.8/11.8	8.8/11.8	10.8/14.8
Net weight/Gross weight	Water inlet & outlet	inch(mm)	Φ1/2(12.7)	Φ1/2(12.7)	Φ1/2(12.7)
	Condensed water drain	inch(mm)	Φ5/8(15.6)	Φ5/8(15.6)	Φ5/8(15.6)
Connection pipe	40'GP/40'HQ	unit	765/850	765/850	595/671
	Standard controller	Wireless remote	-	-	-
Optional controller	Wired remote	-	-	-	-

LOMO

Model		FPD-34BB4/A-K	FPD-51BB4/A-K	FPD-68BB4/A-K	FPD-85BB4/A-K
Air flow volume	High	m³/h	340	510	680
	Medium	m³/h	255	382	510
	Low	m³/h	170	255	340
ESP		Pa	0	0	0
					0
Capacity	cooling	kW	2.2	2.7	3.6
	heating	kW	2.4	2.9	3.9
Power system	Type	V/Ph/Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
	Input	W	12	18	29
Water system	Water flow volume	l/s	0.11	0.14	0.18
	Pressure drop	kPa	18	28	43
		Ft.WG	5.9	9.18	14.1
Sound pressure level		dB(A)	31	37	43
	Outline	mm	845×289×209	845×289×209	845×289×209
Connection pipe	Water inlet & outlet	inch(mm)	Φ1/2(12.7)	Φ1/2(12.7)	Φ1/2(12.7)
	Condensed water drain	inch(mm)	Φ3/4(15.6)	Φ3/4(15.6)	Φ3/4(15.6)
Dimension (W×D×H)	Outline	mm	845×289×209	845×289×209	845×289×209
	Package	mm	970×360×280	970×360×280	970×360×280
Net weight/Gross weight	Outline	kg	10.5/12.5	10.5/12.5	10.5/12.5
	Package	kg	604/682	604/682	604/682
Loading quantity	40'GP/40'HQ	unit	604/682	604/682	604/682
	Standard	Wireless remote controller	-	YAP1F	YAP1F

Air Curtain

The air curtain adopts cross flow blower to generate high speed air flow downward, that be installed upward side of the entrance door or window, to isolate the indoor air from the outdoor air and reduce the loss of indoor cool air, also prevent the insects and dust from entering the indoor environment.



Washable filter



Quiet function



Compact design



Easier maintainability

- » Optimized cross-flow fan and good performance motor are adopted.
- » Micro processor controlling with high reliability and long service life.
- » Anti-corrosion thanks to two-side painted electro-galvanized metal case.
- » High quality galvanized steel casing with double-sided plastic spray processing, high anti-corrosion.
- » Good strength structure provides powerful airflow.
- » Integrated electric components, easy maintenance.
- » High performance cross flow fan blade with 3D-optimized streamlined.



Item		Working condition parameters	
Dry bulb temperature of inlet air °C		5~40	
Model		FM-1.25-9-K	FM-1.25-12-K
Power supply	V/Hz	220-240/50	220-240/50
Power input	W	110	140
Air flow volume	m³/h	1200	1650
Sound pressure level (H/L)	dB (A)	59	61
Dimension (W×D×H)	Outline mm	900×225×220	1200×225×220
	Package mm	1015×270×256	1315×270×256
Net weight /Gross weight	kg	16/18	20/22
Loading quantity	40'GP unit	848	660
	40'HQ unit	954	746
Setting height	m	2.3~3	2.3~3
Standard	Wired remote controller	ZY611 (MC)	ZY611 (MC)

Note: Gree reserves the right to modify the specifications without prior notice. Please confirm the final specifications with sales representatives.

Control System Lineup

Product series		Cassette type	Floor ceiling type	Wall mounted type	Air curtain
Control system	YB1FA				
	ZY611 (MC)				
Mechanical FCU controller	Z54352A1				
Long-distance monitoring software	Gree AC Eudemon 2009 ^{*2}	FE30-00/A(M) 			
BMS accessories	ME30-17/E2(M)				
	DQ34 ^{*3}				
	ZJ0212				
Other modules	Optoelectronic isolated converter	RS232-RS422/485 			
	Optoelectronic isolated signal multiplier	RS-422/485 			

Notes:

● means standard, ○ means optional.

*1 The pictures of unit and wireless remote controller please refer to the actual product.

*2 If long-distance monitoring software Gree Eudemon 2009 is selected, the communication module ME30-17/E2(M) shall be selected also. The selection shall refer to actual models.

*3 DQ34 including wired remote controller Z4E351B and Communication module ZJ0212, so if DQ34 is selected, the wired remote controller Z54352A1 is not necessary to select. ME30-17/E2(M) is not necessary also.



SPECIALIZED AC

Marine Air Conditioner

Marine Air Conditioner

R410A

It is a kind of sea water source AC that is widely used in yachts and boats.



- » 360 degree air blowing.
- » Outlay electric box for easy installation & maintenance.
- » Low start-up current thanks to power delay control design.
- » LED display of operation status.
- » Highly anti-corrosion special spray processing on the complete unit.
- » Nickel-Copper coaxial heat exchanger for sea water side.
- » Golden anti-corrosive finned tube heat exchanger.
- » Only one PCB for the entire control and minimize cable connections, with higher reliability and also easier maintenance.
- » Universal for both 50Hz and 60Hz.



Capacity	Model		CYR16/NaC-T*		CYR24/NaC-T**		
	Cooling	kW	3.20	3.50	6.40	7.50	
		Btu/h	10900	11900	21800	25600	
Heating		kW	4.00	4.40	6.65	7.60	
Heating		Btu/h	13600	15000	22700	25900	
EER/COP		W/W	2.67/3.08	2.41/2.93	4.41/3.80	4.17/3.62	
Power supply		V/Ph/Hz	220-240V ~ 50Hz	230V ~ 60Hz	220-240V ~ 50Hz	230V ~ 60Hz	
Power input	Cooling	kW	1.20	1.45	1.45	1.80	
	Heating	kW	1.30	1.50	1.75	2.10	
Input current	Cooling	A	6.00	6.20	6.80	8.00	
	Heating	A	6.10	6.30	8.20	9.30	
Sound pressure level		dB(A)	62	62	60	60	
Refrigerant charge volume		kg	0.46	0.46	0.95	0.95	
Air flow volume (H)	CFM	348	406	560	650		
	m³/h	590	690	951	1104		
Dimension (W×D×H)	Outline	mm	450×454×330	450×454×330	620×540×385	620×540×385	
	Package	mm	558×663×375	558×663×375	638×853×440	638×853×440	
Net weight/Gross weight		kg	37.5/43.5	37.5/43.5	60.5/68.0	60.5/68.0	
Condenser pipe		mm	25.4	25.4	25.4	25.4	
Loading quantity	40'GP	unit	426	426	225	225	
	40'HQ	unit	495	495	270	270	
Fan motor supply air outlet diameter		inch(mm)	4.7(119.4)	4.7(119.4)	4.7(119.4)	4.7(119.4)	

Notes:

*: Test condition for cooling: temperature of dry/wet bulb at air inlet: 27/19.5°C; water inlet/outlet temperature: 32/36°C; static pressure: 20Pa;

Test condition for heating: temperature of dry/wet bulb at air inlet: 22/-C; water inlet temperature: 15°C; water flow is same as that for cooling; static pressure: 20Pa;

**: Test condition for heating: temperature of dry/wet bulb at air inlet: 27/19.5°C; water inlet/outlet temperature: 30/35°C; static pressure: 0Pa;

Test condition for heating: temperature of dry/wet bulb at air inlet: 20/15°C; water inlet temperature: 15°C; water flow is same as that for cooling; static pressure: 0Pa.

Model		CYR5/NaC-T*		CYR9/NaC-T*		CYR12/NaC-T*			
Capacity	Cooling	kW	1.10	1.30	2.10	2.35	3.10	3.50	
	Cooling	Btu/h	3700	4400	7100	8000	10500	11900	
	Heating	kW	1.40	1.50	2.20	2.45	3.20	3.60	
EER/COP		Btu/h	4800	5100	7500	8400	10900	12200	
Power supply		V/Ph/Hz	220-240V ~ 50Hz	230V ~ 60Hz	220-240V ~ 50Hz	230V ~ 60Hz	230V ~ 60Hz		
Power input	Cooling	kW	0.56	0.58	0.90	0.92	1.10	1.20	
	Heating	kW	0.53	0.55	0.88	0.86	1.10	1.10	
Input current	Cooling	A	3.50	2.70	4.90	4.00	6.10	5.30	
	Heating	A	3.40	2.50	4.80	3.90	6.00	4.90	
Sound pressure level		dB(A)	58	58	58	58	58	58	
Refrigerant charge volume		kg	0.32	0.32	0.34	0.34	0.53	0.53	
Air flow volume (H)	CFM	188	188	265	265	274	324		
	m³/h	320	320	450	450	466	550		
Dimension (W×D×H)	Outline	mm	285×408×295	285×408×295	380×408×310	380×408×310	380×420×330	380×420×330	
	Package	mm	493×594×355	493×594×355	513x683x340	513x683x340	533x608x375	533x608x375	
Net weight/Gross weight		kg	25.5/30.0	25.5/30.0	28.0/33.0	28.0/33.0	33.0/38.0	33.0/38.0	
Condenser pipe		mm	22.2	22.2	22.2	22.2	22.2	22.2	
Loading quantity	40'GP	unit	552	552	444	444	492	492	
	40'HQ	unit	644	644	518	518	572	572	
Fan motor supply air outlet diameter		inch(mm)	3.6(91.5)	3.6(91.5)	3.6(91.5)	3.6(91.5)	4.7(119.4)	4.7(119.4)	

Reference Projects



Mordovia Arena
Water-cooled Screw Chiller; Fan Coils
Russia



Mir Kino Cinema
Duct
Russia



Wymondham Leisure Centre
GMV5 Heat Recovery
UK



Sketch
GMV5; U-match Split Systems
UK



Holiday Inn Orchard
Water-cooled Screw Chiller



Sochi More-Mall
Centrifugal Chiller
Russia



Expo 2015
GMV4; GMV5
Italy



Bicon Headquarter Building
Sketch



Trattoria Restaurant
U-Match; Duct
France



Global Foundries Electronic Factory
Centrifugal Chiller

Reference Projects Lineup

Country	Project Name	Installed Series
Philippine	Tosot Philippines Corporation	GMV5 PV
Iran	Tehran University	PV Inverter Centrifugal Chiller
Macedonia	Nikob Cash Center Skopje	GMV5 PV
Thailand	7-11 Store	GMV5 PV
Italy	Expo 2015	GMV4; GMV5
Brazil	2016 Rio de Janeiro Olympics Games	GMV4; GMV4 Mini; Free Match; Splits
Bulgaria	G. Asparuhov Stadium	GMV 4; Cassette IDU
Russia	Mordovia Arena	Water-cooled Screw Chiller; Fan Coils
Malawi	National Stadium	GMV5 Duct System
South Africa	2010 South Africa FIFA World Cup	Water-cooled Packaged Unit
Angola	2010 Africa Cup of Nations	Digital D4 (Modular Digital VRF); Duct Split Unit
Russia	Sochi More-Mall	Centrifugal Chiller
India	Bicon Headquarter Building	Water-cooled Screw Chiller; Air-cooled Screw Chiller
France	Trattoria Restaurant	U-Match; Duct
UK	Wymondham Leisure Centre	GMV5 Heat Recovery
UK	Sketch	GMV5; U-match Split Systems
Russia	Mir Kino Cinema	Duct
Myanmar	Grand Hantha International Hospital	Inverter Centrifugal Chiller; AHU; Fan Coil
Sudan	Ministry of Finance	GMV5
Cuba	CECMED National Pharmacy Laboratory	Water-cooled Screw Chiller; Hydronic Air Handling Unit; Fan Coil Unit
Malta	ST James Hospital	Air-cooled Scroll Chiller (C Series); Mini Chiller
Bulgaria	Sliven Town Library	Air-cooled Scroll Chiller
Senegal	Grande Mosquee De Touba	Water-cooled Package Unit
Brazil	Farroupilha Porto Alegre School	GMV4
UK	Richmond upon Thames College	GMV5
Russia	Uralzheldorproekt Institute	GMV
Sudan	National University Sudan	GMV4 DC Inverter
Serbia	Student Dormitory in Novi Sad	Modular Air-cooled Screw Chiller
Panama	Panama De Universidad Technology	DC Inverter GMV
Bahrain	IBN School	Rooftop Package Unit
Cyprus	Lancashire University	DC Inverter GMV
UK	Persimmon Homes HQ	GMV5 Heat Recovery
Russia	AVM-Orsetto Business Center	GMV
Indonesia	Oppo and J & T Office Tower-Landmark Pult	GMV5 Duct System; GMV5 Fresh Air System; AC Elevator; Air Curtain
Indonesia	Satoria Tower	GMV5; GMV5 Duct Type; Split Wall Mounted
Oman	Al Habsi	GMV5
Oman	Raha Towers	GMV5 Compact
Bahrain	Millennium Tower	Fan Coil Unit
Oman	Trading Building	Air Cooled Screw Chiller
Costarica	Ins Call Center	DC Inverter GMV
Russia	Green Park Commercial Center	DC Inverter GMV
Croatia	FINA Rijeka	Air-cooled Scroll Chiller (C Series)
Lebanon	CUBIC Commercial Center	GMV5
Palestine	Ministry of Foreign Affairs	DC Inverter GMV
Pakistan	Al Tijara Building	DC Inverter GMV
Serbia	Buha	Versati
Indonesia	Sudirman Suites	Centrifugal Chiller; Concealed Ceiling Type; AHU; Duct Type; Wall Mounted Unit
Sri Lanka	Astoria	GMV5; Duct Type
Myanmar	Golden City	GMV5; Duct Type
Australia	Subi Strand	GMV5 Mini
Australia	Toccata	GMV5 Mini
Australia	Linq	GMV5 Mini
Australia	Unison	GMV5
Oman	ERA Real Estate	GMV5
Iraq	NawRoz City-500 Luxury Apartment	Super Free Match

Country	Project Name	Installed Series
Iraq	Lebanese Village	DC Inverter GMV; U-Match; Super Free Match; Air Cooled Screw Chiller
Iraq	New Eskan Project	Super Free Match
Bulgaria	Private House, Markovo Village	Mini Chiller
Lebanon	Conad Supermarket	U-match (Inverter Series)
America	Charter Court Apartments	TMV5
Russia	Mechta Shopping Mall	U-Match
Russia	Krasnaya Pakhra Recreation Center	GMV
Philippine	Unitop Taggarao	Water-cooled Screw Chiller
Philippine	One Mall	Centrifugal Chiller; Water-cooled Screw Chiller; AHU
Myanmar	Time City	DC Inverter Centrifugal Chiller
Mauritius	Grand Bay La Croisette	GMV4
Angola	Ulengo Center Glakeni	GMV5
Oman	Centrepoint Mall	GMV5 Compact
Oman	Nawaras Commercial Centre	High-efficiency Air-cooled Screw Chiller; Terminal; GMV5; Rooftop
Russia	Tools Shop	U-Match
India	Tanishq Flag Store	DC Inverter GMV
Palestine	Palestinian Trade Tower	DC Inverter GMV
Indonesia	Grand Mercure & Ibis Hotel Yogyakarta	High-efficiency Modular Air-cooled Screw Chiller
Philippine	Sunlight Hotel Coron	GMV5
Philippine	Sunshine Island Hotel	GMV5; Duct Type
Thailand	Harbour View Residence Hotel	GMV5
Mauritius	Heritage Le Telfair Hotel	GMV5 Duct System
Qatar	Hilton Garden Inn	Fan Coil Unit
Yemen	Al-Bustan	DC Inverter GMV
Cyprus	Limassol Hotel	Free Match
Bulgaria	Alen Mak Hotel	Air-cooled Scroll Chiller
Bulgaria	Sana 1 Hotel	DC Inverter GMV
Greece	Samos Bay Hotel	DC Inverter GMV
Indonesia	Ibis Budget Hotell	Heat pump Water Heater; Split Wall Mounted; U-Match Split Duct
Brazil	Compal Factory	Modular Air-cooled Scroll Chiller
Russia	MLP-Podolsk Logistic Center	GMV
Russia	IEK Warehouse	GMV
China	Top Giga Material TGHQ	CVE Series Permanent Magnet Synchronous Inverter Centrifugal Chiller
Brazil	XCMG Brasil	DC Inverter GMV
Russia	Aircraft Plant	U-Match

Award and Certification

