

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

Contact Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China 519070

Tel: (+86-756) 852 2218      Fax: (+86-756) 866 9426

Email: gree@cn.gree.com Http://global.gree.com

HONG KONG GREE ELECTRIC APPLIANCES SALES LIMITED

Add: Unit 2612, 26/F, Mira Place Tower A, 132 Nathan Road, Tsimshatsui, Kowloon, Hong Kong

Tel: (852) 3165 8898 Fax: (852) 3165 1029

**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.

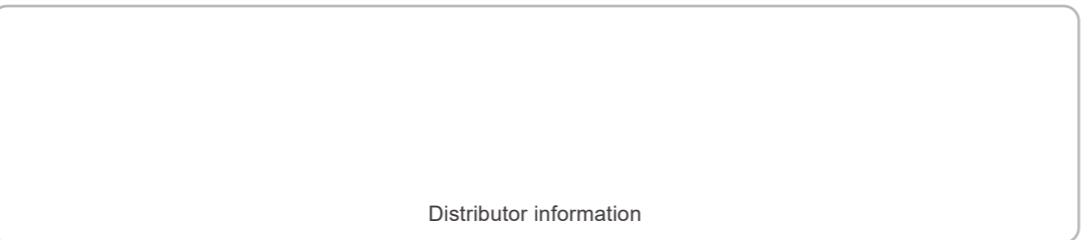
All features and specifications are subject to change without prior notice.

All images provided in this catalogue are used for illustration purposes only.

Copyright© Gree Electric Appliances, Inc. of Zhuhai. All rights reserved.

11. 5 11. 5 11. 5

GC-2401-03



## Distributor information



# CAC

— EU

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 was the number one brand of air conditioners in the world in 2022\*.

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.

2022: Gree has ranked the 487th on the list of Fortune Global 500.

Thanks to 500 million users' choices, Gree brands are sold widely to more than 180 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 2022

Footnote: "Source Euromonitor International Limited; Consumer appliances 2023ed; retail volume sales in units, 2022 data."

# CONTENTS

005-018	<b>LIGHT COMMERCIAL AC</b>
007	U-Match
014	Big Duct Type Unit

017-066	<b>VRF</b>
019	GMV5
023	GMV5 Home
026	GMV6
031	GMV6 HR
035	GMV Mini Star
051	Control System Lineup
065	ERV+DX Coil

067-090	<b>AIR TO WATER</b>
069	Versati IV Monobloc
072	Versati III (Split Type)
076	Versati III (All In One)
081	Versati III (Monobloc Type)
085	Split Type Water Heater
087	Integral Type Water Heater
089	Heat Pump Pool Heater

091-096	<b>AIR-COOLED CHILLER</b>
093	A Series Inverter Modular Air-cooled Chiller (Heat Pump, R32)
095	A Series Inverter Modular Air-cooled Chiller Built-in Hydraulic Module (Heat Pump, R32)

097-110	<b>SCREW CHILLER</b>
099	High-efficiency Modular Air-cooled Screw Chiller
103	Permanent Magnetic Synchronous Inverter Screw Chiller

111-116	<b>CENTRIFUGAL CHILLER</b>
113	CVE Series Permanent Magnet Synchronous Inverter Centrifugal Chiller

117-136	<b>TERMINAL</b>
119	Fan Coil Unit
131	ERV
133	Air Curtain



## SOME PARTS



**Golden fin condenser**  
The anti-corrosion performance of golden fins is 3 times better than ordinary fins.



**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 enables stable operation and low noise.



**Auxiliary electric heater**  
Auxiliary heater greatly improves heating capacity and saves energy.



**Slave and master wired controllers**  
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.

## RELIABILITY



**Auto clean**  
After turning off the unit, the indoor fan will keep running at 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**  
The unit is able to safely start when voltage is below standard.



**Low temperature heating**  
The unit is able to start and operate in normal when the ambient temperature is lower than -20°C 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.

## COMFORTABLE & HEALTHY



**Vertical swing**  
Air discharge flaps can move automatically and vertically for efficient air and temperature distribution throughout the room.



**Horizontal swing**  
Air discharge louver can move automatically and horizontally for efficient air and temperature distribution throughout the room.



**Anti-cold function**  
The indoor unit will not blow in 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.

## 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**  
The unit can operate in wide range, greatly reducing the ambient temperature limitation.



**Multiple fan speeds**  
The fan can operate with multiple speeds and satisfy different air flow requirements.



**Modular structure**  
High efficiency compressor presents reliable performance.

## 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.

## CONTROLLER



**24 hour timer**  
The unit can be set to turn on or turn off at anytime in a day.(The timing interval is 5-minute.)



**Weekly timer**  
The unit can be set to start heating or cooling anytime on a daily or weekly basis.



**°C/°F switch**  
Under off status, press MODE and “-” buttons simultaneously to switch °C/°F.



**Clock display**  
Time is shown on the 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**  
Turn on, turn off and regulate the 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, such as 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 the project efficiency.



**Floor heating debugging**

## CONVENIENCE



**Memory function**  
The unit is able to remember the operation status before power failure and automatically return to that operation status once the power is restored.



**Compact design**  
The unit is designed with smaller dimension, which is easy to install and transport for saving 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.



# LIGHT COMMERCIAL AC

---

R32 Inverter Series  
(Heat Pump) (EU)

Big Duct Type Unit

# U-Match

R32

## R32 Inverter Series (Heat Pump) (EU)

U-MATCH is an air conditioning product in which the outdoor unit is generally designed to be matched with different types of indoor units (duct type, cassette type, floor ceiling type), saving the cost of warehouse management and after-sales maintenance.

The cooling capacity ranges from 3.5kW to 16kW, applicable to houses, hotels, restaurants, stores, office buildings, etc.



- Quality motor
- Built-in drain pump
- Turbo function
- Quiet function
  
- All DC inverter technology
- High efficiency
- Wide voltage range
- Wide operation range

## Outdoor Unit

CE

- » High Energy Efficiency: SEER up to 7.20 and energy efficiency rated at A++ for the whole series thanks to all DC inverter system and high-efficiency casing design, leading to 10% energy savings on average compared to the last generation.
- » Health Function: Fresh air provision for the entire range of indoor units, optional healthy and sterilizing accessories, multiple air purification methods to ensure quality air in real time.
- » Quiet Design: Originally designed bionic fan blades and low noise compressor lower indoor unit sound level to 28dB.
- » Comfort: Adopt high precision temperature and humidity dual sensors ( $\pm 0.5^{\circ}\text{C}$ ) to fully consider the impact of humidity on thermal comfort, reduce excessive dehumidification and substantially improve the level of comfort through intelligent correction of indoor temperature and humidity.
- » Intelligent Control: WiFi function for remote APP control; Smart Sensor, with 360° temperature field detection, can automatically adjust airflow direction and the air conditioner's operation status by detecting the positions of occupants in the room.
- » Easy-to-install ODU: When installing the unit, wiring and piping can be done without opening the casing, saving installation time.
- » Compact Design: Single fan compact design for outdoor units of the whole series, for the ease of transport and installation.
- » Different Debugging Tools: Provide different debugging tools, for example, the portable debugger, which can monitor real-time operating parameters, set unit parameters and store underlying data; the monitoring and debugging software, which can remotely monitor operating conditions and parameters. After-sales personnel can check the monitored data to locate errors. Troubleshooting is more accurate and efficient.

## Indoor Unit

CE

### Duct type

- » Plasmacluster ion sterilization module is included, for a healthy and comfortable environment;
- » It can be directly connected to a centralized controller and can share a centralized controller with GREE GMV6 for centralized control;
- » Different sterilization filters are optional;
- » Up to 9 static pressure stages with a maximum of 200Pa can be set, to suit different static pressure requirements.

### Cassette type

- » Plasmacluster ion sterilization module is included, for a healthy and comfortable environment;
- » Equipped with MODBUS interface, which can be directly connected to the BMS; BACnet gateway is optional;
- » Panel lifting function module is built as standard; lifting panel is optional;
- » It is equipped with an 8-way air discharge panel and a panel lifting function module; lifting panel is optional.

### Floor ceiling type

- » Plasmacluster ion sterilization module is included, for a healthy and comfortable environment;
- » Equipped with MODBUS interface, which can be directly connected to the BMS; BACnet gateway is optional;
- » It can be directly connected to a centralized controller and can share a centralized controller with GREE GMV6 for centralized control;
- » Optional WiFi wired controller.

## Product operation range

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	-20-52	
Heating	7	6	20	15	-20-24	

## Product Lineup

Capacity index	35	50	71	85	100	125	140	160
Outdoor unit								
Duct(without water pump)								
Duct(with water pump)								
Indoor unit								
Cassette								
Floor ceiling								

## Control System Lineup

Controlling system	Model	Outlook	Duct	Cassette	Floor ceiling
Remote controller	YAP1F		○	○	○
			○	●	●
Remote controller	YAP1F7		●	○	○
			○	●	●
Wired controller	XE7A-24/H		●	○	○
			○	○	○
Wired controller ( WiFi )	XE7A-24/HC		○	○	○
			○	○	○
Wired controller	XE73-24/HC		○	○	○
			○	○	○
Programmable wired controller	XE7C-24/HC		○	○	○
			○	○	○
Duct unit LED panel ( matched with remote controller )	JS13		○	○	○
			○	○	○
Linkage Controller	LE60-24/H1		○	○	○
			○	○	○
Centralized controller	CE58-00/EF(CM)		○	○	○
			○	○	○
Modbus gateway	ME50-00/EG(M)		○	○	○
			○	○	○
BACnet gateway	ME30-44/D2(B)		○	○	○

Note: ● means standard, ○ means optional.

XE73-24/HC is under development. Please confirm the final specifications with the sales personnel.

## Specifications

Model	Outdoor unit		GUD35W1/NhA-S GUD35W1/NhA-S(LCLH)		
	Indoor unit		Duct	Cassette	Floor ceiling
			GUD35P1/A-S GUD35PS1/A-S	GUD35T1/A-S	GUD35ZD1/A-S
Capacity	Cooling	kW	3.5	3.5	3.5
	Btu/h	11900	11900	11900	11900
	Heating	kW	4.0	4.0	4.0
	Btu/h	13600	13600	13600	13600
EER /COP	-	3.40/4.00	3.80/4.00	3.80/4.30	3.80/4.30
SEER/SCOP	-	6.50/4.00	7.10/4.20	7.20/4.10	7.20/4.10
Energy efficiency grade (Cooling/Heating)	-	A++/A+	A++/A+	A++/A+	A++/A+
Power supply	V/Ph/Hz	220-240-1-50/60	220-240-50/60-1	220-240-1-50/60	220-240-1-50/60
Power input	Cooling	kW	1.03	0.92	0.92
	Heating	kW	0	0	0.93
Current input	Cooling	A	4.90	4.40	4.40
	Heating	A	4.80	4.80	4.45
Refrigerant charge volume	kg	0.57	0.57	0.57	0.57
Loading quantity	40'GP/40'HQ	unit	182/205	159/182	139/160
Indoor unit	Air flow volume		CFM	353/324/294/235	353/324/294/235
	m³/h		600/550/500/400	600/550/500/400	650/600/500/400
ESP	Rated Range	Pa	25	0	0
	Range	Pa	0-80	0	0
Sound pressure level(SH/I/H/M/L)	dB(A)	35/33/32/30	36/35/33/29	35/34/31/28	35/34/31/28
Dimension (W × D × H)	Outline	mm	700 × 450 × 200	570 × 570 × 260	870 × 665 × 235
	Package	mm	1008 × 568 × 275	698 × 653 × 295	973 × 770 × 300
Panel	Net weight/Gross weight		kg	17.0/21.0	16.5/21.0
		kg	18.0/22.0		24.0/28.0
Outdoor unit	Dimension (W × D × H)	Outline	mm	675 × 285 × 553	675 × 285 × 553
		Package	mm	794 × 376 × 605	794 × 376 × 605
Net weight/Gross weight	kg		24.5/27.0	24.5/27.0	24.5/27.0
Connecting pipe	Outdoor diameter	Liquid inch(mm)	1/4"	1/4"	1/4"
	Gas inch(mm)	3/8"	3/8"	3/8"	3/8"
	Max. distance	Height m	15/30	15/30	15/30
		Length m			

Model	Outdoor unit		GUD50W1/NhA-S GUD50W1/NhA-S(LCLH)		
	Indoor unit		Duct	Cassette	Floor ceiling
			GUD50P1/A-S GUD50PS1/A-S	GUD50T1/A1-S	GUD50T1/A-S
Capacity	Cooling	kW	5.3	5.0	5.3
	Btu/h	18000	17000	18000	18000
	Heating	kW	5.6	5.6	5.6
	Btu/h	19100	19100	19790	19100
EER /COP	-	3.50/3.95	3.40/3.50	3.45/3.95	3.40/3.90
SEER/SCOP	-	6.30/4.00	6.60/4.00	7.20/4.30	6.50/4.20
Energy efficiency grade (Cooling/Heating)	-	A++/A+	A++/A+	A++/A+	A++/A+
Power supply	V/Ph/Hz	220-240-1-50/60	220-240-50/60-1	220-240-1-50/60	220-240-1-50/60
Power input	Cooling	kW	1.51	1.47	1.56
	Heating	kW	2	0	1.44
Current input	Cooling	A	7.20	7.00	7.50
	Heating	A	6.80	7.65	6.85
Refrigerant charge volume	kg	0.85	0.85	0.85	0.85
Loading quantity	40'GP/40'HQ	unit	145/164	148/165	102/116
Indoor unit	Air flow volume		CFM	530/471/412/353	530/471/412/353
		m³/h	900/800/700/600	720/650/600/500	900/800/700/600
ESP	Rated Range	Pa	25	0	0
	Range	Pa	0-80	0	0
Sound pressure level(SH/H/M/L)	dB(A)	36/35/33/31	43/41/39/35	36/35/33/31	41/40/38/36
Dimension (W × D × H)	Outline	mm	1000 × 450 × 200	570 × 570 × 260	840 × 840 × 200
	Package	mm	1308 × 568 × 275	698 × 653 × 295	943 × 923 × 245
Panel	Net weight/Gross weight		kg	23.0/28.0	16.5/21.0
		kg	24.0/29.0		21.0/27.0
Outdoor unit	Dimension (W × D × H)	Outline	mm	745 × 300 × 555	745 × 300 × 555
		Package	mm	872 × 398 × 609	872 × 398 × 609
Net weight/Gross weight	kg		30.5/33.0	30.5/33.0	30.5/33.0
Connecting pipe	Outdoor diameter	Liquid inch(mm)	1/4"	1/4"	1/4"
	Gas inch(mm)	1/2"	1/2"	1/2"	1/2"
	Max. distance	Height m	20/30	20/30	20/30
		Length m			

Note: ● means standard, ○ means optional.

XE73-24/HC is under development. Please confirm the final specifications with the sales personnel.

## Specifications

Model	Outdoor unit		GUD71W1/NhA-S GUD71W1/NhA-S(LCLH)			
	Indoor unit		Duct	Cassette	Floor ceiling	Wall-mounted
Capacity	Cooling		GUD71PH1/A-S GUD71PHS1/A-S	GUD71T1/A-S	GUD71D1/A-S	GUD71G1/A-S
	Heating					
EER /COP	-	kW	7.1	7.1	7.1	7.1
SEER/SCOP	-	Btu/h	24200	24200	24200	24200
Energy efficiency grade (Cooling/Heating)	-	kW	8.0	7.8	7.7	7.7
Power supply	-	Btu/h	27200	26600	26200	26200
Power input	Cooling	kW	3.70/4.00	3.50/3.90	3.50/3.95	3.50/3.95
	Heating	kW	6.60/4.10	6.70/4.30	7.20/4.30	7.20/4.30
Current input	Cooling	A	9.20	9.70	9.70	9.70
	Heating	A	9.60	9.60	9.10	9.10
Refrigerant charge volume	kg	1.50	1.50	1.50	1.50	1.50
Loading quantity	unit	98/109	84/94	92/102	115/134	
Indoor unit	Air flow volume		CFM	647/588/529/470	647/588/529/470	735/647/588/529
	m³/h	1100/1000/900/800	1100/1000/900/800	1250/1100/1000/900	1200/1100/1000/950	706/647/589/559
Panel	ESP	Rated	Pa	25	0	0
		Range	Pa	0-160	0	0
Outdoor unit	Sound pressure level(SH/H/M/L)	dB(A)	37/35/33/31	39/38/36/34	41/39/37/35	47/45/43/40
	Dimension (W × D × H)	Outline	mm	900 × 655 × 260	840 × 840 × 200	1200 × 665 × 235
Connecting pipe	Net weight/Gross weight	kg	1115 × 772 × 320	943 × 923 × 245	1303 × 770 × 300	1127 × 403 × 344
	kg	kg	28.5/32.5	21.0/27.0	31.0/36.0	15.0/18.0
Outdoor unit	Dimension (W × D × H)	Outline	mm	950 × 950 × 52	-	-
		Package	mm	1033 × 1020 × 110	-	-
Connecting pipe	Net weight/Gross weight	kg	-	6.0/9.5	-	-
	Outdoor diameter	Liquid	inch(mm)	3/8"	3/8"	3/8"
		Gas	inch(mm)	5/8"	5/8"	5/8"
	Max. distance	Height	m	20/30	20/30	20/30
		Length	m			

Model	Outdoor unit		GUD85W1/NhA-S GUD85W1/NhA-S(LCLH)			
	Indoor unit		Duct	Cassette	Floor ceiling	
Capacity	Cooling		GUD85PH1/A-S GUD85PHS1/A-S	GUD85T1/A-S	GUD85D1/A-S	
	Heating					
EER /COP	-	kW	8.5	8.5	8.5	
SEER/SCOP	-	Btu/h	29000	29000	29000	
Energy efficiency grade	-	kW	8.80	8.80	8.80	
Power supply	-	Btu/h	30000	30000	30000	
Power input	Cooling	kW	2.50	2.50	2.50	
	Heating	kW	2.25	2.25	2.25	
Current input	Cooling	A	11.40	11.40	11.40	
	Heating	A	10.30	10.30	10.30	
Refrigerant charge volume	kg	1.50	1.50	1.50	1.50	
Loading quantity	unit	98/109	84/94	92/102		
Indoor unit	Air flow volume		CFM	824/765/647/588	824/765/647/588	824/765/706/588
	m³/h	1400/1300/1100/1000	1400/1300/1100/1000	1400/1300/1200/1000		
Panel	ESP	Rated	Pa	37	0	0
		Range	Pa	0-160	0	0
Outdoor unit	Sound pressure level(SH/H/M/L)	dB(A)	43/41/39/37	47/46/42/38	46/45/43/39	
	Dimension (W × D × H)	Outline	mm	900 × 655 × 260	840 × 840 × 200	1200 × 665 × 235
Connecting pipe	Net weight/Gross weight	kg	1115 × 772 × 320	943 × 923 × 245	1303 × 770 × 300	
	kg	kg	28.5/32.5	21.0/27.0	32.0/37.0	
Outdoor unit	Dimension (W × D × H)	Outline	mm	950 × 950 × 52	-	-
		Package	mm	1033 × 1020 × 110	-	-
Connecting pipe	Net weight/Gross weight	kg	-	6.0/9.5	-	-
	Outdoor diameter	Liquid	inch(mm)	3/8"	3/8"	3/8"
		Gas	inch(mm)	5/8"	5/8"	5/8"
	Max. distance	Height	m	25/30	25/30	25/30
		Length	m			

Model	Outdoor unit		GUD100W1/NhA-S GUD100W1/NhA-S(LCLH)		Duct		GUD100W1/NhA-X GUD100W1/NhA-X(LCLH)		Cassette		Floor ceiling	
	Indoor unit		GUD100PH1/A-S GUD100PHS1/A-S		GUD100T1/A-S		GUD100W1/NhA-S GUD100W1/NhA-S(LCLH)		GUD100W1/NhA-X GUD100W1/NhA-X(LCLH)		GUD100ZD1/A-S	
Capacity	Cooling		kW	10.5	10.5	10.5	10.5	10.0	10.0	10.0	10.0	
	Heating		Btu/h	35800	35800	35800	35800	34100	34100	34100	34100	
EER /COP			kW	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	
			Btu/h	39200	39200	39200	39200	39200	39200	39200	39200	
SEER/SCOP			-	3.50/4.10	3.50/4.10	3.40/3.90	3.40/3.90	3.40/3.90	3.40/3.90	3.40/3.90	3.40/3.90	
			-	6.40/4.20	6.40/4.20	6.60/4.40	6.60/4.40	6.30/4.20	6.30/4.20	6.30/4.20	6.30/4.20	
Energy efficiency grade			-	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+	
			-	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+	
Power supply			V/Ph/Hz	220-240-1-50/60	220-240-50/60-1	220-240-1-50/60	220-240-50/60-1	220-240-1-50/60	220-240-50/60-1	220-240-1-50/60	220-240-50/60-1	
Power input	Cooling		kW	3.00	3.00	3.10	3.10	2.94	2.94	2.94	2.94	
	Heating		kW	0	0	2.95	2.95	2.95	2.95	2.95	2.95	
Current input	Cooling		A	14.35	4.80	14.80	14.80	14.00	14.00	14.00	14.00	

## Big Duct Type Unit



## 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.



- » 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.

Model	Outdoor unit		GUD160W1/NhA-X GUD160W1/NhA-X(LCLH)		
	Indoor unit		Duct	Cassette	Floor ceiling
			GUD160PH1/A-S GUD160PH1/A-S	GUD160T1/A-S	GUD160ZD1/A-S
Capacity	Cooling	kW	16.0	14.5	16.0
		Btu/h	54500	49400	54600
	Heating	kW	17.0	17.0	17.0
		Btu/h	5800	58000	58000
EER /COP			2.96/3.62	2.74/2.98	3.02/3.54
SEER/SCOP		-	6.10/4.00	6.10/4.00	6.10/4.00
Energy efficiency grade		-	A++/A+	A++/A+	A++/A+
Power supply		V/Ph//Hz	380-415-3-50/60	380-415-3-50/60	380-415-3-50/60
Power input	Cooling	kW	5.40	5.30	5.30
	Heating	kW	4.70	5.70	4.80
Current input	Cooling	A	9.20	9.00	9.00
	Heating	A	8.00	8.20	9.70
Refrigerant charge volume		kg	3.50	3.50	3.50
Loading quantity	40'GP/40'HQ	unit	49/57	58/62	60/67
Indoor unit	Air flow volume		CFM	1529/1354/1176/1000	1354/1235/1118/941
			m³/h	2600/2300/2000/1700	2300/2100/1900/1600
	ESP	Rated	Pa	50	0
		Range	Pa	0~200	0
	Sound pressure level(SH/H/M/L)		dB(A)	46/44/42/40	52/50/48/44
	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	54.0/61.0	26.0/33.0
			kg	55.0/62.0	42.0/49.0
Panel	Dimension (W × D × H)	Outline	mm	-	950 × 950 × 52
		Package	mm	-	1033 × 1020 × 110
	Net weight/Gross weight		kg	-	6.0/9.5
Outdoor unit	Sound pressure level		dB(A)	60	60
	Dimension (W × D × H)	Outline	mm	990 × 370 × 960	990 × 370 × 955
		Package	mm	1153 × 478 × 1110	1153 × 478 × 1110
	Net weight/Gross weight		kg	94.0/103.0	94.0/103.0
Connecting pipe	Outdoor diameter	Liquid	inch(mm)	3/8"	3/8"
		Gas	inch(mm)	5/8"	5/8"
	Max. distance	Height	m	30/75	30/75
		Length	m		30/75

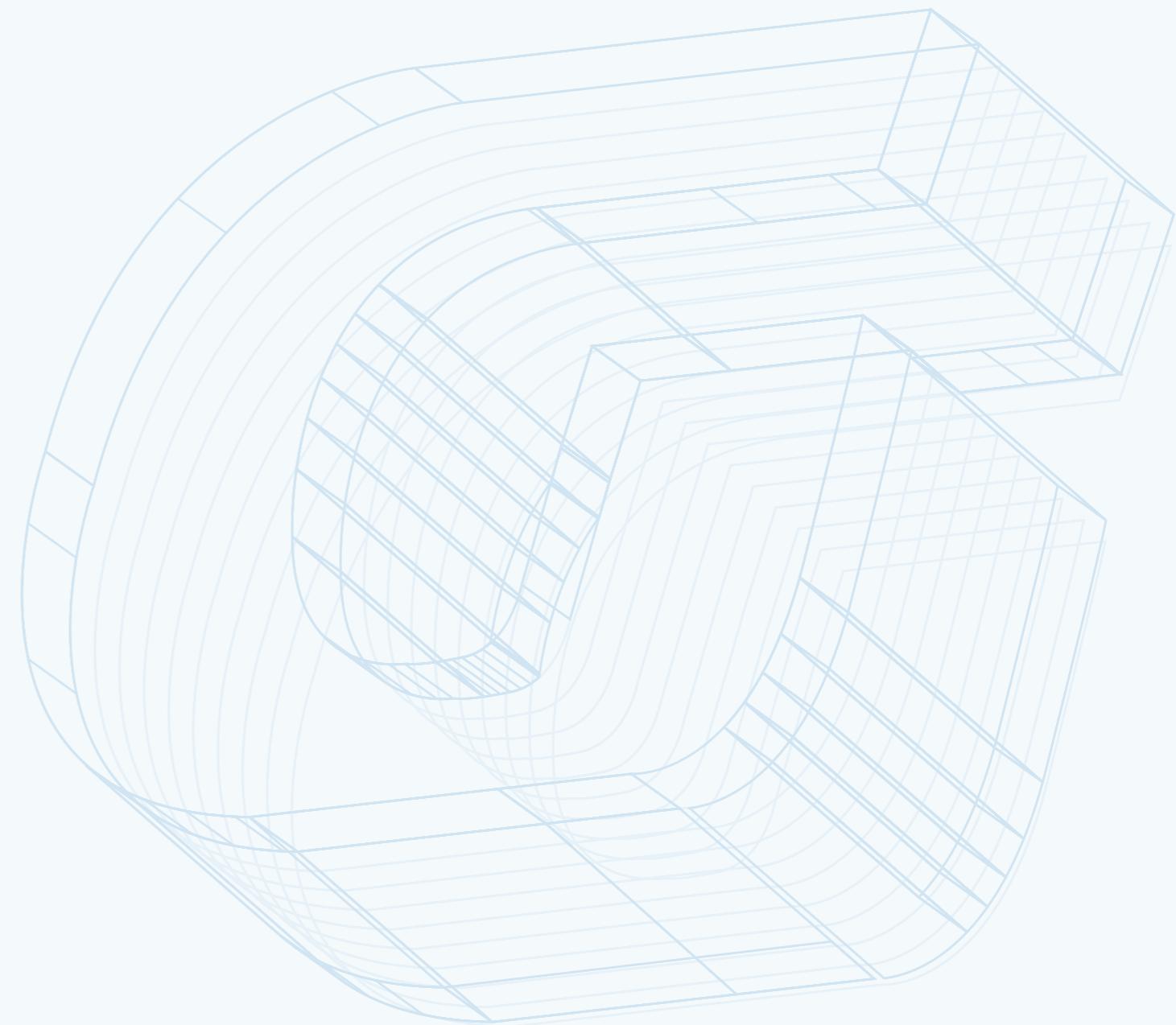
Model	Heat pump		FGR20Pd/DNa-X	FGR25Pd/DNa-X	FGR30Pd/DNa-X	FGR40Pd/D(2)Na-X	
Capacity	Cooling	kW	20	25	30	40	
		BTU/h	68240	85300	102400	136500	
	Heating	kW	22.0	27.5	33.0	43.0	
		BTU/h	75100	93800	112600	146700	
EER/COP		W/W	2.56/3.14	2.65/3.10	2.65/3.20	2.59/3.10	
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz	
Power input	Cooling	kW	7.800	9.435	11.300	15.450	
	Heating	kW	7.00	8.87	10.30	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 m³/h	2177 3700	2472 4200	3060 5200	
	ESP	Rated Range	Pa Pa	120 0-250	120 0-250	120 0-250	
	Sound pressure level		dB (A)	52	53	55	
	Dimension (W × D × H)	Outline Package	mm mm	1315 × 760 × 385 1578 × 883 × 400	1520 × 840 × 450 1788 × 988 × 465	1520 × 840 × 450 1788 × 988 × 465	
	Net weight /Gross weight		kg kg	82/104	99/134	105/145	
	Sound pressure level		dB (A)	62	63	65	
	Dimension (W × D × H)	Outline Package	mm mm	940 × 320 × 1430 1038 × 438 × 1580	940 × 460 × 1615 1038 × 578 × 1765	(940 × 320 × 1430) × 2 (1038 × 438 × 1580) × 2	
	Net weight /Gross weight		kg kg	120/130	146/162	175/190	
Outdoor unit	Outer diameter	Liquid Gas	inch(mm) inch(mm)	Φ3/8(9.52) Φ3/4(19.05)	Φ3/8(9.52) Φ7/8(22.00)	Φ1/2(12.70) Φ1(25.40)	
	Max. distance	Height Length	m m	30	30	30	
Loading quantity	20'GP	unit	15	12	12	6	
	40'GP/40'HQ	unit	35/42	28/28	28/28	12/14	

\*Single unit's noise value.

## Control System Lineup

Controlling system	Model	Outlook	Big duct type unit
Wired controller	XK46		●
Wireless controller	YAP1F		○
Remote controller	YAP1F7		○
Wired controller	XE7A-24/H		○
Wired controller ( WiFi )	XE7A-24/HC		○
Duct unit LED panel ( matched with remote controller )	JS13		○
Linkage Controller	LE60-24/H1		○

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





# VRF

---

**GMV5**

**GMV5 Home**

**GMV6**

**GMV6 HR**

**GMV Mini Star**

**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.



GMV5 Mini

GMV5 Slim



All DC inverter technology



Energy saving function



Quiet function



Human engineering operation



Intelligent Management



Long connection pipe design



Wide operation range



Comprehensive protection

» Outdoor unit quiet mode.

» High energy efficiency with high-performance compressor.

Max. piping length (meter)	GMV5 Mini	GMV5 Slim
Total piping length	250m <sup>1</sup>	300m <sup>2</sup>
Actual piping length	100m <sup>1</sup>	120m <sup>2</sup>
Equivalent piping length	120m <sup>1</sup>	150m <sup>2</sup>
Height difference between indoor units	10m <sup>1</sup>	15m <sup>2</sup>
Height difference between ODU and IDU (ODU is located above the IDU)	30m <sup>1</sup>	50m <sup>2</sup>
Height difference between ODU and IDU (IDU is located above the ODU)	30m <sup>1</sup>	40m <sup>2</sup>
Piping length from first indoor branch to the farthest IDU	40m <sup>1</sup>	40m <sup>2</sup>

Notes:

\*1: The value is applied to product type with 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 Mini	GMV5 Slim
Cooling	35	-	27	19	-5~52	-5~52
Heating	7	6	20	-	-20~27	-20~27

## Outdoor Units Lineup

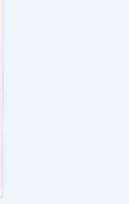
GMV5 Mini Lineup(220-240V/50Hz & 208-230V/60Hz & 380-415V, 50/60HZ)

HP	Model	Product
4	GMV-120WL/C-T	
	GMV-120WL/C-X	
5	GMV-140WL/C-T	
	GMV-140WL/C-X	
6	GMV-160WL/C-T	
	GMV-160WL/C-X	

GMV5 Mini Lineup (220-240V ~ 50Hz & 208-230V ~ 60Hz)

HP	Model	Product
5	GMV-141WL/C-T	

## 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 Mini (220-240V ~ 50Hz & 208-230V ~ 60Hz)

Model	GMV-120WL/C-T	GMV-140WL/C-T	GMV-141WL/C-T	GMV-160WL/C-T
Capacity range	HP	4	5	5
Cooling capacity	Rated	kW	12.1	14.0
	Max.	kW	12.1	14.0
Heating capacity	Rated	kW	12.1	14.0
	Max.	kW	14.0	16.0
SEER	Ducted	-	6.70	6.88
	Cassette	-	6.70	6.79
SCOP	Ducted	-	3.97	4.24
	Cassette	-	3.93	4.24
Max. circuit/Fuse current	A	32	40	40
Power supply	V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz		
Maximum drive IDU NO.	unit	7	8	9
Refrigerant charge volume	kg	3.3	3.3	3.3
Sound power level	dB(A)	75	75	77
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52
	Gas	mm	Φ15.90	Φ15.90
Dimension(W × D × H)	Outline	mm	900 × 340 × 1345	900 × 340 × 1345
	Package	mm	998 × 458 × 1500	998 × 458 × 1500
Net weight/ Gross weight	kg	112/123	112/123	98/108
Loading quantity	40'GP	unit	57	88
	40'HQ	unit	57	88

Note:

(1)The ODU operation temperature range is -5~52°C in cooling and -20~27°C in heating.

(2) Heat radiation by refrigerant.

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

Model		GMV-120WL/C-X	GMV-140WL/C-X	GMV-160WL/C-X
Capacity range	HP	4	5	6
Cooling capacity	Rated	kW	12.1	14
	Max.	kW	12.1	14
Heating capacity	Rated	kW	12.1	14
	Max.	kW	14	16.5
SEER	Ducted	-	6.70	6.88
	Cassette	-	6.70	6.79
SCOP	Ducted	-	3.97	4.24
	Cassette	-	3.93	4.24
Max. circuit/Fuse current	A	16	16	16
Power supply	V/Ph/Hz	380-415V 3N~ 50/60Hz		
Maximum drive IDU NO.	unit	7	8	9
Refrigerant charge volume	kg	3.3	3.3	3.3
Sound power level	dB(A)	75	75	77
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9
Dimension(W × D × H)	Outline	mm	900 × 340 × 1345	900 × 340 × 1345
	Package	mm	998 × 458 × 1500	998 × 458 × 1500
Net weight/ Gross weight	kg	122/133	122/133	122/133
Loading quantity	40'GP	unit	57	57
	40'HQ	unit	57	57

Note: The ODU operation temperature range is -5~52°C in cooling and -20~27°C in heating.

## 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
	Max.	kW	22.4	28.0
Heating capacity	Rated	kW	24.0	28.0
	Max.	kW	24.0	28.0
SEER	Ducted	-	7.27	7.31
	Cassette	-	7.27	6.87
SCOP	Ducted	-	4.08	5.19
	Cassette	-	4.11	4.66
Max. circuit/Fuse current	A	20	25	32
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	Φ12.70
	Gas	mm	Φ19.05	Φ25.40
Dimension(W × D × H)	Outline	mm	940 × 320 × 1430	940 × 460 × 1615
	Package	mm	1038 × 438 × 1580	1038 × 578 × 1765
Net weight/ Gross weight	kg	133/144	163/175	174/187
Loading quantity	40'GP	unit	57	44
	40'HQ	unit	57	44

## GMV5 Home

GMV5 Home is a new generation of multi VRF system developed by Gree, integrating "central air conditioning + hot water".



» High efficiency and energy saving. The self-developed DC inverter technology stimulates the intelligence and integration of the system. In full heat recovery mode of "cooling + hot water", the ECOP is up to 7.0; DC inverter water pump is adopted, which has apparent advantages in energy savings, flow-lift regulating range and performance curve.

» Optional quiet modes. The system has got night quiet mode and forced quiet mode, with operation noise as low as 45dB(A).

» Unique comfort functions. The system has got auto heat recovery function in cooling; the heat is recovered automatically for heating water.

INVERTER R410A

Item	Nominal operating condition(temperature)					
	Outdoor condition		Indoor condition		Water	
	DB(°C)	WB(°C)	DB(°C)	WB(°C)	Start(°C)	End(°C)
Cooling	35	24	27	19	/	/
Heating	7	6	20	15	/	/
Hot water	20	15	/	/	15	55

Operation range	Mode	Outdoor condition(°C)
	Cooling	-5~ 50
	Heating	-15~ 24
	Water heating	-15~ 43
	Cooling and water heating	-5~ 43
	Heating and water heating	-15~ 24

## Hot Water Converter

Model		NRZ16G/A-S
Heating capacity	kW	4.5(2.8~5.6)
Dimension (W×D×H)	Outline mm	370×135×485
	Package mm	473×238×660
Power supply	V/Ph/Hz	220~240V ~ 50/60Hz
Connecting pipe to ODU	Gas mm	Φ15.90
	Liquid mm	Φ9.52
	Gas(high pressure) mm	Φ12.70
Net weight/Gross weight	kg	8.5/13.5
Loading quantity	40'GP/40'HQ unit	660/880

## Water Tank

Model		SXTD200LCJW/A-K
Capacity	L	185
Power supply for electric heater	-	220~240V~50Hz
Input power for electric heater	W	1500
Max. operation pressure	Mpa	0.70
Outline dimensions(W×D×H)	mm	462×462×1944
Package dimensions(W×D×H)	mm	583×583×2045
Water tank gross/net weight	kg	88/75
Outer size of connection pipe	mm	Φ6, Φ9.52
Material of inner tank	-	Enamel
Made of defending cauterization	-	Mg anode

Note:

\*1: The hot water converter is only matched with the outdoor unit model of GMV-S(120~160)WL/A-S.

\*2: The hot water converter is only matched with the water tank model of SXTD200LCJW/A-K.

\*3: Please consult the sales person for the water tank.



## Outdoor Unit

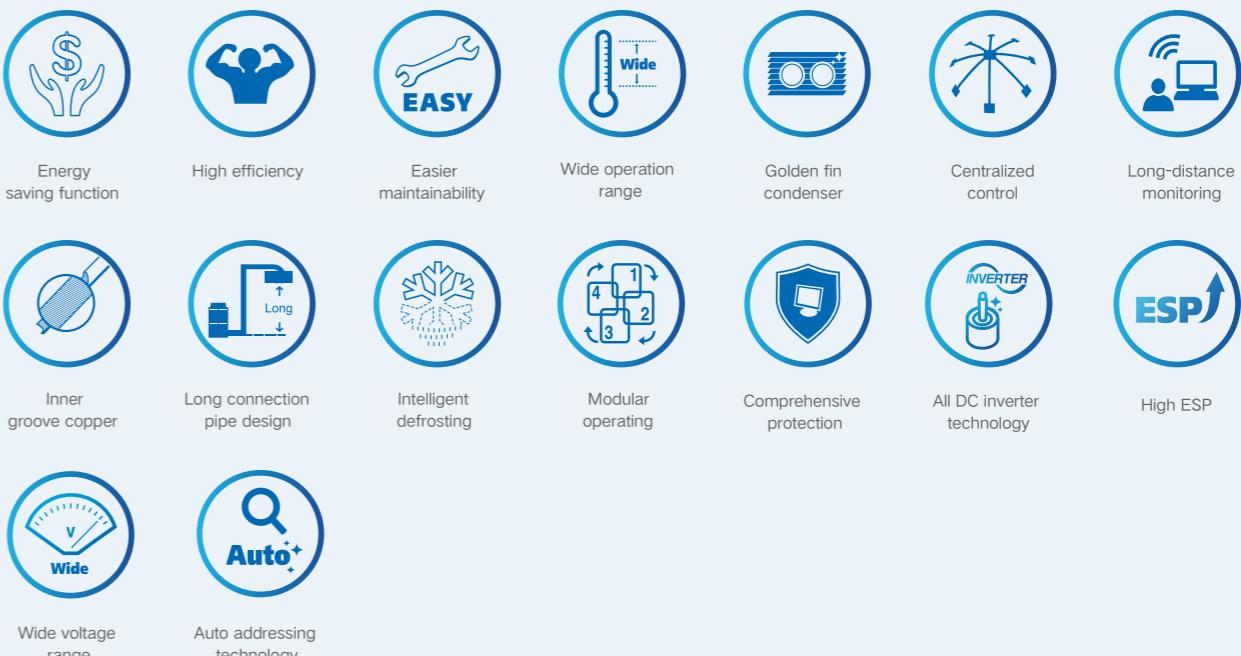
Model		GMV-S120WL/A-S	GMV-S140WL/A-S	GMV-S160WL/A-S
Capacity range	HP	4	5	6
Cooling capacity	Rated kW	12.1	14.0	16.0
	Max. kW	12.1	14.0	16.0
Heating capacity	Rated kW	12.1	14.0	16.0
	Max. kW	14.0	16.5	18.5
SEER	Ducted	-	6.70	6.88
	Cassette	-	6.70	6.79
SCOP	Ducted	-	3.97	4.24
	Cassette	-	3.93	4.24
Max. circuit/Fuse current	A	32	32	40
Power supply	V/Ph/Hz	220-240V~ 50/60Hz		
Maximum drive IDU NO.	unit	6	7	8
Refrigerant charge volume	kg	5	5	5
Sound power level	dB(A)	75	75	77
Connecting pipe	Liquid mm	Φ 9.52	Φ 9.52	Φ 9.52
	Gas mm	Φ 15.90	Φ 15.90	Φ 19.05
	Gas(high pressure) mm	Φ 12.7	Φ 12.7	Φ 12.7
Dimension(W×D×H)	Outline mm	900 × 340 × 1345	900 × 340 × 1345	900 × 340 × 1345
	Package mm	998 × 458 × 1500	998 × 458 × 1500	998 × 458 × 1500
Net weight/ Gross weight	kg	113/123	113/123	113/123
Loading quantity	40'GP unit	57	57	57
Loading quantity	40'HQ unit	57	57	57

## GMV6

INVERTER R410A

### DC Inverter Multi VRF Unit (R410A, Inverter)

Gree new generation modular all inverter VRF unit GMV6 adopts world-leading CAN+ communication technology, energy-saving technology, high-efficiency smart control and other innovative technologies. This unit is also with new generation smart management control solution as well as clean and healthy fresh air solution. It enables excellent energy conservation, comfort and stability.



- » Adopt high-efficiency EVI system design; the compressor matches with the complete unit perfectly;
- » Adopt new-type big air volume blade. The s-shaped trailing edge design effectively increase the work area of blade to greatly enhance the air volume;
- » Adopt new HPAC modular control method. It can smartly adjust the distribution method according to indoor load requirements to ensure the service life of the whole module and improve the overall energy efficiency;
- » Connect ERV or ERV+DX COIL to effectively remove particulate pollutant for improving indoor air quality;
- » Air-makeup enthalpy-adding compressor design is applied for stronger cooling and heating performance and wider operation range from -30°C~55°C;
- » With compact unit body design, new generation 12HP model saves floor area by 29% compared with the last generation model;
- » New refrigerant and refrigeration oil circular design, and air-makeup enthalpy-adding circulation are adopted for better performances in high-temperature cooling and low-temperature heating and more reliable operation.



GMV6 CP Outdoor Unit Lineup (380-415V 3N~ 50/60Hz)

#### GMV6 Outdoor Unit Lineup (380-415V 3N~ 50/60Hz)



Model		GMV-224WM/ H(1)-X	GMV-280WM/ H(1)-X	GMV-335WM/ H(1)-X	GMV-400WM/ H(1)-X	GMV-450WM/ H(1)-X	GMV-504WM/ H(1)-X	GMV-560WM/ H(1)-X	GMV-615WM/ H(1)-X	
Capacity range		HP	8	10	12	14	16	18	20	22
Cooling capacity	Rated *	kW	22.4	28.0	33.5	40.0	45.0	50.4	52.0	52.0
	Max.	kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	61.5
Heating capacity	Rated *	kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	56.0
	Max.	kW	25.0	31.5	37.5	45.0	50.0	56.5	63.0	69.0
SEER	Ducted *	-	7.10	6.66	6.31	6.75	6.24	6.12	5.97	6.02
	Cassette *	-	7.80	6.33	6.58	6.74	6.41	6.44	5.67	5.75
SCOP	Ducted *	-	4.62	4.80	4.40	4.80	4.84	4.19	4.10	4.10
	Cassette *	-	4.50	4.75	4.66	4.44	4.44	3.71	3.71	3.71
$\eta_{S,C}$	Ducted *	%	281.0	263.4	249.4	267.0	246.6	241.8	235.8	237.8
	Cassette *	%	309.0	250.0	260.2	266.4	253.3	254.4	223.8	226.9
$\eta_{S,H}$	Ducted *	%	181.8	189.0	173.0	189.0	190.6	164.6	161.0	161.0
	Cassette *	%	177.0	187.0	183.4	174.6	174.6	145.4	145.4	145.4
Power supply										380-415V 3N~ 50/60Hz
Min. circuit/Max. Fuse current										A
Maximum drive IDU NO.										23.0/25.0
Refrigerant charge volume										kg
Sound pressure level(Cooling)										dB(A)
Sound power level(Cooling)	Ducted *	dB(A)	56	57	59	59	60	61	62	63
	Cassette *	dB(A)	80	84	86	90	93	93	93	93
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.70	Φ12.70	Φ12.70	Φ15.90	Φ15.90	Φ15.90
	Gas	mm	Φ19.05	Φ22.2	Φ25.40	Φ25.40	Φ28.60	Φ28.60	Φ28.60	Φ28.60
Dimension(W × D × H)	Outline	mm	930 × 775 × 1690	930 × 775 × 1690	930 × 775 × 1690	1340 × 775 × 1690	1340 × 775 × 1690	1340 × 775 × 1690	1340 × 775 × 1690	1340 × 775 × 1690
	Package	mm	1000 × 830 × 1855	1000 × 830 × 1855	1000 × 830 × 1855	1400 × 830 × 1855	1400 × 830 × 1855	1400 × 830 × 1855	1400 × 830 × 1855	1400 × 830 × 1855
Net weight/Gross weight										kg
Loading quantity	20' GP	unit	12	12	12	10	10	10	10	
	40' GP	unit	28	28	28	22	22	22	22	
	40' HQ	unit	28	28	28	22	22	22	22	

Note: The data is Eurovent certified.

## Specifications of ODU Combinations

HP	Model	Power Supply	Capacity				SEER		SCOP		η <sub>S,C</sub>		η <sub>S,H</sub>		Sound power level(Cooling)	Dimension(W × D × H)	Connecting pipe		Min.circurrent	Max.fusecurrent	Netweight		
			Cooling		Heating		Ducted*	Cassette*	Ducted*	Cassette*	Ducted*	Cassette*	Ducted*	Cassette*			m³/h	Pa	mm	mm			
			Rated	Max.	Rated	Max.	kW	kW	kW	kW	kW	kW	kW	kW			mm	m³/h	Pa	mm			
24	GMV-680WM/H(1)-X		68.0	68.0	68.0	76.5	6.71	6.56	4.80	4.56	265.4	259.4	188.9	179.5	90		10500+13500	110	Φ15.9	Φ28.6	23.5+37.5	25+40	220+300
26	GMV-730WM/H(1)-X		73.0	73.0	81.5	6.39	6.37	4.82	4.56	252.7	252.0	189.9	179.5	93		10500+15400	110	Φ19.05	Φ31.8	23.5+39.3	25+40	220+300	
28	GMV-784WM/H(1)-X		78.4	78.4	88.0	6.30	6.40	4.39	4.00	248.9	252.8	172.4	156.9	93		10500+16000	110	Φ19.05	Φ31.8	23.5+47	25+50	220+350	
30	GMV-840WM/H(1)-X		80.0	84.0	94.5	6.19	5.87	4.31	4.00	244.6	231.9	169.4	156.9	93		10500+16500	110	Φ19.05	Φ31.8	23.5+48	25+50	220+350	
32	GMV-895WM/H(1)-X		80.0	89.5	100.5	6.22	5.93	4.31	4.00	245.9	234.3	169.4	156.9	93		10500+16500	110	Φ19.05	Φ31.8	23.5+49	25+50	220+355	
34	GMV-950WM/H(1)-X		85.5	95.0	106.5	6.13	6.04	4.20	4.01	242.0	238.7	165.1	157.4	93		11100+16500	110	Φ19.05	Φ31.8	24.1+49	25+50	240+355	
36	GMV-1015WM/H(1)-X		92.0	101.5	114.0	6.31	6.13	4.35	3.98	249.4	242.4	170.8	156.3	94		13500+16500	110	Φ19.05	Φ38.1	37.5+49	40+50	300+355	
38	GMV-1065WM/H(1)-X		97.0	106.5	119.0	6.12	6.03	4.38	3.98	241.7	238.3	172.4	156.3	96		15400+16500	110	Φ19.05	Φ38.1	39.3+49	40+50	300+355	
40	GMV-1119WM/H(1)-X		102.4	111.9	125.5	6.06	6.06	4.14	3.71	239.6	239.4	162.6	145.2	96		16000+16500	110	Φ19.05	Φ38.1	47+49	50+50	350+355	
42	GMV-1175WM/H(1)-X		104.0	117.5	132.0	5.99	5.70	4.10	3.71	236.7	225.0	161.0	145.2	96		16500+2	110	Φ19.05	Φ38.1	48+49	50+50	350+355	
44	GMV-1230WM/H(1)-X		104.0	123.0	138.0	6.02	5.74	4.10	3.71	237.6	226.7	161.0	145.2	96		16500+2	110	Φ19.05	Φ38.1	49+49	50+50	355+2	
46	GMV-1290WM/H(1)-X		125.0	129.0	144.5	6.21	6.05	4.47	4.13	245.3	239.2	175.8	162.3	96		10500+15400+1650							

## GMV6 HR

GMV6 HR Series integrates multiple functions of cooling, heating, water heating, floor heating and heat supply, featuring powerful functions and convenient operation. It adopts DC inverter enthalpy-adding compressor and brand new high-efficiency heat exchanger, to achieve -25°C ultra-low ambient temperature heating, continuous heating and other functions for more energy savings and higher energy efficiency.

Continuous heating	Energy saving function	High efficiency	Easier maintainability	Golden fin condenser	Centralized control	Long-distance monitoring	Comprehensive protection
Hot water	Long connection pipe design	Intelligent defrosting	Low temperature heating	Quiet function	Modular operating	Wide operation range	

- » The indoor unit can perform cooling and heating simultaneously, as well as water heating and floor heating functions;
- » -25°C ultra-low ambient temperature heating can be achieved;
- » Outdoor unit capacity ranges from 8HP to 22HP with maximum combination capacity of 88HP, meeting various engineering demands;
- » One unit with multiple functions of cooling, heating, water heating, floor heating and heat supply, meeting various demands of the customers;
- » Continuous heating function is available to further improve the comfort and energy efficiency of the unit;
- » High-efficiency enthalpy-adding DC inverter compressor and high-efficiency DC motor are adopted. Energy efficiency reaches 9.0 under heat recovery status;
- » Strong low-temperature injection technology and integrated aluminum electric control and high-efficiency radiation design are adopted, achieving operation in wide ambient temperature range from -25°C~55°C;
- » Outdoor static pressure is up to 110Pa, reducing engineering application requirement and making equipment floor design more convenient;
- » It can match with the new generation mode exchange unit. The compact structure design reduces the size by 20% in maximum. Meanwhile, pipe port design with flexible diameters is adopted for more convenient installation.



Item	Nominal operating condition (temperature)				Operation range (temperature)	
	Outdoor condition		Indoor condition			
	DB (°C)	WB (°C)	DB (°C)	WB (°C)		
Cooling	35	24	27	19	-10~55	
Heating	7	6	20	15	-25~24	



## Mode Exchange Unit

Model	Product Outlook
NCHS1D	
NCHS2D	
NCHS4D	
NCHS8D	

## Hydro Box

Model	Product Outlook
NRQR16L/A-T	
NRQR30L/A-T	

## Outdoor Unit (380-415V 3N~50/60Hz)

Model	GMV-VQ224WM/C-X	GMV-VQ280WM/C-X	GMV-VQ335WM/C-X	GMV-VQ400WM/C-X	GMV-VQ450WM/C-X	GMV-VQ504WM/C-X	GMV-VQ560WM/C-X	GMV-VQ615WM/C-X	
Capacity range	HP	8	10	12	14	16	18	20	22
Cooling capacity	Rated * kW	22.4	28.0	33.5	40.0	45.0	50.4	52.0	52.0
	Max. kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	61.5
Heating capacity	Rated * kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	56.0
	Max. kW	25.0	31.5	37.5	45.0	50.0	56.5	63.0	69.0
SEER	Ducted *	7.00	6.76	6.61	6.97	6.53	6.54	6.38	6.32
	Cassette *	7.25	6.49	6.73	6.25	6.22	6.78	6.42	6.36
SCOP	Ducted *	4.32	4.58	4.74	4.44	4.42	4.25	4.15	4.15
	Cassette *	4.30	4.44	4.37	4.44	4.51	4.34	4.34	4.34
$\eta_{S,C}$	Ducted *	277.0	267.4	261.4	275.8	258.2	258.6	252.2	249.8
	Cassette *	287.0	256.6	266.1	247.0	245.7	268.2	253.7	251.4
$\eta_{S,H}$	Ducted *	169.8	180.2	186.6	174.6	173.8	167.0	163.0	163.0
	Cassette *	169.0	174.6	171.8	174.6	177.4	170.6	170.6	170.6
Power supply	V/Ph/Hz	380-415V 3N~50/60Hz							
Min. circuit/Max. fuse current	A	23.0/25	23.5/25	24.1/25	37.5/40	39.3/40	47.0/50	48.0/50	49.0/50
Max. drive IDU NO.	unit	13	16	19	23	26	29	33	36
Refrigerant charge volume	kg	8.2	8.5	9.6	11.1	11.6	12.8	12.8	13.3
Airflow rate	m³/h	9750	10500	11100	13500	15400	16000	16500	16500
Sound pressure level(Cooling)	dB(A)	60	61	63	63	63	63	64	64
Sound power level(Cooling)	Ducted * dB(A)	80	82	84	91	91	88	88	89
	Cassette * dB(A)	80	84	86	87	94	87	89	89
Connecting pipe	Liquid mm	Φ9.52	Φ9.52	Φ12.70	Φ12.70	Φ12.70	Φ15.90	Φ15.90	Φ15.90
	High pressure mm	Φ15.90	Φ19.05	Φ19.05	Φ22.20	Φ22.20	Φ25.40	Φ25.40	Φ25.40
	Low pressure mm	Φ19.05	Φ22.20	Φ22.20	Φ25.40	Φ25.40	Φ28.60	Φ28.60	Φ28.60
Dimension(W*D*H)	Outline mm	930×775×1690	930×775×1690	930×775×1690	1340×775×1690	1340×775×1690	1340×775×1690	1340×775×1690	1340×775×1690
	Package mm	1000×830×1855	1000×830×1855	1000×830×1855	1400×830×1855	1400×830×1855	1400×830×1855	1400×830×1855	1400×830×1855
Net weight/Gross weight	kg	243/253	243/253	256/266	325/340	325/340	385/400	385/400	385/400
Loading quantity	20' GP unit	12	12	12	10	10	10	10	10
	40' GP unit	28	28	28	22	22	22	22	22
	40' HQ unit	28	28	28	22	22	22	22	22

Note: The data is Eurovo certified.

## Mode Exchange Unit

Model	NCHS1D	NCHS2D	NCHS4D	NCHS8D			
Number of branches	unit	1	2	4	8		
Max. number of connectable IDUs	Per branch	8	8	8	8		
	Total	8	16	32	64		
Max. capacity of connectable IDUs	Per branch	kW	16	16	16		
	Total	kW	16	28	45	85	
Power supply	V/Ph/Hz	220-240V ~ 50/60Hz					
Power consumption		Cooling W	14	25	32	90	
		Heating W	14	25	32	90	
Piping connections	Outdoor units		Liquid mm	Φ9.52	Φ9.52	Φ12.70	Φ15.90
			High pressure gas mm	Φ19.05	Φ19.05	Φ22.20	Φ22.20
			Low pressure gas mm	Φ22.2	Φ22.2	Φ28.6	Φ28.6
	Indoor units		Liquid mm	Φ6.35/9.52	Φ6.35/9.52	Φ6.35/9.52	Φ6.35/9.52
Dimension(W × D × H)		Gas mm	Φ12.7/15.9	Φ12.7/15.9	Φ12.7/15.9	Φ12.7/15.	

## Hydro Box

Model			NRQR16L/A-T				NRQR30L/A-T				
Floor heating capacity			kW				16				
Hot water heating capacity			kW				4.5 (3.6~16)				
Power supply			V/Ph/Hz				220-240V ~ 50Hz & 208-230V ~ 60Hz				
Connecting pipe diameter	to exchange unit	Gas	mm	15.9			22.2				
		Liquid	mm	9.52			9.52				
	to water tank		mm	25			25				
Rated water flow			L/min	46			86				
Dimension(W x D x H)			Outing	mm	515 x 330 x 606						
			Package	mm	685 x 473 x 657						
Net/Gross weight			kg	36/42			40/47				
Loading quantity			40' GP/40' HQ	set	252/336			252/336			

## GMV6 HR ( 380-415V 3N~50/60Hz )

HP	Model	Power Supply	Capacity				SEER		SCOP		ηs.c		ηs.h		Sound power level(Cooling) (W x D x H)	Dimension (W x D x H) (mm)	Airflow Volume	ESP	Connecting pipe			Min.circ current (A)	Max.fuse current (A)	Net weight (kg)
			Cooling		Heating		Ducte d*	Cassete d*																
			Rated kW	Max. kW	Rated kW	Max. kW	-	-	-	-	%	%	%	%										
24	GMV-VQ680WM/C-X		68.0	68.0	68.0	76.5	6.88	6.34	4.50	4.44	272.2	250.7	177.0	174.5	91	930 x 775 x 1690	10500+13500	110	Φ15.9	Φ25.4	Φ28.6	23.5+37.5	25+40	243+325
26	GMV-VQ730WM/C-X		73.0	73.0	81.5	6.61	6.31	4.48	4.48	261.5	249.5	176.1	176.0	91	10500+15400	110	Φ19.05	Φ28.6	Φ31.8	23.5+39.3	25+40	243+325		
28	GMV-VQ784WM/C-X		78.4	78.4	88.0	6.62	6.67	4.36	4.37	261.8	263.9	171.4	171.7	88	10500+16500	110	Φ19.05	Φ28.6	Φ31.8	23.5+47	25+50	243+385		
30	GMV-VQ840WM/C-X		80.0	84.0	94.5	6.51	6.43	4.28	4.37	257.3	254.2	168.4	171.7	88	10500+16500	110	Φ19.05	Φ28.6	Φ31.8	23.5+48	25+50	243+385		
32	GMV-VQ895WM/C-X		80.0	89.5	100.5	6.47	6.39	4.28	4.37	255.7	252.6	168.4	171.7	88	10500+16500	110	Φ19.05	Φ28.6	Φ31.8	23.5+49	25+50	243+385		
34	GMV-VQ950WM/C-X		85.5	95.0	106.5	6.43	6.48	4.35	4.35	254.3	256.4	171.1	171.0	89	11100+16500	110	Φ19.05	Φ28.6	Φ31.8	24.1+49	25+50	256+385		
36	GMV-VQ1015WM/C-X		92.0	101.5	114.0	6.59	6.30	4.26	4.38	260.4	249.0	167.6	172.2	92	13500+16500	110	Φ19.05	Φ31.8	Φ38.1	37.5+49	40+50	325+385		
38	GMV-VQ1065WM/C-X		97.0	106.5	119.0	6.41	6.28	4.26	4.41	253.5	248.2	167.5	173.2	92	15400+16500	110	Φ19.05	Φ31.8	Φ38.1	39.3+49	40+50	325+385		
40	GMV-VQ1119WM/C-X		102.4	111.9	125.5	6.43	6.55	4.20	4.34	254.1	258.9	165.0	170.6	91	(1340 x 775 x 1690) x 2	16500 x 2	110	Φ19.05	Φ31.8	Φ38.1	47+49	50+50	385 x 2	
42	GMV-VQ1175WM/C-X		104.0	117.5	132.0	6.35	6.37	4.15	4.34	251.0	251.8	163.2	170.6	91	16500 x 2	110	Φ19.05	Φ31.8	Φ38.1	48+49	50+50	385 x 2		
44	GMV-VQ1230WM/C-X		104.0	123.0	138.0	6.32	6.34	4.15	4.34	249.8	250.6	163.2	170.6	91	16500 x 2	110	Φ19.05	Φ31.8	Φ38.1	49+49	50+50	385 x 2		
46	GMV-VQ1290WM/C-X		125.0	129.0	144.5	6.51	6.35	4.33	4.41	249.8	250.9	170.1	173.4	93	10500+15400+16500	110	Φ19.05	Φ31.8	Φ38.1	23.5+39.3	25+40	243+325		
48	GMV-VQ1345WM/C-X		125.0	134.5	150.5	6.49	6.32	4.33	4.41	257.5	249.9	170.1	173.4	93	10500+15400+16500	110	Φ19.05	Φ31.8	Φ38.1	23.5+39.3	25+40	243+325		
50	GMV-VQ1400WM/C-X		130.5	140.0	156.5	6.46	6.39	4.37	4.40	256.5	252.5	171.9	172.9	93	930 x 775 x 1690	11100+15400+16500	110	Φ19.05	Φ38.1	Φ41.3	24.1+39.3	25+40	256+325	
52	GMV-VQ1455WM/C-X		132.0	145.5	163.5	6.43	6.39	4.23	4.36	255.5	252.7	166.2	171.3	91	10500+16500	110	Φ19.05	Φ38.1	Φ41.3	23.5+49	25+50	243+385		
54	GMV-VQ1510WM/C-X		132.0	151.0	169.5	6.41	6.37	4.23	4.36	254.3	251.8	166.2	171.3	91	10500+16500	110	Φ19.05	Φ38.1	Φ41.3	23.5+49	25+50	243+385		
56	GMV-VQ1565WM/C-X		137.5	156.5	175.5	6.39	6.43	4.27	4.35	253.3	254.2	168.0	170.9	91	11100+16500	110	Φ19.05	Φ38.1	Φ41.3	24.1+49	25+50	256+385		
58	GMV-VQ1630WM/C-X		144.0	163.0	183.0	6.49	6.31	4.22	4.37	252.6	249.6	165.9	171.6	94	13500+16500	110	Φ19.05	Φ38.1	Φ41.3	37.5+49	40+50	325+385		
60	GMV-VQ1680WM/C-X		149.0	168.0	188.0	6.38	6.30	4.22	4.38	256.5	249.0	165.9	172.2	94	15400+16500	110	Φ19.05	Φ38.1	Φ41.3	39.3				

# GMV Mini Star

**INVERTER** R410A



## DC Inverter Multi VRF Unit (R410A, Inverter)

Gree Multi VRF System adopts inverter compressor technology. By changing the displacement of compressor, stepless capacity regulation within range of 10%~100% can be realized. Various product lineups are provided with capacity range from 12kw to 16kw, which can be widely used in residential, commercial and working area and especially applicable to places with big load change. Gree residential air conditioner is absolutely your best choice.

Energy saving function

High efficiency

Easier maintainability

Wide operation range

Golden fin condenser

Centralized control

Long-distance monitoring

Long connection pipe design

Quality motor

Intelligent defrosting

Vertical swing

Comprehensive protection

Slave and master wired controller

All DC inverter technology

- » Outdoor unit quiet design with brand new compressor and duct system – greatly reducing outdoor unit noise; operating sound of a 6HP outdoor unit is only 53dB.
- » Dynamic control of compressor and fan according to the load change of VRF units; outdoor unit noise is lower if only one 1HP indoor unit is used.
- » U-shaped efficient heat exchange structure is adopted, resulting in 10% increase in windward area and better heat exchange capacity.
- » Efficient compressor drive technology and auto optimization of control angel – compressor torque control angle can be automatically optimized; within the compressor frequency range, control efficiency is over 97%.
- » The use of high-efficiency refrigerant cooling module significantly reduces the size while ensuring the heat dissipation effect.
- » New generation CAN bus communication technology is adopted to achieve non-polar communication and strong anti-interference capability.

Model	Nominal operating condition (temperature)				Operation range (temperature) Outdoor condition DB (°C)	
	Outdoor condition		Indoor condition			
	DB (°C)	WB (°C)	DB (°C)	WB (°C)		
Cooling	35	24	27	19	-5~52	

## Specifications of ODU Combinations

Model		GMV-120WL/C1-S		GMV-140WL/C1-S		GMV-160WL/C1-S	
Capacity range	HP	4		5		6	
Cooling capacity	Rated kW	12.1		14.0		16.0	
	Max. kW	12.1		14.0		16.0	
Heating capacity	Rated kW	12.1		14.0		16.0	
	Max. kW	14.0		16.5		18.5	
SEER	Ducted -	6.89		6.90		6.90	
	Cassette -	7		7		7	
SCOP	Ducted -	4.10		4.31		4.10	
	Cassette -	4.10		4.37		4.26	
Power supply	V/Ph/Hz	220-240V ~ 50/60Hz				31.5/32	
Min./circuit/Max./fuse current	A	30.2/32		30.8/32		9	
Maximum drive IDU NO	unit	7		8			
Refrigerant charge volume	kg	3.2		3.2		3.3	
Sound power level(cooling)	Ducted dB(A)	74		75		75	
	Cassette dB(A)	72		73		76	
Connecting pipe	Liquid mm	Φ9.52		Φ9.52		Φ9.52	
	Gas mm	Φ15.90		Φ15.90		Φ19.05	
Dimension (W × D × H)	Outline mm	900 × 340 × 1345		900 × 340 × 1345		900 × 340 × 1345	
	Package mm	998 × 458 × 1500		998 × 458 × 1500		998 × 458 × 1500	
Net weight/Gross weight	kg	97/107		97/107		98/108	
Loading quantity	40'GP unit	57		57		57	
	40'HQ unit	57		57		57	

## Indoor Units

### High Static Pressure Duct Type Indoor Unit

Model		GMV-ND22PHS/B-T	GMV-ND25PHS/B-T	GMV-ND28PHS/B-T	GMV-ND32PHS/B-T	GMV-ND36PHS/B-T
Capacity	Cooling kW	2.2	2.5	2.8	3.2	3.6
	Heating kW	2.5	2.8	3.2	3.6	4.0
Power supply	V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption	W	55	55	55	65	65
Airflow volume(H/M/L)	m³/h	550/480/400	550/480/400	550/480/400	600/500/420	600/500/420
Rated Current	Cooling A	0.5	0.5	0.5	0.5	0.5
	Heating A	0.5	0.5	0.5	0.5	0.5
ESP	Pa	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
Connecting pipe	Liquid mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas mm	Φ9.52	Φ9.52	Φ9.52	Φ12.70	Φ12.70
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	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
Net weight/Gross weight	kg	32/38	32/38	32/38	32/38	32/38
Loading quantity	40'GP unit	168	168	168	168	168
	40'HQ unit	196	196	196	196	196

Model			GMV-ND40PHS/B-T	GMV-ND45PHS/B-T	GMV-ND50PHS/B-T	GMV-ND56PHS/B-T	GMV-ND63PHS/B-T
Capacity	Cooling	kW	4.0	4.5	5.0	5.6	6.3
	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	85	85	85	90	90	
Airflow volume(H/M/L)	m³/h	850/700/600	850/700/600	850/700/600	1000/800/700	1000/800/700	
Rated Current	Cooling	A	0.5	0.5	0.5	0.8	0.8
	Heating	A	0.5	0.5	0.5	0.8	0.8
ESP	Pa	60/0~150	60/0~150	60/0~150	90/0~200	90/0~200	
Sound pressure level(H/M/L)	dB(A)	36/34/32	36/34/32	36/34/32	37/35/33	37/35/33	
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	700 × 700 × 300	700 × 700 × 300	700 × 700 × 300	1000 × 700 × 300	1000 × 700 × 300
	Package	mm	897 × 808 × 360	897 × 808 × 360	897 × 808 × 360	1205 × 813 × 360	1205 × 813 × 360
Net weight/Gross weight	kg	34/40	34/40	34/40	43/49	43/49	
Loading quantity	40'GP	unit	168	168	168	138	138
	40'HQ	unit	196	196	196	161	161

Model			GMV-ND224PH/A-T*	GMV-ND280PH/A-T*	GMV-ND400PH/AR-X*	GMV-ND450PH/AR-X*	GMV-N560PH/AR-M*
Capacity	Cooling	kW	22.4	28.0	40.0	45.0	56.0
	Heating	kW	25.0	31.0	45.0	50.0	63.0
Power supply	V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz	220-240V~ 50Hz & 208-230V~ 60Hz	380-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz	380V 3N~ 50Hz	
Power consumption	W	800	900	2500	2550	2700	
Airflow volume(H/M/L)	m³/h	4000/3600/3200	4400/4000/3600	8000/6100/5050	8200/6600/5550	10000	
Rated Current	Cooling	A	3.7	4.1	2.7	4.1	5.5
	Heating	A	3.7	4.1	2.7	4.1	5.5
ESP	Pa	100/50~200	100/50~200	200/50~250	200/50~250	200	
Sound pressure level(H/M/L)	dB(A)	54/52/49	55/52/50	61/59/56	62/60/57	63	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9
	Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ28.6	Φ28.6
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.0	2.0	1.2	1.2	1.2
Dimension (W × D × H)	Outline	mm	1483 × 791 × 385	1686 × 870 × 450	1680 × 900 × 650	1900 × 1100 × 700	1900 × 1100 × 850
	Package	mm	1578 × 883 × 472	1788 × 988 × 580	1923 × 1153 × 850	2123 × 1463 × 905	2123 × 1463 × 1060
Net weight/Gross weight	kg	82/104	105/140	170/220	236/317	282/364	
Loading quantity	40'GP	unit	60	52	24	16	16
	40'HQ	unit	75	52	36	16	16

Note : This model is without water pump.

Model			GMV-ND71PHS/B-T	GMV-ND80PHS/B-T	GMV-ND90PHS/B-T	GMV-ND100PHS/B-T	GMV-ND112PHS/B-T
Capacity	Cooling	kW	7.1	8.0	9.0	10.0	11.2
	Heating	kW	8.0	9.0	10.0	11.2	12.5
Power supply	V/Ph/Hz		220-240V~ 50Hz & 208-230V~ 60Hz				
Power consumption	W	100	100	140	140	160	
Airflow volume(H/M/L)	m³/h	1250/1050/950	1250/1050/950	1800/1450/1250	1800/1450/1250	2000/1600/1400	
Rated Current	Cooling	A	0.8	0.8	1.1	1.1	1.1
	Heating	A	0.8	0.8	1.1	1.1	1.1
ESP	Pa	90/0~200	90/0~200	90/0~200	90/0~200	90/0~200	
Sound pressure level(H/M/L)	dB(A)	38/36/34	38/36/34	40/37/35	40/37/35	40/38/36	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	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	1000 × 700 × 300	1000 × 700 × 300	1400 × 700 × 300	1400 × 700 × 300	
	Package	mm	1205 × 813 × 360	1205 × 813 × 360	1601 × 813 × 365	1601 × 813 × 365	
Net weight/Gross weight	kg	43/49	43/49	57/64	57/64	57/64	
Loading quantity	40'GP	unit	138	138	84	84	84
	40'HQ	unit	161	161	98	98	98

Model			GMV-ND22PHS/D-T	GMV-ND25PHS/D-T	GMV-ND28PHS/D-T	GMV-ND32PHS/D-T	GMV-ND36PHS/D-T
Capacity	Cooling	kW	2.2	2.5	2.8	3.2	3.6
	Heating	kW	2.5	2.8	3.2	3.6	4.0
Power supply	V/Ph/Hz		220-240V~ 50Hz & 208-230V~ 60Hz				
Power consumption	W	50	50	50	50	50	
Airflow volume(H/M/L)	m³/h	550/480/400	550/480/400	550/480/400	600/500/420	600/500/420	
Rated current	Cooling	A	0.4	0.4	0.4	0.4	0.4
	Heating	A	0.4	0.4	0.4	0.4	0.4
ESP	Pa	50/0~80	50/0~80	50/0~80	50/0~80	50/0~80	
Sound pressure level(H/M/L)	dB(A)	35/31/29	35/31/29	35/31/29	36/33/30	36/33/30	
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.70	Φ12.70
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	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
Net weight / Gross weight	kg	30.5/36	30.5/36	30.5/36	30.5/36	30.5/36	
Loading quantity	40'GP	unit	168	168	168	168	168
	40'HQ	unit	196	196	196	196	196

Model			GMV-ND125PHS/B-T	GMV-ND140PHS/B-T	GMV-ND160
-------	--	--	------------------	------------------	-----------

## Low Static Pressure Duct Type Indoor Unit

Model		GMV-ND71PHS/D-T	GMV-ND80PHS/D-T	GMV-ND90PHS/D-T	GMV-ND100PHS/D-T	GMV-ND112PHS/D-T
Capacity	Cooling	kW	7.1	8.0	9.0	10.0
	Heating	kW	8.0	9.0	10.0	11.2
Power supply		V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz			
Power consumption		W	110	110	170	170
Airflow volume(H/M/L)		m³/h	1250/1050/950	1250/1050/950	1800/1450/1250	1800/1450/1250
Rated current	Cooling	A	0.9	0.9	1.4	1.4
	Heating	A	0.9	0.9	1.4	1.4
ESP		Pa	90/0~200	90/0~200	90/0~200	90/0~200
Sound pressure level(H/M/L)		dB(A)	40/36/32	40/36/32	42/38/34	42/38/34
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5
Dimension (W×D×H)	Outline	mm	1000×700×300	1000×700×300	1400×700×300	1400×700×300
	Package	mm	1205×813×360	1205×813×360	1601×813×365	1601×813×365
Net weight / Gross weight		kg	41/47	41/47	54/61	54/61
Loading quantity	40'GP	unit	138	138	84	84
	40'HQ	unit	161	161	98	98

Model		GMV-ND18PLS/C1-T	GMV-ND22PLS/C1-T	GMV-ND25PLS/C1-T	GMV-ND28PLS/C1-T	GMV-ND32PLS/C1-T
Capacity	Cooling	kW	1.80	2.20	2.50	2.80
	Heating	kW	2.20	2.50	2.80	3.20
Power supply		V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz			
Power consumption		W	28	28	28	37
Airflow volume(H/M/L)		m³/h	450/350/200	450/350/200	450/350/200	450/350/200
Rated Current	Cooling	A	0.2	0.2	0.2	0.2
	Heating	A	0.2	0.2	0.2	0.3
ESP		Pa	15/0~30	15/0~30	15/0~30	15/0~30
Sound pressure level (H/M/L)		dB(A)	30/25/22	30/25/22	30/25/22	31/27/25
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.70
Drain pipe	External dia.	mm	25	25	25	25
	Thickness	mm	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
	Package	mm	1008×568×275	1008×568×275	1008×568×275	1008×568×275
Net weight/Gross weight		kg	18.5/23.5	18.5/23.5	18.5/23.5	18.5/23.5
Loading quantity	40'GP	unit	386	386	386	386
	40'HQ	unit	430	430	430	430

Model		GMV-ND125PHS/D-T	GMV-ND140PHS/D-T	GMV-ND160PHS/D-T	GMV-ND180PHS/D-T	
Capacity	Cooling	kW	12.5	14.0	16.0	
	Heating	kW	14.0	16.0	18.0	
Power supply		V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz			
Power consumption		W	170	240	240	350
Airflow volume(H/M/L)		m³/h	2000/1600/1400	2350/1900/1650	2500/2000/1750	3000/2600/2000
Rated current	Cooling	A	1.4	1.8	1.8	2.0
	Heating	A	1.4	1.8	1.8	2.0
ESP		Pa	90/0~200	90/0~200	90/0~200	90/0~170
Sound pressure level(H/M/L)		dB(A)	44/40/37	44/41/38	45/43/40	49/47/44
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ19.05	Φ19.05
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5
Dimension (W×D×H)	Outline	mm	1400×700×300	1400×700×300	1400×700×300	1400×700×300
	Package	mm	1601×813×365	1601×813×365	1601×813×365	1678×808×365
Net weight / Gross weight		kg	54.0/61.0	54.5/61.5	54.5/61.5	58.0/67.0
Loading quantity	40'GP	unit	84	84	84	84
	40'HQ	unit	98	98	98	98

Model		GMV-ND36PLS/C1-T	GMV-ND40PLS/C1-T	GMV-ND45PLS/C1-T	GMV-ND50PLS/C1-T	GMV-ND56PLS/C1-T
Capacity	Cooling	kW	3.60	4.00	4.50	5.00
	Heating	kW	4.00	4.50	5.00	5.60
Power supply		V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz			
Power consumption		W	37	40	40	55
Airflow volume(H/M/L)		m³/h	550/400/300	750/550/400	750/550/400	750/550/400
Rated Current	Cooling	A	0.3	0.3	0.3	0.4
	Heating	A	0.3	0.3	0.3	0.4
ESP		Pa	15/0~30	15/0~30	15/0~30	15/0~30
Sound pressure level (H/M/L)		dB(A)	31/27/25	33/29/27	33/29/27	35/31/29
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas	mm	Φ12.7	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
Dimension (W×D×H)	Package	mm	710×462×200	1010×462×200	1010×462×200	1010×462×200
	Outline	mm	1008×568×275	1308×568×275	1308×568×275	1308×568×275
Net weight/Gross weight		kg	19/24	24/30	24/30	25/31
Loading quantity	40'GP	unit	386	288	288	288
	40'HQ	unit	430	340	340	340

Model			GMV-ND63PLS/C1-T		GMV-ND71PLS/C1-T		GMV-ND80PLS/C1-T	
Capacity	Cooling	kW	6.30		7.10		8.00	
	Heating	kW		7.10		8.00		9.00
Power supply		V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz					
Power consumption		W	55		55		95	
Airflow volume(H/M/L)		m³/h	850/700/550		1100/850/650		1200/950/700	
Rated Current	Cooling	A	0.4		0.5		0.8	
	Heating	A	0.4		0.5		0.7	
ESP		Pa	15/0~30		15/0~30		15/0~30	
Sound pressure level(H/M/L)		dB(A)	35/31/29		37/32/30		40/35/31	
Connecting pipe	Liquid	mm	Φ9.52		Φ9.52		Φ9.52	
	Gas	mm	Φ15.9		Φ15.9		Φ15.9	
Drain pipe	External dia.	mm	25		25		25	
	Thickness	mm	2.5		2.5		2.5	
Dimension (W×D×H)	Outline	mm	1010×462×200		1310×462×200		1310×462×200	
	Package	mm	1308×568×275		1608×568×275		1608×568×275	
Net weight/Gross weight		kg	25/31		31/37.5		31/37.5	
Loading quantity	40'GP	unit	288		229		229	
	40'HQ	unit	340		257		257	

## Medium Static Pressure Duct Type Indoor Unit

Model			GMV-ND56PMS/A1-T	GMV-ND63PMS/A1-T	GMV-ND71PMS/A1-T	GMV-ND80PMS/A1-T	GMV-ND90PMS/A1-T	GMV-ND100PMS/A1-T	GMV-ND112PMS/A1-T	GMV-ND125PMS/A1-T	GMV-ND140PMS/A1-T
Capacity	Cooling	kW	5.6	6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0
	Heating	kW	6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0
Power supply		V/Ph/Hz	220-240V ~50Hz & 208-230V~ 60Hz								
Power consumption		W	95	95	95	100	120	120	120	170	170
Airflow volume(H/M/L)		m³/h	1100/900/700	1100/900/700	1100/900/700	1100/900/700	1700/1500/1100	1700/1500/1100	1700/1500/1100	2000/1700/1400	2000/1700/1400
Rated Current	Cooling	A	0.72	0.72	0.72	0.75	0.85	0.85	0.85	1.20	1.20
	Heating	A	0.72	0.72	0.72	0.75	0.85	0.85	0.85	1.20	1.20
ESP		Pa	50/0~80	50/0~80	50/0~80	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	37/34/31	37/34/31	40/36/32	40/36/32	40/36/32	42/40/37	42/40/37	
Connecting	Liquid	mm	Φ9.52	Φ9.52	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	Φ15.9	Φ15.9	
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	
Dimension (W×D×H)	Outline	mm	900×655×260	900×655×260	900×655×260	900×655×260	1340×655×260	1340×655×260	1340×655×260	1340×655×260	
	Package	mm	1115×772×320	1115×772×320	1115×772×320	1115×772×320	1568×770×323	1568×770×323	1568×770×323	1568×770×323	
Net weight/Gross weight		kg	29.5/34.0	29.5/34.0	29.5/34.0	30.0/34.5	43.5/50.0	43.5/50.0	43.5/50.0	43.5/50.0	
Loading quantity	40'GP	unit	224	224	224	154	154	154	154	154	
	40'HQ	unit	256	256	256	176	176	176	176	176	

## 360° Air Discharge Cassette Indoor Unit

Model			GMV-ND22T/C-T	GMV-ND28T/C-T	GMV-ND36T/C-T	GMV-ND45T/C-T	GMV-ND50T/C-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	26	26	26	26	28	
Airflow volume(H/M/L)		m³/h	800/700/600	800/700/600	800/700/600	800/700/600	900/800/700	
Rated current	Cooling	A	0.2	0.2	0.2	0.2	0.2	
	Heating	A	0.2	0.2	0.2	0.2	0.2	
Sound pressure level(H/M/L)		dB(A)	33/30/28	33/30/28	33/30/28	34/30/28	35/32/29	
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	
	Gas	mm	Φ9.52	Φ9.52	Φ12.70	Φ12.70	Φ12.70	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	
Main body	Dimension (W×D×H)	Outline	840×840×240	840×840×240	840×840×240	840×840×240	840×840×240	
	Package	mm	963×963×325	963×963×325	963×963×325	963×963×325	963×963×325	
Net weight/Gross weight		kg	27.0/35.0	27.0/35.0	27.0/35.0	27.0/35.0	28.0/36.0	
Panel	Model	TF06	TF06	TF06	TF06	TF06	TF06	
	Dimension (W×D×H)	Outline	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65	
Net weight/Gross weight		mm	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110	
Loading quantity		40'GP	unit	126	126	126	126	
		40'HQ	unit	144	144	144	144	

Model			GMV-ND56T/C-T	GMV-ND63T/C-T	GMV-ND71T/C-T	GMV-ND80T/C-T	GMV-ND90T/C-T
Capacity	Cooling	kW	5.6	6.3	7.1	8.0	9.0
	Heating	kW	6.3	7.1	8.0	9.0	10.0
Power supply		V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz				
Power consumption							

## 360° Air Discharge Compact Cassette Indoor Unit

Model		GMV-ND22T/D1-T	GMV-ND28T/D1-T	GMV-ND36T/D1-T	GMV-ND45T/D1-T	GMV-ND50T/D1-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	40	40	40	50	
Airflow volume(H/M/L)		m³/h	800/700/600	800/700/600	800/700/600	900/800/700	
Rated current	Cooling	A	0.35	0.35	0.35	0.44	
	Heating	A	0.35	0.35	0.35	0.44	
Sound pressure level(H/M/L)		dB(A)	32/29/27	32/29/27	32/29/27	35/30/27	
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	
	Gas	mm	Φ9.52	Φ9.52	Φ12.70	Φ12.70	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	
Main body	Dimension (W×D×H)	Outline	840×840×200	840×840×200	840×840×200	840×840×200	
	Panel	Package	933×933×255	933×933×255	933×933×255	933×933×255	
Net weight/Gross weight		kg	19/23	19/23	19/23	19/23	
Panel	Dimension (W×D×H)	Outline	950×950×65	950×950×65	950×950×65	950×950×65	
	Net weight/Gross weight	kg	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110	
Net weight/Gross weight		kg	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	
Loading quantity		40'GP	unit	152	152	152	
		40'HQ	unit	169	169	169	

Model		GMV-ND56T/D1-T	GMV-ND63T/D1-T	GMV-ND71T/D1-T	GMV-ND80T/D1-T	GMV-ND90T/D1-T	
Capacity	Cooling	kW	5.6	6.3	7.1	8.0	
	Heating	kW	6.3	7.1	8.0	9.0	
Power supply		V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz				
Power consumption		W	60	60	60	75	
Airflow volume(H/M/L)		m³/h	1100/935/850	1100/935/850	1100/935/850	1400/1000/900	
Rated current	Cooling	A	0.49	0.49	0.49	0.60	
	Heating	A	0.49	0.49	0.49	0.60	
Sound pressure level(H/M/L)		dB(A)	37/35/32	37/35/32	37/35/32	40/36/31	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	
Main body	Dimension (W×D×H)	Outline	840×840×200	840×840×200	840×840×200	840×840×240	
	Panel	Package	933×933×255	933×933×255	933×933×255	933×933×292	
Net weight/Gross weight		kg	21/25	21/25	21/25	22.5/27.5	
Panel	Dimension (W×D×H)	Outline	950×950×65	950×950×65	950×950×65	950×950×65	
	Net weight/Gross weight	kg	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110	
Net weight/Gross weight		kg	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	
Loading quantity		40'GP	unit	152	152	139	
		40'HQ	unit	169	169	157	

Model		GMV-ND100T/D1-T	GMV-ND112T/D1-T	GMV-ND125T/D1-T	GMV-ND140T/D1-T		
Capacity	Cooling	kW	10.0	11.2	12.5		
	Heating	kW	11.2	12.5	14.0		
Power supply		V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz				
Power consumption		W	100	100	160	160	
Airflow volume(H/M/L)		m³/h	1550/1200/1000	1550/1200/1000	1800/1450/1150	1800/1450/1150	
Rated current	Cooling	A	0.76	0.76	0.85	0.85	
	Heating	A	0.76	0.76	0.85	0.85	
Sound pressure level(H/M/L)		dB(A)	43/39/35	43/39/35	46/41/35	46/41/35	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	
Main body	Dimension (W×D×H)	Outline	840×840×240	840×840×240	840×840×290	840×840×290	
	Panel	Package	933×933×292	933×933×292	933×933×345	933×933×345	
Net weight/Gross weight		kg	22.5/27.5	22.5/27.5	25/30.5	25/30.5	
Panel	Dimension (W×D×H)	Outline	950×950×65	950×950×65	950×950×65	950×950×65	
	Net weight/Gross weight	kg	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110	
Net weight/Gross weight		kg	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	
Loading quantity		40'GP	unit	139	139	117	
		40'HQ	unit	157	157	135	

Model		GMV-ND15T/E-T	GMV-ND18T/E-T	GMV-ND22T/E-T	GMV-ND28T/E-T		
Capacity	Cooling	kW	1.5	1.8	2.2		
	Heating	kW	1.8	2.2	2.5		
Power supply		V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz				
Power consumption		W	30	30	30	30	
Airflow volume(H/M/L)		m³/h	460/420/370	460/420/370	500/460/370	570/480/420	
Rated current	Cooling	A	0.15	0.15	0.15	0.15	
	Heating	A	0.15	0.15	0.15	0.15	
Sound pressure level(H/M/L)		dB(A)	33/30/25	33/30/25	36/31/25	36/33/28	
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	
Main body	Dimension (W×D×H)	Outline	570×570×265	570×570×265	570×570×265	570×570×265	
	Panel	Package	698×653×295	698×653×295	698×653×295	698×653×295	
Net weight/Gross weight		kg	17.5/22.5	17.5/22.5	17.5/22.5	17.5/22.5	
Model		TF05	TF05	TF05	TF05		
Panel	Dimension (W×D×H)	Outline	620×620×47.5	620×620×47			

## 2-way Cassette Indoor Unit

Model			GMV-ND28TS/B-T	GMV-ND36TS/B-T	GMV-ND45TS/B-T	GMV-ND50TS/B-T	GMV-ND56TS/B-T	GMV-ND63TS/B-T	GMV-ND71TS/B-T	GMV-ND80TS/B-T
Capacity	Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3	7.1	8.0
	Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1	8.0	9.0
Power supply V/Ph/Hz										
Power consumption W		20	20	30	30	30	30	55	55	
Airflow volume(H/M/L) m³/h		671/616/513	671/616/513	715/616/513	715/616/513	764/709/676	764/709/676	816/745/660	816/745/660	
Rated current	Cooling	A	0.25	0.25	0.30	0.30	0.30	0.30	0.49	0.49
	Heating	A	0.25	0.25	0.30	0.30	0.30	0.30	0.49	0.49
Sound pressure level(H/M/L) dB(A)		33/31/28	33/31/28	35/31/28	35/31/28	37/35/32	37/35/32	39/37/34	39/37/34	
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ9.52	Φ12.70	Φ12.70	Φ12.70	Φ15.90	Φ15.90	Φ15.90	
Drain pipe	External dia.	mm	Φ25							
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
Main body	Dimension (W×D×H)	Outline	790×630×280	790×630×280	790×630×280	790×630×280	790×630×280	790×630×280	790×630×280	
	Package	mm	1033×740×365	1033×740×365	1033×740×365	1033×740×365	1033×740×365	1033×740×365	1033×740×365	
Net weight/Gross weight kg		25.5/33.0	25.5/33.0	25.5/33.0	26.0/33.5	26.0/33.5	26.0/33.5	26.0/33.5	26.0/33.5	
Panel	Model		TE03							
	Dimension (W×D×H)	Outline	1100×710×28	1100×710×28	1100×710×28	1100×710×28	1100×710×28	1100×710×28	1100×710×28	
	Package	mm	1230×843×130	1230×843×130	1230×843×130	1230×843×130	1230×843×130	1230×843×130	1230×843×130	
Net weight/Gross weight kg		6.0/10.5	6.0/10.5	6.0/10.5	6.0/10.5	6.0/10.5	6.0/10.5	6.0/10.5	6.0/10.5	
Loading quantity	40'GP	unit	144	144	144	144	144	144	144	
	40'HQ	unit	166	166	166	166	166	166	166	

Model			GMV-ND90TS/B-T	GMV-ND100TS/B-T	GMV-ND112TS/B-T	GMV-ND125TS/B-T	GMV-ND140TS/B-T	GMV-ND160TS/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	18.0	
Power supply V/Ph/Hz									
Power consumption W		90	90	90	100	100	110		
Airflow volume(H/M/L) m³/h		1470/1310/1275	1470/1310/1275	1470/1310/1275	1565/1400/1275	1565/1400/1275	1755/1565/1275		
Rated current	Cooling	A	0.62	0.62	0.62	0.69	0.69	0.75	
	Heating	A	0.62	0.62	0.62	0.69	0.69	0.75	
Sound pressure level(H/M/L) dB(A)		41/39/37	41/39/37	41/39/37	43/41/39	43/41/39	46/43/40		
"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	Φ19.05	
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	
Main body	Dimension (W×D×H)"	Outline	1350×630×280	1350×630×280	1350×630×280	1350×630×280	1350×630×280	1350×630×280	
	Package	mm	1591×740×365	1591×740×365	1591×740×365	1591×740×365	1591×740×365	1591×740×365	
Net weight/Gross weight kg		40.5/50.5	40.5/50.5	40.5/50.5	40.5/50.5	40.5/50.5	40.5/50.5		
Panel	Model		TE04	TE04	TE04	TE04	TE04	TE04	
	"Dimension (W×D×H)"	Outline	1660×710×28	1660×710×28	1660×710×28	1660×710×28	1660×710×28	1660×710×28	
	Package	mm	1790×843×130	1790×843×130	1790×843×130	1790×843×130	1790×843×130	1790×843×130	
Net weight/Gross weight kg		9.5/15.5	9.5/15.5	9.5/15.5	9.5/15.5	9.5/15.5	9.5/15.5		
Loading quantity	40'GP	unit	96	96	96	96	96	96	
	40'HQ	unit	109	109	109	109	109	109	

## 1-way Cassette Indoor Unit

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	30	45	45	45
Airflow volume(H/M/L) m³/h		600/500/450	600/500/450	600/500/450	830/600/500	830/600/500	890/667/564
Rated current	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	40/35/30	41/38/35
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Main body	Dimension (W×D×H)	Outline	987×385×178	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		20/27	20/27	20/27	21/28.5	21/28.5	21/28.5
Panel	Model		TD01	TD01	TD01	TD01	TD01
	Dimension (W×D×H)	Outline	1200×460×55	1200×460×55	1200×460×55	1200×460×55	1200×460×55
	Package	mm	1265×536×121	1265×536×121			

Model		GMV-ND90ZD/B-T		GMV-ND112ZD/B-T		GMV-ND125ZD/B-T		GMV-ND140ZD/B-T		GMV-ND160ZD/B-T	
Capacity	Cooling	kW	9.0		11.2		12.5		14.0		16.0
	Heating	kW	10.0		12.5		14.0		16.0		18.0
Power supply		V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz								
Power consumption		W	120		120		120		150		175
Airflow volume(H/M/L)		m³/h	1550/1400/1250		1800/1600/1400		1800/1600/1400		2000/1750/1600		2150/1850/1650
Rated current	Cooling	A	0.7		0.7		0.7		0.8		0.9
	Heating	A	0.7		0.7		0.7		0.8		0.9
Sound pressure level(H/M/L)		dB(A)	47/44/41		47/44/42		47/44/42		49/45/43		52/48/45
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
Dimension (W×D×H)	Outline	mm	1200×665×235		1570×665×235		1570×665×235		1570×665×235		1570×665×235
	Package	mm	1303×770×300		1669×770×300		1669×770×300		1669×770×300		1669×770×300
Net weight/Gross weight		kg	33/39		41/48		41/48		43/50		43/50
Loading quantity	40'GP	unit	189		147		147		147		147
	40'HQ	unit	216		168		168		168		168

## 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	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									
Power consumption		W	20	20	20	20	25	35	35			
Airflow volume(H/M/L)		m³/h	500/440/300	500/440/300	500/440/300	500/440/300	630/460/320	850/580/500	850/580/500			
Rated current	Cooling	A	0.10	0.10	0.10	0.10	0.12	0.17	0.17			
	Heating	A	0.10	0.10	0.10	0.10	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	43/40/37			
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35			
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.70	Φ12.70	Φ12.70			
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ20	Φ20			
	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5			
Dimension (W×D×H)	Outline	mm	845×209×289	845×209×289	845×209×289	845×209×289	970×224×300	970×224×300				
	Package	mm	976×281×379	976×281×379	976×281×379	976×281×379	1096×308×395	1096×308×395				
Net weight/Gross weight		kg	10.5/12.5	10.5/12.5	10.5/12.5	10.5/12.5	12.5/15.5	12.5/15.5				
Loading quantity	40'GP	unit	576	576	576	576	576	448	448			
	40'HQ	unit	576	576	576	576	512	512	512			

Model		GMV-ND56G/B4B-T	GMV-ND63G/B4B-T	GMV-ND71G/B4B-T	GMV-ND80G/B4B-T	GMV-ND90G/B4B-T	GMV-ND100G/B4B-T					
Capacity	Cooling	kW	5.6	6.3	7.1	8.0	9.0	9.5				
	Heating	kW	6.3	7.1	7.5	9.0	10.0	10.5				
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	1078×246×325	1078×246×325	1350×258×326	1350×258×326	1350×258×326				
	Package	mm	1203×338×425	1203×338×425	1203×338×425	1496×357×433	1496×357×433	1496×357×433				
Net weight/Gross weight		kg	16/19	16/19	16/19	20/24	20/24	20/24				
Loading quantity	40'GP	unit	282	282	282	228	228	228				
	40'HQ	unit	329	329	329	266	266	266				

## Console Indoor Unit

Model		GMV-ND22C/A-T		GMV-ND28C/A-T		GMV-ND36C/A-T		GMV-ND4
-------	--	---------------	--	---------------	--	---------------	--	---------

## 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		560								
	Cooling	kW	3.6		7.1		14.0		28.0		56.0							
	Heating	kW	4.0		8.0		16.0		31.5		63.0							
Adjustable capacity	Capacity	28	36	45	56	71	90	112	140	224	280	335	400	450	504	560	840	
	Cooling	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	22.4	28.0	33.5	40.0	45.0	50.4	56.0	84.0
	Heating	kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	25.0	31.5	37.5	45.0	50.0	56.5	63.0	94.5
Power input	W	8		8		8		8		8								
Power supply	V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz																
Size of connection pipe	AHU-KIT (ex-factory pipe size)	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ15.90	Φ15.90	Φ15.90		
	Air handling unit	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.70	Φ12.70	Φ12.70		
	Liquid pipe	mm	Φ9.52	Φ12.70	Φ12.70	Φ15.90	Φ15.90	Φ15.90	Φ15.90	Φ15.90	Φ15.90	Φ15.90	Φ15.90	Φ22.20	Φ25.40	Φ28.60	Φ28.60	
Connection method		Brazing Connection																
Outline dimension (W×D×H)	EVX box	mm	203×326×85	203×326×85	203×326×85	203×326×85	203×326×85	203×326×85	203×326×85	246×500×120	246×500×120	246×500×120						
	Control box	mm	334×284×111	334×284×111	334×284×111	334×284×111	334×284×111	334×284×111	334×284×111	334×284×111	334×284×111	334×284×111						
Package dimension(W×D×H)	mm	539×461×247		539×461×247		539×461×247		539×461×247		759×645×180								
Net weight	kg	10.0		10.5		10.5		10.5		13.0								
Gross weight	kg	13.0		13.5		13.5		13.5		17.5								
Loading	40'GP	unit	990		990		990		990		702							
	40'HP	unit	1100		1100		1100		1100		756							

Model		GMV-N560U/C-T +GMV-N140U/C-T	GMV-N560U/C-T +GMV-N280U/C-T	GMV-N560U/C-T +GMV-N560U/C-T	GMV-N560U/C-T +GMV-N560U/C-T +GMV-N140U/C-T	GMV-N560U/C-T +GMV-N560U/C-T +GMV-N280U/C-T	GMV-N560U/C-T +GMV-N560U/C-T +GMV-N560U/C-T				
Defaulted capacity of ex-factory	Capacity	840+140	840+280	840+560	840+840	840+840+140	840+840+280	840+840+560			
	Cooling	kW	98.0	112.0	140.0	168.0	182.0	196.0			
	Heating	kW	110.5	126.0	157.5	189.0	204.5	220.5			
Power input	W	8+8		8+8		8+8+8		8+8+8			
Power supply	V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz									
Size of connection pipe	Air handling unit	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ22.20	Φ22.20	Φ22.20	Φ22.20
	Gas pipe	mm	Φ38.1	Φ38.1	Φ41.3	Φ41.3	Φ41.3	Φ44.5	Φ44.5	Φ44.5	Φ44.5
Connection method		Brazing Connection									
Outline dimension (W×D×H)	EVX box	mm	246×500×120 +203×326×85	246×500×120 +203×326×85	(246×500×120)×2 +203×326×85	(246×500×120)×2 +203×326×85	(246×500×120)×2 +203×326×85	(246×500×120)×3	(246×500×120)×3	(246×500×120)×3	(246×500×120)×3
	Control box	mm	(334×284×111)×2	(334×284×111)×2	(334×284×111)×2	(334×284×111)×2	(334×284×111)×3	(334×284×111)×3	(334×284×111)×3	(334×284×111)×3	(334×284×111)×3
Package dimension(W×D×H)	mm	759×645×180+ 539×461×247		759×645×180+ 539×461×247		(759×645×180)×2		(759×645×180)×2 +539×461×247		(759×645×180)×2 +539×461×247	
Net weight	kg	13.0+10.5		13.0+10.5		13.0+13.0		13.0+13.0+10.5		13.0+13.0+10.5	
Gross weight	kg	17.5+13.5		17.5+13.5		17.5+17.5+13.5		17.5+17.5+13.5		17.5+17.5+17.5	

## Fresh Air Processing Indoor Unit

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 <sup>1</sup>	kW	12.5	14.0	22.4	25.0	28.0	45.0			
	Heating <sup>2</sup>	kW	8.5	10.0	16.0	18.0	20.0	32.0			
	Heating <sup>3</sup>	kW	10.5	12.0	20.0	20.0	22.0	35.0			
Power supply	V/Ph/Hz	220-240V~ 50Hz & 208-230V~ 60Hz									
Power consumption <sup>4</sup>	W	200/350		200/350		400/760		520/860		520/860	
ESP <sup>5</sup>	Pa	150/50~200		150/50~200		200/50~300		200/50~300		200/50~300	
Airflow volume (Default/Range) <sup>6</sup>	m <sup>3</sup> /h	1200/1000~2000		1200/1000~2000							



# Control System



## Control System Lineup

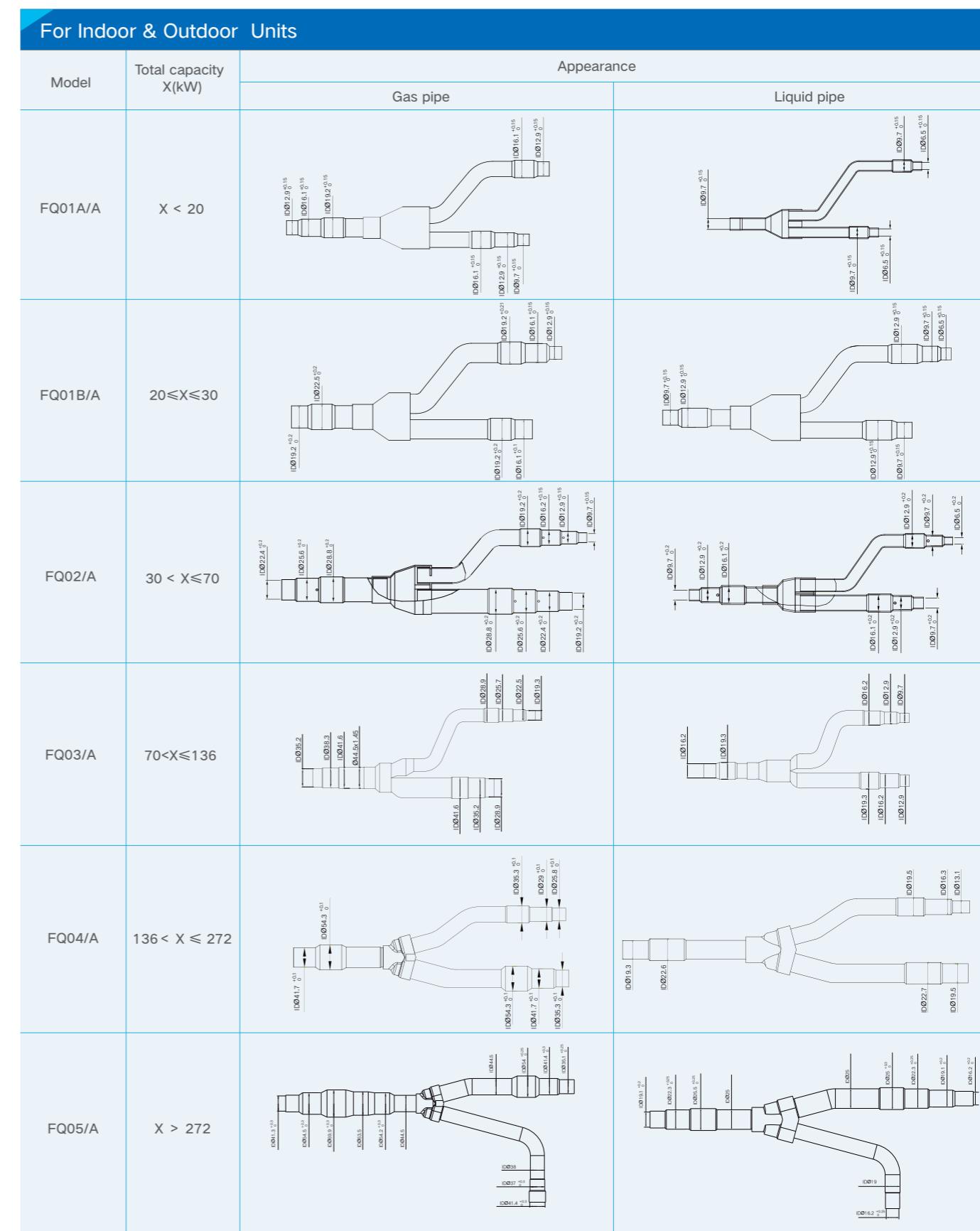
Controlling systems			Outdoor series		GMV6	GMV6 HR	GMV5 Mini	GMV5 Mini Star	GMV5 Slim	GMV5 Home
Long-distance monitor	Intelligent remote eudemon	ME30-24/DF(B)		○	○	○	○	○	○	○
		ME20-24/D1(T)		○	○	○	○	○	○	○
	Gateway of building protocol	ME30-24/E6(M)		○	○	○	○	○	○	○
		ME30-24/D1(BM)		○	○	○	○	○	○	○
		ME31-33/EH1(M)		○	○	○	○	○	○	○
		FE11-24/D4(B)		○	○	○	○	○	○	○
		ME11-24/D4(B)		○	○	○	○	○	○	○
	G-Cloud		ME31-00/C3		○	○	○	○	○	○
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	Cassette type	Floor standing type	Concealed floor standing type
Wired controller	Wireless controller	YAP1F		●	○	○	○	●	●	●	●	○
		YAP1F7		○	○	○	○	○	○	○	○	○
	Wired controller	XK46		○	●/○	●	○	○	○	○	○	●
		XE7A-24/H		○	●/○	○	○	○	○	○	○	○
		XE7A-24/HC		○	○	○	○	○	○	○	○	○
		XE73-24/HC		○	○	○	○	○	○	○	○	○
		XE70-33/H		○	○	○	○	○	○	○	○	○
		JS13		○	○	○	○	○	○	○	○	○
	Linkage Controller	LE60-24/H1		○	○	○	○	○	○	○	○	○
		CE54-24/F(C)		○	○	○	○	○	○	○	○	○
		CE52-24/F(C)		○	○	○	○	○	○	○	○	○
		CE58-00/EF(CM)		○	○	○	○	○	○	○	○	○
Debugger	DE43-00/EF(CM)		○	○	○	○	○	○	○	○	○	○

Note : ● means standard, ○ means optional.

XE73-24/HC is under development. Please confirm the final specifications with the sales personnel.

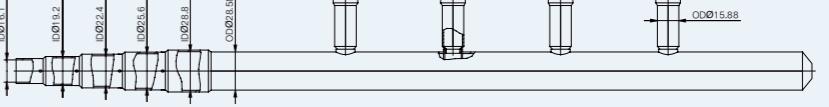
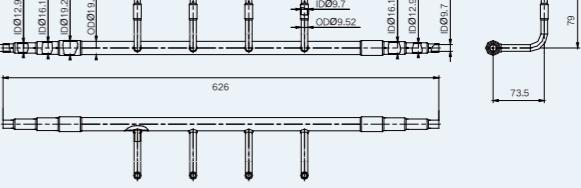
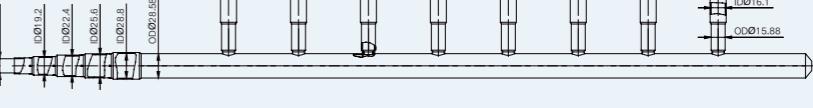
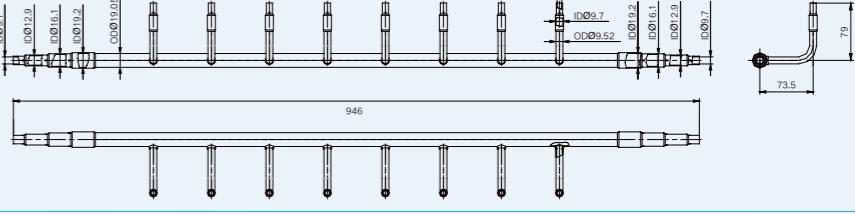
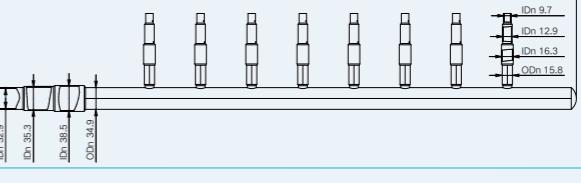
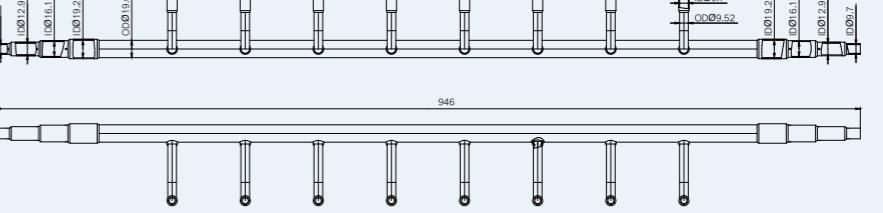
## Branching Joint (For GMV6 and GMV X units)



## For Outdoor Units

Model	Appearance	
	Gas pipe	Liquid pipe
ML01/A	<p>Gas pipe dimensions:</p> <ul style="list-style-type: none"> <li>ID Ø35.3 <math>\pm 0.3</math></li> <li>ID Ø25.8 <math>\pm 0.2</math></li> <li>ID Ø28.9 <math>\pm 0.2</math></li> <li>ID Ø25.8 <math>\pm 0.2</math></li> <li>ID Ø35.3 <math>\pm 0.3</math></li> </ul>	<p>Liquid pipe dimensions:</p> <ul style="list-style-type: none"> <li>ID Ø16.3 <math>\pm 0.2</math></li> <li>ID Ø12.9 <math>\pm 0.2</math></li> <li>ID Ø22.5 <math>\pm 0.2</math></li> <li>ID Ø19.3 <math>\pm 0.2</math></li> <li>ID Ø16.3 <math>\pm 0.2</math></li> </ul>
ML02/A	<p>Gas pipe dimensions:</p> <ul style="list-style-type: none"> <li>ID Ø35.2 <math>\pm 0.2</math></li> <li>ID Ø41.6 <math>\pm 0.3</math></li> <li>ID Ø54.3 <math>\pm 0.3</math></li> <li>ID Ø51.6 <math>\pm 0.2</math></li> <li>ID Ø44.8 <math>\pm 0.3</math></li> </ul>	<p>Liquid pipe dimensions:</p> <ul style="list-style-type: none"> <li>ID Ø16.1 <math>\pm 0.15</math></li> <li>ID Ø16.1 <math>\pm 0.15</math></li> <li>ID Ø25.6 <math>\pm 0.2</math></li> <li>ID Ø22.4 <math>\pm 0.2</math></li> <li>ID Ø16.1 <math>\pm 0.15</math></li> </ul>

## For Indoor Units

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)	Gas pipe(mm)	Liquid pipe(mm)	Model of manifold pipe
X≤40.0	≤Φ25.4	≤Φ12.70	FQ14/H1
X≤68.0	≤Φ28.6	≤Φ15.90	FQ18/H1
68.0 < X	≥Φ31.8	≥Φ19.05	FQ18/H2

## Branching Joint (For GMV6 HR units)

### For Outdoor Units and Mode Exchanger

Model	Total capacity of the downstream indoor units X(kW)	Appearance		
		High-pressure gas pipe	Low-pressure gas pipe	Liquid pipe
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			

## For Indoor & Mode Exchanger

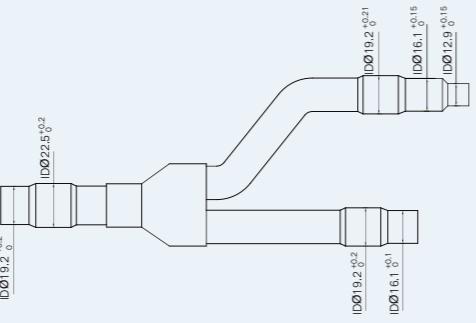
Model	Total capacity of the downstream indoor units X(Kw)	Appearance	
		Gas pipe	Liquid pipe
FQ01A/A	X≤16		
FQ01B/A	16<X≤28.0		

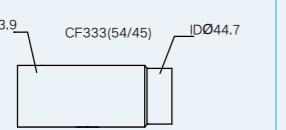
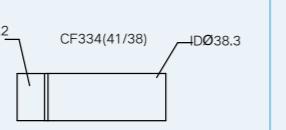
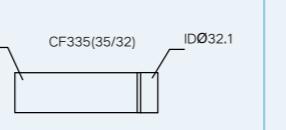
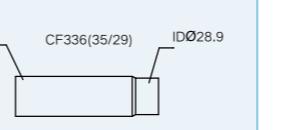
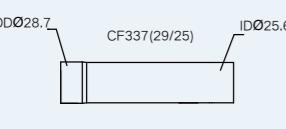
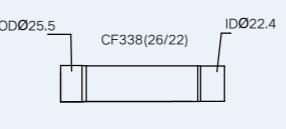
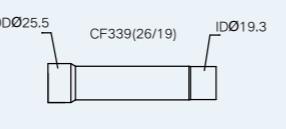
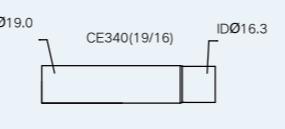
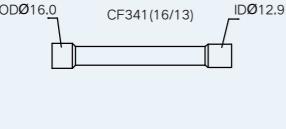
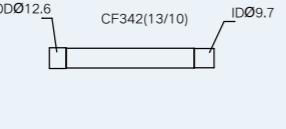
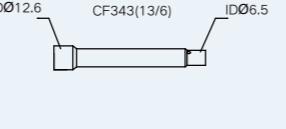
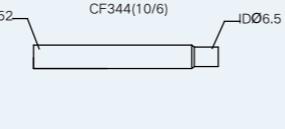
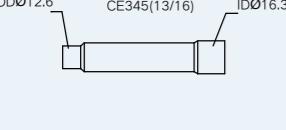
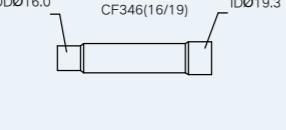
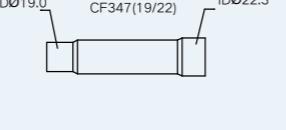
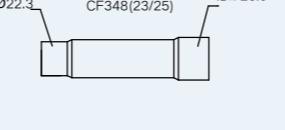
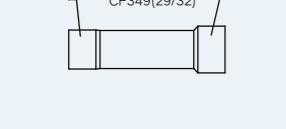
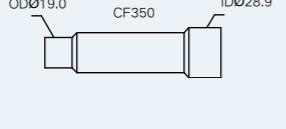
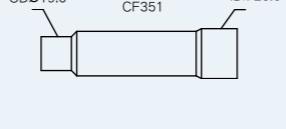
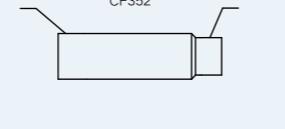
## For Outdoor Units

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

## For GMV6 HR Mode Exchanger and Hydro Box

Model	Capacity of the hydro box X(kW)	Appearance	
		Gas pipe	Liquid pipe
FQ01B/A	X=30		

Branching Joint ( For AHU KIT)	
Model	Appearance Liquid pipe
FQ02U/A	

Reducer/expander pipe dimensions							
							
							
							
							
							

Note: OD side connects the branch pipe; ID side connects the engineering pipe.

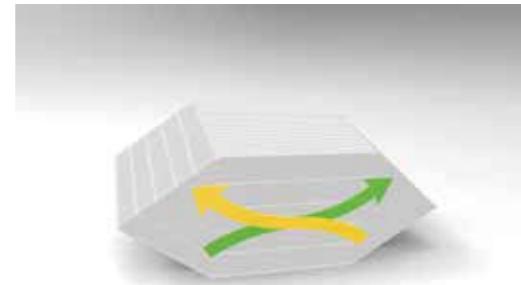
# Energy Recovery Ventilation(ERV)



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.

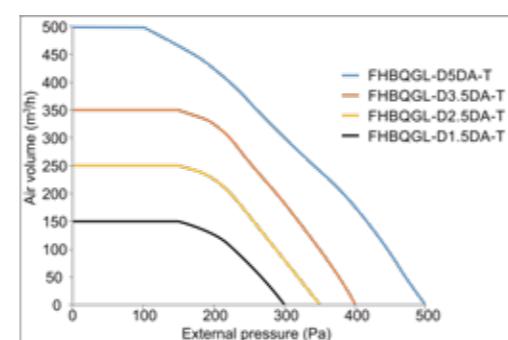
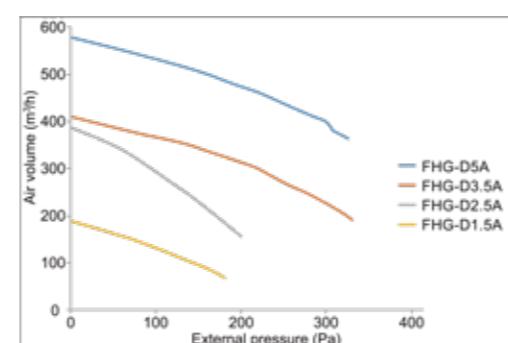
350 m <sup>3</sup> /h	High
300 m <sup>3</sup> /h	Medium high
250 m <sup>3</sup> /h	Medium
200 m <sup>3</sup> /h	Medium low
150 m <sup>3</sup> /h	Low

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

## Constant Fresh Air Volume

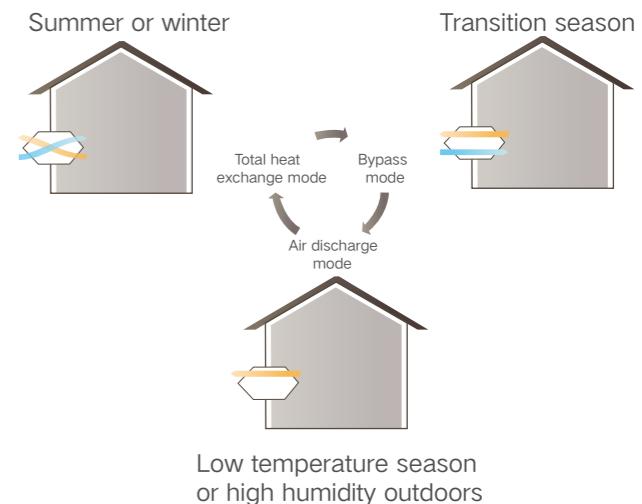
> System adopts DC motor and constant air volume control to realize air provision that will not be attenuated under certain range of static pressure. It can maintain sufficient supply of fresh air during operation, providing users with super comfortable experience.

> 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.

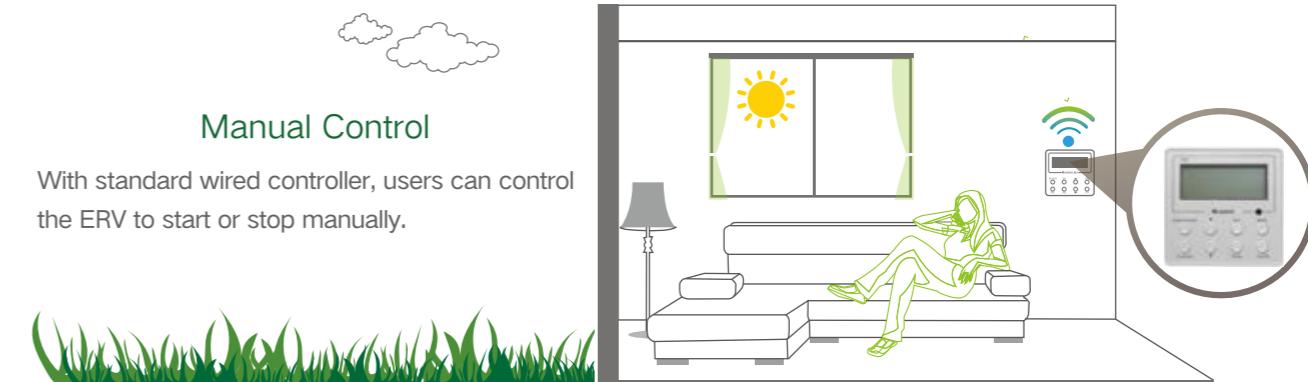


## Intelligent Control

> 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.

### Manual Control

With standard wired controller, users can control the ERV to start or stop manually.



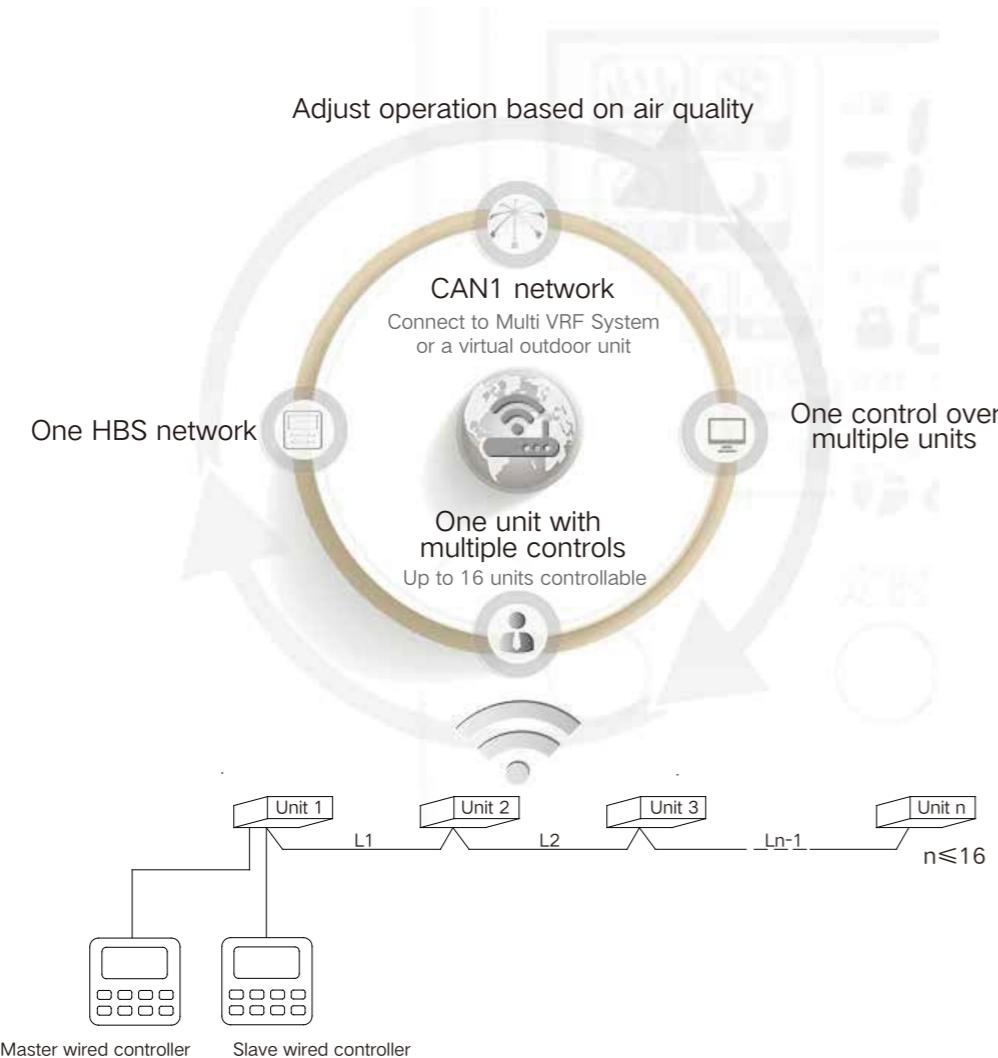
### Linked Control

By connecting the ERV system with GMV5 DC Inverter Multi VRF system through communicationline, users can set linked control.



## “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	1160×700×220	1160×700×220	1200×785×240
	Package	1468×873×285	1468×873×285	1528×973×305
Net weight/Gross weight	kg	50.0/58.5	50.0/58.5	60.0/70.5
Loading quantity	40GP/40HQ	unit	172/195	121/140
				117/131

## Control System Lineup

Product series		
Control system	Wired controller	Centralized controller
	XK112	CE52-24/F(C)
ERV		

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 used.



- » 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.

## Specifications

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





# AIR TO WATER

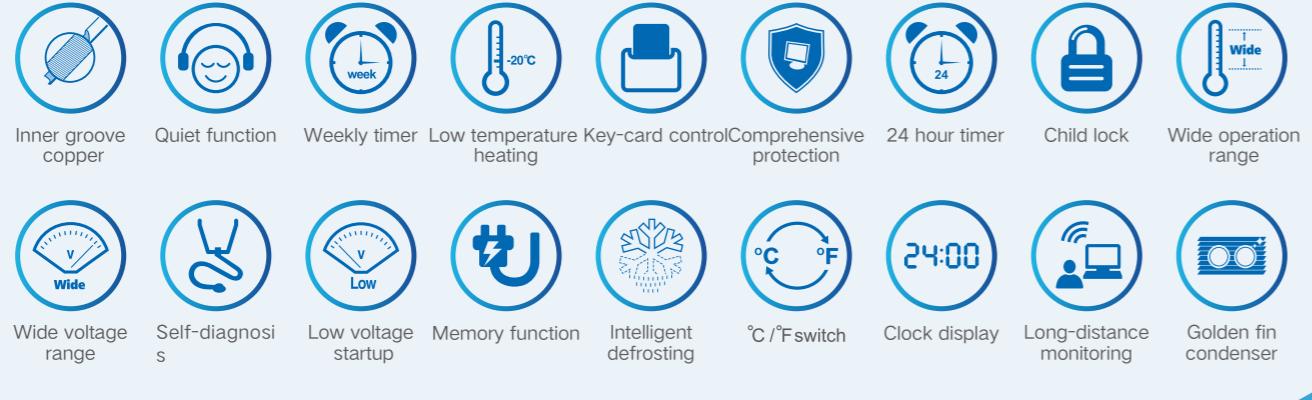
---

Versati IV Monobloc  
Versati III (Split Type)  
Versati III ( All In One)  
Versati III (Monobloc Type)  
Split Type Water Heater  
Integral Type Water Heater  
Heat Pump Pool Heater

# Versati IV Monobloc

R32

VERSATI, a DC inverter multifunctional air-to-water heat pump with advanced heat pump technology, absorbs natural heat from the ambient air and then releases heat to the room or water. It not only satisfies room heating requirements but also supplies domestic hot water. Besides, VERSATI can also provide you with cool air in hot summer.



- » It adopts a two-stage compressor technology to improve the heating capacity and energy efficiency under low temperature, with A7W35 COP up to 5.4, and average climate SCOP 35°C, A+++.
- » It can be combined with a fan coil unit, heat radiator, floor heating and a hot water tank to provide five working modes including cooling, heating and water heating.
- » Versati is equipped with a 5-inch high-definition LCD touch screen, which provides 20 languages to suit users of different countries and regions.
- » Users can set the relationship between ambient temperature and room temperature. The targeted room temperature will change accordingly with room load and ambient temperature change so as to bring comfort to users and achieve energy saving.
- » Users can set the quiet time, for example, all day long or night time only, to improve the level of comfort.



Item	Water side	Heat source/User side
	Leaving water temperature(°C)	Dry bulb temperature(°C)
Cooling	5~25	-15~48
Heating	20~65	-25~35
Water heating	40~80	-25~45

Note: When operating conditions are out of the range listed above, please contact Gree.

Model		GRS-CQ4.0Pd/NhG3-E	GRS-CQ6.0Pd/NhG3-E	GRS-CQ8.0Pd/NhG3-E	GRS-CQ10Pd/NhG3-E	GRS-CQ12Pd/NhG3-E	GRS-CQ14Pd/NhG3-E	GRS-CQ16Pd/NhG3-E	
Capacity (Floor)	Cooling	kW	5.00	6.50	8.30	10.20	12.00	13.70	15.50
	Heating	kW	5.00	6.00	8.20	10.20	12.00	14.20	15.70
Power input(Floor)	Cooling	kW	0.96	1.28	1.56	2.00	2.45	3.00	3.60
	Heating	kW	0.93	1.11	1.54	2.02	2.43	2.99	3.45
EER(Floor Cooling)	W/W		5.20	5.10	5.32	5.10	4.90	4.57	4.31
COP(Floor Heating)	W/W		5.40	5.40	5.32	5.05	4.94	4.75	4.55
Capacity (FanCoil)	Cooling	kW	4.90	5.70	7.40	9.00	11.10	13.30	13.80
	Heating	kW	4.90	6.80	8.30	10.20	13.00	14.20	16.20
Power input (FanCoil)	Cooling	kW	1.40	1.76	2.00	2.65	3.58	4.75	5.09
	Heating	kW	1.17	1.66	1.90	2.50	3.45	3.84	4.49
EER(Fan Coil)	W/W		3.50	3.25	3.70	3.40	3.10	2.80	2.71
COP(Fan Coil or Radiator)	W/W		4.20	4.10	4.36	4.08	3.77	3.70	3.61
Refrigerant charge volume	kg		0.95	0.95	1.60	1.60	2.20	2.20	2.20
Electric heater	Operation	-	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
	Steps	-	2	2	2	2	2	2	2
	Capacity	kW	3	3	6	6	6	6	6
	Combination	kW	1.5+1.5	1.5+1.5	3+3	3+3	3+3	3+3	3+3
	Power input	V/Ph/Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
Sanitary water temperature	°C	40~80	40~80	40~80	40~80	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	51	52	54	54	55	56	56
	Heating	dB(A)	53	53	54	56	58	59	59
	Outline (W×D×H)	mm	1150	1150	1206	1206	1206	1206	1206
	Packaged (W×L×H)	mm	365	365	445	445	445	445	445
		mm	735	735	878	878	878	878	878
Dimensions	Packaged (W×L×H)	mm	503	503	553	553	553	553	553
		mm	1258	1258	1338	1338	1338	1338	1338
		mm	900	900	1020	1020	1020	1020	1020
	Net weight	kg	95.0	95.0	127.0	127.0	142.0	142.0	142.0
	Gross weight	kg	112.0	112.0	146.0	146.0	161.0	161.0	161.0
Loading quantity	20' Container	unit	38	38	32	32	32	32	32
	40' Container	unit	82	82	66	66	66	66	66
	40' High Cube Container	unit	82	82	66	66	66	66	66

Model		GRS-CQ8.0Pd/NhG3-M	GRS-CQ10Pd/NhG3-M	GRS-CQ12Pd/NhG3-M	GRS-CQ14Pd/NhG3-M	GRS-CQ16Pd/NhG3-M	
Capacity (Floor)	Cooling	kW	8.30	10.20	12.00	13.90	15.40
	Heating	kW	8.20	10.20	12.00	14.20	15.70
Power input(Floor)	Cooling	kW	1.64	2.13	2.61	3.32	4.05
	Heating	kW	1.62	2.06	2.49	3.09	3.57
EER(Floor Cooling)	W/W		5.06	4.79	4.60	4.19	3.80
COP(Floor Heating)	W/W		5.06	4.95	4.82	4.60	4.40
Capacity (FanCoil)	Cooling	kW	7.10	9.10	11.10	13.30	13.80
	Heating	kW	8.20	10.20	13.00	14.20	16.20
Power input (FanCoil)	Cooling	kW	2.10	2.80	3.58	4.75	5.09
	Heating	kW	2.05	2.60	3.45	3.84	4.49
EER(Fan Coil)	W/W		3.38	3.25	3.10	2.80	2.71
COP(Fan Coil or Radiator)	W/W		4.00	3.92	3.77	3.70	3.61
Refrigerant charge volume	kg		1.60	1.60	2.20	2.20	2.20
Electric heater	Operation	-	Field supply	Field supply	Automatic	Automatic	Automatic
	Steps	-	2	2	2	2	2
	Capacity	kW	6	6	6	6	6
	Combination	kW	3+3	3+3	3+3	3+3	3+3
	Power input	V/Ph/Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz
Sanitary water temperature	°C	40~80	40~80	40~80	40~80	40~80	40~80
Dimensions	Outline (W×D×H)	mm	1206	1206	1206	1206	1206
	Packaged (W×L×H)	mm	445	445	445	445	445
		mm	878	878	878	878	878
		mm	553	553	553	553	553
		mm	1338	1338	1338	1338	1338
Net weight	kg	141.0	141.0	148.0	148.0	148.0	148.0
Gross weight	kg	159.0	159.0	166.0	166.0	166.0	166.0
Loading quantity	20' Container	unit	32	32	32	32	32
	40' Container	unit	66	66	66	66	66
	40' High Cube Container	unit	66	66	66	66	66

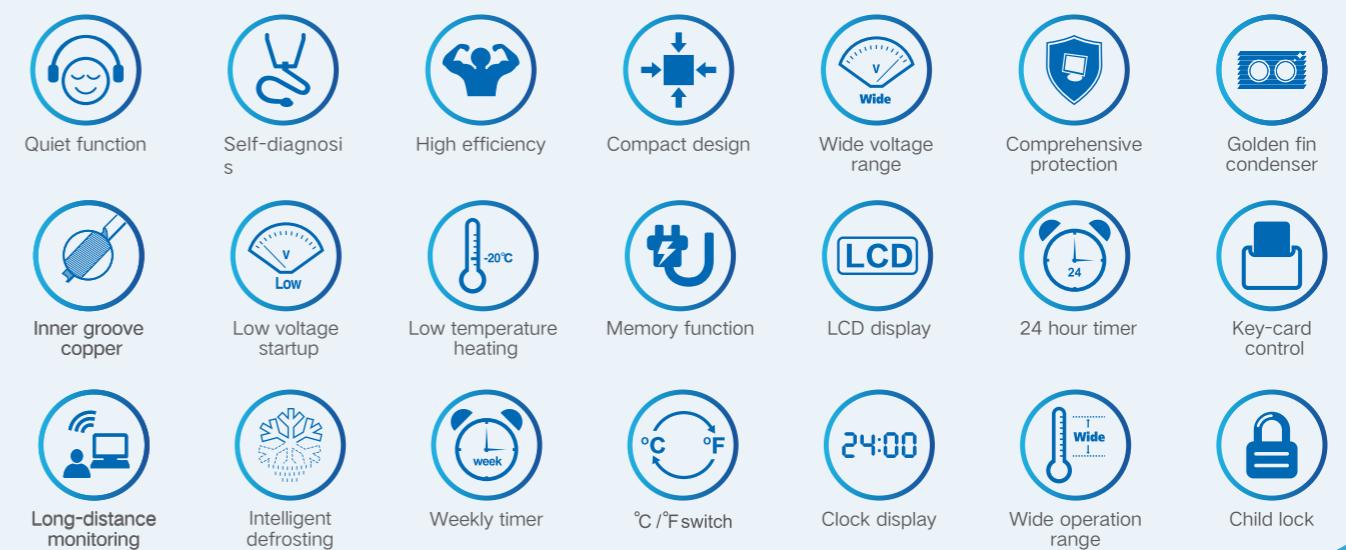
Note: When operating conditions are out of the range listed above, please contact Gree.

Model		GRS-CQ4.0Pd/ NhG4-E	GRS-CQ6.0Pd/ NhG4-E	GRS-CQ8.0Pd/ NhG4-E	GRS-CQ10Pd/ NhG4-E	GRS-CQ12Pd/ NhG4-E	GRS-CQ14Pd/ NhG4-E	GRS-CQ16Pd/ NhG4-E
Capacity (Floor)	Cooling	kW	5.00	6.50	8.30	10.20	12.00	13.70
	Heating	kW	5.00	6.00	8.20	10.20	12.00	15.50
Power input(Floor)	Cooling	kW	0.96	1.28	1.56	2.00	2.45	3.00
	Heating	kW	0.93	1.11	1.54	2.02	2.43	3.60
EER(Floor Cooling)	W/W		5.20	5.10	5.32	5.10	4.90	4.57
COP(Floor Heating)	W/W		5.40	5.40	5.32	5.05	4.94	4.75
Capacity (FanCoil)	Cooling	kW	4.90	5.70	7.40	9.00	11.10	13.30
	Heating	kW	4.90	6.80	8.30	10.20	13.00	16.20
Power input (FanCoil)	Cooling	kW	1.40	1.76	2.00	2.65	3.58	4.75
	Heating	kW	1.17	1.66	1.90	2.50	3.45	5.09
EER(Fan Coil)	W/W		3.50	3.25	3.70	3.40	3.10	2.80
COP(Fan Coil or Radiator)	W/W		4.20	4.10	4.36	4.08	3.77	3.70
Refrigerant charge volume	kg		0.95	0.95	1.60	1.60	2.20	2.20
Sanitary water temperature	°C		40~80	40~80	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	51	52	52	54	54	56
	Heating	dB(A)	53	53	54	56	56	59
Dimensions	Outline (W × D × H)		mm	1150	1150	1206	1206	1206
	mm		mm	365	365	445	445	445
	mm		mm	735	735	878	878	878
	mm		mm	503	503	553	553	553
	Packaged (W × L × H)		mm	1258	1258	1338	1338	1338
	mm		mm	900	900	1020	1020	1020
Net weight	kg		90	90	120.0	120.0	138.0	138.0
Gross weight	kg		106	106	139.0	139.0	156.0	156.0
Loading quantity	20' Container	unit	38	38	32	32	32	32
	40' Container	unit	82	82	66	66	66	66
	40' High Cube Container	unit	82	82	66	66	66	66

Model		GRS-CQ8.0Pd/NhG4-M	GRS-CQ10Pd/NhG4-M	GRS-CQ12Pd/NhG4-M	GRS-CQ14Pd/NhG4-M	GRS-CQ16Pd/NhG4-M
Capacity (Floor)	Cooling	kW	8.30	10.20	12.00	13.90
	Heating	kW	8.20	10.20	12.00	15.40
Power input(Floor)	Cooling	kW	1.64	2.13	2.61	3.32
	Heating	kW	1.62	2.06	2.49	4.05
EER(Floor Cooling)	W/W		5.06	4.79	4.60	4.19
COP(Floor Heating)	W/W		5.06	4.95	4.82	4.40
Capacity (FanCoil)	Cooling	kW	7.10	9.10	11.10	13.30
	Heating	kW	8.20	10.20	13.00	16.20
Power input (FanCoil)	Cooling	kW	2.10	2.80	3.58	4.75
	Heating	kW	2.05	2.60	3.45	5.09
EER(Fan Coil)	W/W		3.38	3.25	3.10	2.80
COP(Fan Coil or Radiator)	W/W		4.00	3.92	3.77	3.70
Refrigerant charge volume	kg		1.60	1.60	2.20	2.20
Sanitary water temperature	°C		40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	52	54	54	55
	Heating	dB(A)	54	56	56	58
Dimensions	Outline (W × D × H)		mm	1206	1206	1206
	mm		mm	445	445	445
	mm		mm	878	878	878
	mm		mm	553	553	553
	Packaged (W × L × H)		mm	1338	1338	1338
	mm		mm	1020	1020	1020
Net weight	kg		134.0	134.0	144.0	144.0
Gross weight	kg		152.0	152.0	162.0	162.0
Loading quantity	20' Container	unit	32	32	32	32
	40' Container	unit	66	66	66	66
	40' High Cube Container	unit	66	66	66	66

## Versati III (Split Type)

It's a kind of integrated DC inverter unit that comprises cooling, heating and water heating functions, with up to 5.0 energy efficiency. It adopts R32 refrigerant and two-stage compressor. For heating, ambient temperature range is -25~35°C, while the leaving water temperature range is 25~60°C.



- » Floor debugging function;
- » Integrated structure, simple installation, less installation cost; R32 refrigerant, low GWP;
- » Adopt two-stage compressor to widen the ambient temperature range for heating;
- » Leaving water temperature up to 60°C, applicable to various heating terminals.



Item	Water side	Heat source/User side
	Leaving water temperature(°C)	Dry bulb temperature(°C)
Cooling	7~25	10~48
Heating	20~60	-25~35
Water heating	40~80(Water tank)	-25~45

Note: When operating conditions are out of the range listed above, please contact Gree.

## Specifications

Model		GRS-CQ4.0Pd /NhH2-E(O)	GRS-CQ6.0Pd /NhH2-E(O)	GRS-CQ8.0Pd /NhH2-E(O)	GRS-CQ10Pd /NhH2-E(O)	GRS-CQ12Pd /NhH-E(O)	GRS-CQ14Pd /NhH-E(O)	GRS-CQ16Pd /NhH-E(O)
Power supply	V/Ph/Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
Capacity <sup>*1</sup>	Cooling <sup>*3</sup>	kW	3.90	5.80	7.70	9.35	11.00	12.60
	Heating <sup>*4</sup>	kW	4.00	6.00	8.00	10.00	12.00	14.00
Power input <sup>*1</sup>	Cooling <sup>*3</sup>	kW	0.68	1.13	1.72	2.36	2.50	3.41
	Heating <sup>*4</sup>	kW	0.77	1.20	1.61	2.10	2.40	2.98
EER/COP <sup>*1</sup>	W/W	5.74/5.20	5.15/5.00	4.48/4.97	3.96/4.76	4.40/5.00	3.70/4.70	3.61/4.50
Capacity <sup>*2</sup>	Cooling <sup>*5</sup>	kW	3.40	4.00	7.15	7.60	10.59	11.07
	Heating <sup>*6</sup>	kW	4.10	5.80	8.00	9.85	12.40	14.48
Power input <sup>*2</sup>	Cooling <sup>*5</sup>	kW	0.92	1.16	2.49	2.77	3.79	4.18
	Heating <sup>*6</sup>	kW	1.04	1.52	2.07	2.69	3.29	3.93
EER/COP <sup>*2</sup>	W/W	3.69/3.94	3.45/3.82	2.87/3.86	2.74/3.67	2.79/3.77	2.65/3.68	2.56/3.62
Refrigerant charge volume	kg	1.10	1.10	1.84	1.84	1.84	1.84	1.84
Sanitary water temperature	°C	40~80	40~80	40~80	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	52	52	55	55	57	58
	Heating	dB(A)	52	52	55	55	57	58
Connecting pipe	Gas	inch(mm)	1/2"(12)	1/2"(12)	1/2"(12)	5/8"(16)	5/8"(16)	5/8"(16)
	Liquid	inch(mm)	1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)
Dimensions (W × D × H)	Outline	mm	975 × 396 × 702	975 × 396 × 702	982 × 427 × 787	982 × 427 × 787	940 × 460 × 820	940 × 460 × 820
	Packaged	mm	1029 × 458 × 845	1029 × 458 × 845	1097 × 478 × 937	1097 × 478 × 937	1103 × 573 × 973	1103 × 573 × 973
Net weight/Gross weight	kg	55/63	55/63	82/92	82/92	104/114	104/114	104/114
Loading quantity	40'GP	unit	114	114	96	96	84	84
	40'HQ	unit	171	171	96	96	84	84

Model		GRS-CQ4.0Pd/NhH2-E(I)	GRS-CQ6.0Pd/NhH2-E(I)	GRS-CQ8.0Pd/NhH2-E(I)	GRS-CQ10Pd/NhH2-E(I)
Power supply	V/Ph/Hz	230V~ 50	230V~ 50	230V~ 50	230V~ 50
Leaving Water Temperature	Nominal input	kW	3.1	3.1	6.1
	Cooling(fan coil)	°C	7	7	7
	Cooling(floor)	°C	18	18	18
	Heating(fan coil)	°C	45	45	45
Pump	Heating(floor)	°C	35	35	35
	Type	-	Water-cooled	Water-cooled	Water-cooled
	Nr.of speed	-	variable-speed	variable-speed	variable-speed
	Power input	W	2-75	2-75	2-75
Electric heater	Water flow limit	LPM	12	12	12
	Operation	-	Automatic	Automatic	Automatic
	Steps	-	2	2	2
	Capacity	kW	3	3	6
	Combination	-	1.5+1.5	1.5+1.5	3+3
Sound pressure level	Power input	kW	3	3	6
	dB(A)	29	29	29	29
Dimensions(W × D × H)	Gas	Inch(mm)	1/2"(12)	1/2"(12)	1/2"(12)
	Liquid	Inch(mm)	1/4"(6)	1/4"(6)	1/4"(6)
Net weight/Gross weight	Outline	mm	860 × 318 × 460	860 × 318 × 460	860 × 318 × 460
	Packaged	mm	1133 × 390 × 568	1133 × 390 × 568	1133 × 390 × 568
Loading quantity	kg	58/67	58/67	58/67	58/67
	40'GP	unit	240	240	240
	40'HQ	unit	240	240	240

Note:

1.Capacity and power input are based on the following conditions:

- **Cooling conditions.**

Outdoor air temperature 35°C DB/-WB.  
Entering water temperature 23°C.  
Leaving water temperature 18°C

- **Heating conditions.**

Outdoor air temperature 7°C DB/6°C WB.  
Entering water temperature 30°C.  
Leaving water temperature 35°C  
Standing piping length 5m.

3. For floor cooling.

4. For floor heating.

5. For fan coil unit.

6. For fan coil or radiator.

2.Capacity and power input are based on the following conditions:

- **Cooling conditions.**

Outdoor air temperature 35°C DB/-WB.  
Entering water temperature 12°C.  
Leaving water temperature 7°C

- **Heating conditions.**

Outdoor air temperature 7°C DB/6°C WB.  
Entering water temperature 40°C.  
Leaving water temperature 45°C  
Standing piping length 5m.

Model		GRS-CQ12Pd /NhH-E(I)	GRS-CQ14Pd /NhH-E(I)	GRS-CQ16Pd /NhH-E(I)
Power supply	V/Ph/Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
Leaving water temperature	Nominal input	kW	6.1	6.1
	Cooling <sup>*1</sup>	°C	18	18
	Cooling <sup>*2</sup>	°C	7	7
	Heating <sup>*1</sup>	°C	35	35
Pump	Heating <sup>*2</sup>	°C	45	45
	Type	-	Water-cooled	Water-cooled
	Nr.of speed	-	variable-speed	variable-speed
	Power input	W	3-87	3-87
Electric heater	Water flow limit	LPM	12	12
	Operation	-	Automatic	Automatic
	Steps	-	2	2
	Capacity	kW	6	6
	Combination	kW	3+3	3+3
Sound pressure level	Power input	V/Ph/Hz	230V~ 50Hz	230V~ 50Hz
	dB(A)	29	29	29
Dimensions	Gas	Inch(mm)	5/8"(16)	5/8"(16)
	Liquid	Inch(mm)	1/4"(6)	1/4"(6)
Outline	Outline	mm	860 × 460 × 318	860 × 460 × 318
	Packaged	mm	1133 × 568 × 390	1133 × 568 × 390
Net weight/Gross weight	kg	58/67	58/67	58/67
	40'GP	unit	240	240
Loading quantity	40'HQ	unit	240	240

Note:

1.Capacity and power input are based on the following conditions:

- **Cooling conditions.**

Outdoor air temperature 35°C DB/-WB.  
Entering water temperature 23°C.  
Leaving water temperature 18°C

- **Heating conditions.**

Outdoor air temperature 7°C DB/6°C WB.  
Entering water temperature 30°C.  
Leaving water temperature 35°C

2.Capacity and power input are based on the following conditions:

- **Cooling conditions.**

Outdoor air temperature 35°C DB/-WB.  
Entering water temperature 12°C.  
Leaving water temperature 7°C

- **Heating conditions.**

Outdoor air temperature 7°C DB/6°C WB.  
Entering water temperature 40°C.  
Leaving water temperature 45°C  
Standing piping length 5m.

## VersatiIII( All in One)

**INVERTER** **R32**

Model		GRS-CQ8Pd/NhH-M(O)	GRS-CQ10Pd/NhH-M(O)	GRS-CQ12Pd/NhH-M(O)	GRS-CQ14Pd/NhH-M(O)	GRS-CQ16Pd/NhH-M(O)
Power supply	V/Ph/Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz
Capacity <sup>*1</sup>	Cooling <sup>*3</sup> kW	8.50	10.00	11.00	12.60	13.00
	Heating <sup>*4</sup> kW	8.00	10.00	12.00	14.00	15.50
Power input <sup>*1</sup>	Cooling <sup>*3</sup> kW	1.74	2.33	2.50	3.41	3.60
	Heating <sup>*4</sup> kW	1.63	2.15	2.40	2.98	3.44
EER/COP <sup>*1</sup>	W/W	4.89/4.91	4.29/4.65	4.40/5.00	3.70/4.70	3.61/4.51
Capacity <sup>*2</sup>	Cooling <sup>*5</sup> kW	7.60	8.20	10.65	11.24	11.52
	Heating <sup>*6</sup> kW	8.00	10.20	12.29	14.44	16.13
Power input <sup>*2</sup>	Cooling <sup>*5</sup> kW	2.48	2.61	3.74	4.13	4.38
	Heating <sup>*6</sup> kW	1.92	2.55	3.09	3.63	4.16
EER/COP <sup>*2</sup>	W/W	3.07/4.17	3.14/4.00	2.85/3.98	2.72/3.98	2.63/3.88
Refrigerant charge volume	kg	1.84	1.84	1.84	1.84	1.84
Sanitary water temperature	°C	40~80	40~80	40~80	40~80	40~80
Sound pressure level	dB(A)	57	57	57	58	58
cooling						
heating						
Connecting pipe	Gas	inch(mm)	1/2" (12)	1/2" (12)	5/8" (16)	5/8" (16)
	Liquid	inch(mm)	1/4" (6)	1/4" (6)	1/4" (6)	1/4" (6)
Dimensions	Outline	mm	982×427×787	982×427×787	940×460×820	940×460×820
(W × D × H)	Packaged	mm	1097×478×937	1097×478×937	1103×573×973	1103×573×973
Net weight/Gross weight	kg	88/89	88/98	110/121	110/121	110/121
Loading quantity	40'GP	set	96	96	84	84
	40'HQ	set	96	96	84	84

Model		GRS-CQ8.0Pd/NhH-M(I)	GRS-CQ10Pd/NhH-M(I)	GRS-CQ12Pd/NhH-M(I)	GRS-CQ14Pd/NhH-M(I)	GRS-CQ16Pd/NhH-M(I)
Power supply	V/Ph/Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz
Nominal input	kW	6.1	6.1	6.1	6.1	6.1
Leaving water temperature	Cooling <sup>*1</sup> °C	18	18	18	18	18
	Cooling <sup>*2</sup> °C	7	7	7	7	7
	Heating <sup>*1</sup> °C	35	35	35	35	35
	Heating <sup>*2</sup> °C	45	45	45	45	45
Pump	Type	-	Water-cooled	Water-cooled	Water-cooled	Water-cooled
	Nr. of speed	-	Variable-speed	Variable-speed	Variable-speed	Variable-speed
	Power input	W	2-75	2-75	3-87	3-87
	Water flow limit	LPM	12	12	12	12
Electric heater	Operation	-	Automatic	Automatic	Automatic	Automatic
	Steps	-	2	2	2	2
	Capacity	kW	6	6	6	6
	Combination	kW	3+3	3+3	3+3	3+3
	Power input	V/Ph/Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz
Sound pressure level	dB(A)	29	29	29	29	29
Connecting pipe	Gas	inch(mm)	1/2"(12)	1/2"(12)	5/8"(16)	5/8"(16)
	Liquid	inch(mm)	1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)
Dimensions	Outline	mm	860x318x460	860x318x460	860x318x460	860x318x460
(W × D × H)	Packaged	mm	1133x568x390	1133x568x390	1133x568x390	1133x568x390
Net weight/Gross weight	kg	60/69	60/69	60/69	60/69	60/69
Loading quantity	40'GP	set	240	240	240	240
	40'HQ	set	240	240	240	240

Note:  
1.Capacities and power inputs are based on the following conditions:

• Cooling conditions.

Outdoor air temperature 35°C DB-WB.

Entering water temperature 23°C.

Leaving water temperature 18°C

• Heating conditions.

Outdoor air temperature 7°C DB/6°C WB.

Entering water temperature 30°C.

Leaving water temperature 35°C

Standing piping length 5m.

3. For floor cooling.

4. For floor heating.

5. For fan coil unit.

6. For fan coil or radiator.

2.Capacities and power inputs are based on the following conditions:

• Cooling conditions.

Outdoor air temperature 35°C DB-WB.

Entering water temperature 12°C.

Leaving water temperature 7°C

• Heating conditions.

Outdoor air temperature 7°C DB/6°C WB.

Entering water temperature 40°C.

Leaving water temperature 45°C

Standing piping length 5m.

It's a kind of integrated DC inverter unit that comprises cooling, heating and water heating functions, and up to 5.0 energy efficiency. It adopts R32 refrigerant and two-stage compressor. For heating, ambient temperature range is -25~35°C, while the leaving water temperature range is 25~60°C .



» Floor debugging function;

» Integrated structure, simple installation, and less installation cost;

» R32 refrigerant, low GWP;

» Adopt two-stage compressor to widen the ambient temperature range for heating;

» Leaving water temperature up to 60°C, applicable to various heating terminals.



Item	Water side	Heat source/User side
	Leaving water temperature(°C)	Dry bulb temperature (°C)
Cooling	7~25	10~48
Heating	20~60	-25~35
Water heating	40~80	-25~45

Note:

\*1:When operating conditions are out of the range listed above, please contact Gree.

## Specifications

### ● Outdoor Unit

Model		GRS-CQ4.0Pd/NhH-E(O)	GRS-CQ6.0Pd/NhH-E(O)	GRS-CQ8.0Pd/NhH-E(O)	GRS-CQ10Pd/NhH-E(O)
Power supply	V/Ph/Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
Capacity <sup>*1</sup>	Cooling <sup>*3</sup>	kW	3.80	5.80	7.00
	Heating <sup>*4</sup>	kW	4.00	6.00	8.00
Power input <sup>*1</sup>	Cooling <sup>*3</sup>	kW	0.82	1.32	1.75
	Heating <sup>*4</sup>	kW	0.78	1.20	1.70
EER/COP <sup>*1</sup>	W/W	4.63/5.13	4.40/5.00	4.00/4.71	3.79/4.59
Capacity <sup>*2</sup>	Cooling <sup>*5</sup>	kW	3.15	4.09	5.30
	Heating <sup>*6</sup>	kW	4.00	5.90	8.00
Power input <sup>*2</sup>	Cooling <sup>*5</sup>	kW	0.92	1.28	1.73
	Heating <sup>*6</sup>	kW	1.02	1.51	2.14
EER/COP <sup>*2</sup>	W/W	3.42/3.92	3.20/3.91	3.06/3.74	2.86/3.60
Refrigerant charge volume	kg	1.00	1.00	1.60	1.60
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	55	55	57
	Heating	dB(A)	55	55	57
Connecting pipe	Gas	inch(mm)	1/2"(12)	1/2"(12)	1/2"(12)
	Liquid	inch(mm)	1/4"(6)	1/4"(6)	1/4"(6)
Dimensions (W × D × H)	Outline	mm	975 × 396 × 702	975 × 396 × 702	982 × 427 × 787
	Packaged	mm	1029 × 458 × 845	1029 × 458 × 845	1097 × 478 × 937
Net weight/Gross weight	kg	55/63	55/63	82/92	82/92
Loading quantity	40'GP	unit	114	114	96
	40'HQ	unit	171	171	96

Model		GRS-CQ12Pd/NhH-E(O)	GRS-CQ14Pd/NhH-E(O)	GRS-CQ16Pd/NhH-E(O)	GRS-CQ8.0Pd/NhH-M(O)
Power supply	V/Ph/Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	400V 3N~ 50Hz
Capacity <sup>*1</sup>	Cooling <sup>*3</sup>	kW	11.00	12.60	13.00
	Heating <sup>*4</sup>	kW	12.00	14.00	15.50
Power input <sup>*1</sup>	Cooling <sup>*3</sup>	kW	2.50	3.41	3.60
	Heating <sup>*4</sup>	kW	2.40	2.98	3.44
EER/COP <sup>*1</sup>	W/W	4.40/5.00	3.70/4.70	3.61/4.50	4.89/4.91
Capacity <sup>*2</sup>	Cooling <sup>*5</sup>	kW	10.59	11.07	11.51
	Heating <sup>*6</sup>	kW	12.40	14.48	16.09
Power input <sup>*2</sup>	Cooling <sup>*5</sup>	kW	3.79	4.18	4.49
	Heating <sup>*6</sup>	kW	3.29	3.93	4.44
EER/COP <sup>*2</sup>	W/W	2.79/3.77	2.65/3.68	2.56/3.62	3.07/4.17
Refrigerant charge volume	kg	1.84	1.84	1.84	1.84
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	57	58	58
	Heating	dB(A)	57	58	57
Connecting pipe	Gas	inch(mm)	5/8"(16)	5/8"(16)	5/8"(16)
	Liquid	inch(mm)	1/4"(6)	1/4"(6)	1/4"(6)
Dimensions (W × D × H)	Outline	mm	940 × 460 × 820	940 × 460 × 820	940 × 460 × 820
	Packaged	mm	1103 × 573 × 973	1103 × 573 × 973	1097 × 478 × 937
Net weight/Gross weight	kg	104/114	104/114	104/114	88/98
Loading quantity	40'GP	unit	84	84	96
	40'HQ	unit	84	84	96

Note:  
1. Capacity and power input are based on the following conditions:

- **Cooling conditions.**  
Outdoor air temperature 35°C DB/-WB.  
Entering water temperature 23°C.  
Leaving water temperature 18°C
- **Heating conditions.**  
Outdoor air temperature 7°C DB/6°C WB.  
Entering water temperature 30°C.  
Leaving water temperature 35°C  
Standing piping length 5m.

3. For floor cooling.
4. For floor heating.
5. For fan coil unit.
6. For fan coil or radiator.

2. Capacities and power inputs are based on the following conditions:

- **Cooling conditions.**  
Outdoor air temperature 35°C DB/-WB.  
Entering water temperature 12°C.  
Leaving water temperature 7°C
- **Heating conditions.**  
Outdoor air temperature 7°C DB/6°C WB.  
Entering water temperature 40°C.  
Leaving water temperature 45°C  
Standing piping length 5m.

3. For floor cooling.
4. For floor heating.
5. For fan coil unit.
6. For fan coil or radiator.

## Specifications

### ● Outdoor Unit

Model		GRS-CQ10Pd/NhH-M(O)	GRS-CQ12Pd/NhH-M(O)	GRS-CQ14Pd/NhH-M(O)	GRS-CQ16Pd/NhH-M(O)
Power supply	V/Ph/Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz
Capacity <sup>*1</sup>	Cooling <sup>*3</sup>	kW	10.00	11.00	12.60
	Heating <sup>*4</sup>	kW	10.00	12.00	14.00
Power input <sup>*1</sup>	Cooling <sup>*3</sup>	kW	2.33	2.50	3.41
	Heating <sup>*4</sup>	kW	2.15	2.40	2.98
EER/COP <sup>*1</sup>	W/W	4.29/4.65	4.40/5.00	3.70/4.70	3.61/4.51
Capacity <sup>*2</sup>	Cooling <sup>*5</sup>	kW	8.20	10.65	11.24
	Heating <sup>*6</sup>	kW	10.20	12.29	14.44
Power input <sup>*2</sup>	Cooling <sup>*5</sup>	kW	2.61	3.74	4.13
	Heating <sup>*6</sup>	kW	2.55	3.09	3.63
EER/COP <sup>*2</sup>	W/W	3.14/4	2.85/3.98	2.72/3.98	2.63/3.88
Refrigerant charge volume	kg	1.84	1.84	1.84	1.84
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	57	57	58
	Heating	dB(A)	57	57	58
Connecting pipe	Gas	inch(mm)	1/2"(12)	5/8"(16)	5/8"(16)
	Liquid	inch(mm)	1/4"(6)	1/4"(6)	1/4"(6)
Dimensions (W × D × H)	Outline	mm	982 × 427 × 787	940 × 460 × 820	940 × 460 × 820
	Packaged	mm	1097 × 478 × 937	1103 × 573 × 973	1103 × 573 × 973
Net weight/Gross weight	kg	88/98	110/121	110/121	110/121
Loading quantity	40'GP	unit	96	84	84
	40'HQ	unit	96	84	84

Model		GRS-CQ4.0Pd/NhH2-E(O)	GRS-CQ6.0Pd/NhH2-E(O)	GRS-CQ8.0Pd/NhH2-E(O)	GRS-CQ10Pd/NhH2-E(O)
Power supply	V/Ph/Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
Capacity <sup>*1</sup>	Cooling <sup>*3</sup>	kW	3.90	5.80	7.70
	Heating <sup>*4</sup>	kW	4.00	6.00	8.00
Power input <sup>*1</sup>	Cooling <sup>*3</sup>	kW	0.68	1.13	1.72
	Heating <sup>*4</sup>	kW	0.77	1.20	1.61
EER/COP <sup>*1</sup>	W/W	5.74/5.20	5.15/5.00	4.48/4.97	3.96/4.76
Capacity <sup>*2</sup>	Cooling <sup>*5</sup>	kW	3.40	4.00	7.15
	Heating <sup>*6</sup>	kW	4.10	5.80	8.00
Power input <sup>*2</sup>	Cooling <sup>*5</sup>	kW	0.92	1.16	2.49
	Heating <sup>*6</sup>	kW	1.04	1.52	2.07
EER/COP <sup>*2</sup>	W/W	3.69/3.94	3.45/3.82	2.87/3.86	2.74/3.67
Refrigerant charge volume	kg	1.10	1.10	1.84	1.84
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	52		

## ● Indoor Unit

Model		GRS-CQ4.0PdG /NhH-E(I)	GRS-CQ6.0PdG /NhH-E(I)	GRS-CQ8.0PdG /NhH-E(I)	GRS-CQ10PdG /NhH-E(I)	GRS-CQ12PdG /NhH-E(I)	GRS-CQ14PdG /NhH-E(I)	GRS-CQ16PdG /NhH-E(I)
Power supply	V/Ph/Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
Nominal input	W	3100	3100	6100	6100	6100	6100	6100
Leaving water temperature	Cooling *1 °C	18	18	18	18	18	18	18
	Cooling *2 °C	7	7	7	7	7	7	7
	Heating *1 °C	35	35	35	35	35	35	35
	Heating *2 °C	45	45	45	45	45	45	45
Pump	Type	- Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
	Nr. of speed	- Variable-speed	Variable-speed	Variable-speed	Variable-speed	Variable-speed	Variable-speed	Variable-speed
	Power input	W 2-75	2-75	2-75	3-87	3-87	3-87	3-87
	Water flow limit	LPM 12	12	12	12	12	12	12
Electric heater	Operation	- Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
	Steps	- 2	2	2	2	2	2	2
	Capacity	kW 3	3	6	6	6	6	6
	Combination	kW 1.5+1.5	1.5+1.5	3+3	3+3	3+3	3+3	3+3
	Power input	V/Ph/Hz 230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
Sound pressure level	dB(A) 29	29	29	29	29	29	29	29
Connecting pipe	Gas inch(mm) 1/2"(12)	1/2"(12)	1/2"(12)	1/2"(12)	5/8"(16)	5/8"(16)	5/8"(16)	5/8"(16)
	Liquid inch(mm) 1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)
Dimensions (W × D × H)	Outline mm 860 × 318 × 460	860 × 318 × 460	860 × 318 × 460	860 × 318 × 460	860 × 318 × 460	860 × 318 × 460	860 × 318 × 460	860 × 318 × 460
Packaged	mm 1133 × 568 × 390	1133 × 568 × 390	1133 × 568 × 390	1133 × 568 × 390	1133 × 568 × 390	1133 × 568 × 390	1133 × 568 × 390	1133 × 568 × 390
Net weight/Gross weight	kg 62/71	62/71	62/71	62/71	58/67	58/67	58/67	58/67
Loading quantity	40'GP unit 240	240	240	240	240	240	240	240
40'HQ	unit 240	240	240	240	240	240	240	240

Model		GRS-CQ4.0PdG/NhH2-E(I)	GRS-CQ6.0PdG/NhH2-E(I)	GRS-CQ8.0PdG/NhH2-E(I)	GRS-CQ10PdG/NhH2-E(I)
Power supply	V/Ph/Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
Nominal input	W	3100	3100	6100	6100
Leaving water temperature	Cooling *1 °C	18	18	18	18
	Cooling *2 °C	7	7	7	7
	Heating *1 °C	35	35	35	35
	Heating *2 °C	45	45	45	45
Pump	Type	- Water-cooled	Water-cooled	Water-cooled	Water-cooled
	Nr. of speed	- Variable-speed	Variable-speed	Variable-speed	Variable-speed
	Power input	W 2-75	2-75	2-75	2-75
	Water flow limit	LPM 12	12	12	12
Electric heater	Operation	- Automatic	Automatic	Automatic	Automatic
	Steps	- 2	2	2	2
	Capacity	kW 3	3	6	6
	Combination	kW 1.5+1.5	1.5+1.5	3+3	3+3
	Power input	V/Ph/Hz 230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
Sound pressure level	dB(A) 34	34	34	34	34
Connecting pipe	Gas inch(mm) 1/2"(12)	1/2"(12)	1/2"(12)	1/2"(12)	1/2"(12)
	Liquid inch(mm) 1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)
Dimensions (W × D × H)	Outline mm 600 × 650 × 1800	600 × 650 × 1800	600 × 650 × 1800	600 × 650 × 1800	600 × 650 × 1800
Packaged	mm 803 × 703 × 2050	803 × 703 × 2050	803 × 703 × 2050	803 × 703 × 2050	803 × 703 × 2050
Net weight/Gross weight	kg 195/230	195/230	195/230	195/230	195/230
Loading quantity	40'GP unit 46	46	46	46	46
40'HQ	unit 46	46	46	46	46

Note:  
1.Capacites and power inputs are based on the following conditions:

- **Cooling conditions.**  
Outdoor air temperature 35°C DB/-WB.  
Entering water temperature 23°C.  
Leaving water temperature 18°C

- **Heating conditions.**

- Outdoor air temperature 7°C DB/6°C WB.  
Entering water temperature 30°C.  
Leaving water temperature 35°C  
Standing piping length 5m.

2.Cpacites and power inputs are based on the following conditions:

- **Cooling conditions.**  
Outdoor air temperature 35°C DB/-WB.  
Entering water temperature 12°C.  
Leaving water temperature 7°C

- **Heating conditions.**

- Outdoor air temperature 7°C DB/6°C WB.  
Entering water temperature 40°C.  
Leaving water temperature 45°C  
Standing piping length 5m.

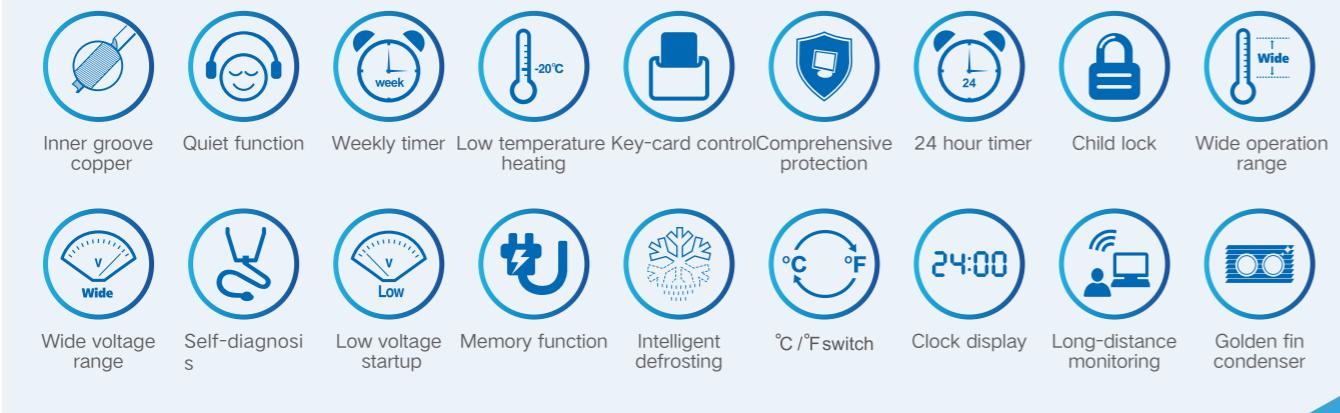
## ● Indoor Unit

Model		GRS-CQ8.0PdG/NhH2-M(I)	GRS-CQ10PdG/NhH2-M(I)	GRS-CQ12PdG/NhH2-M(I)
Power supply	V/Ph/Hz	400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz
Nominal input	W	6100	6100	6100
Leaving water temperature	Cooling *1 °C	18	18	18
	Cooling *2 °C	7	7	7
	Heating *1 °C	35	35	35
	Heating *2 °C	45	45	45
Pump	Type	- Water-cooled	Water-cooled	Water-cooled
	Nr. of speed	- Variable-speed	Variable-speed	Variable-speed
	Power input	W 2-75	2-75	2-75
	Water flow limit	LPM 12	12	12
Electric heater	Operation	- Automatic	Automatic	Automatic
	Steps	- 2	2	2
	Capacity	kW 6	6	6
	Combination	kW 3+3	3+3	3+3
	Power input	V/Ph/Hz 400V 3N~ 50Hz	400V 3N~ 50Hz	400V 3N~ 50Hz
Sound pressure level	dB(A) 34	34	34	34
Connecting pipe	Gas inch(mm) 5/8"(16)	5/8"(16)	5/8"(16)	5/8"(16)
	Liquid inch(mm) 1/4"(6)	1/4"(6)	1/4"(6)	1/4"(6)
Dimensions (W × D × H)	Outline mm 600 × 650 × 1800	600 × 650 × 1800	600 × 650 × 1800	600 × 650 × 1800
Packaged	mm 803 × 703 × 2050	803 × 703 × 2050	803 × 703 × 2050	803 × 703 × 2050
Net weight/Gross weight	kg 195/230	195/230	195/230	195/230
Loading quantity	40'GP set 46	46	46	46
40'HQ	set 46	46	46	46

Model		GRS-CQ14PdG/NhH2-M(I)	GRS-CQ16PdG/NhH2-M(I)
Power supply	V/Ph/Hz	400V 3N~ 50Hz	400V 3N~ 50Hz
Nominal input	W	6100	6100
Leaving water temperature	Cooling *1 °C	18	18
	Cooling *2 °C	7	7
	Heating *1 °C	35	35
	Heating *2 °C	45	45
Pump	Type	- Automatic	Automatic
	Nr. of speed	- Variable-speed	Variable-speed
	Power input	W 3-87	3-87
	Water flow limit	LPM 12	12
Electric heater	Operation	- Automatic	Automatic
	Steps	- 2	2
	Capacity	kW 6	6
	Combination	kW 3+3	3+3
	Power input	V/Ph/Hz 400V 3N~ 50Hz	400V 3N~ 50Hz
Sound pressure level	dB(A) 34	34	34
Connecting pipe	Gas inch(mm) 5/8"(16)	5/8"(16)	5/8"(16)
	Liquid inch(mm) 1/4"(6)	1/4"(6)	1/4"(6)
Dimensions (W × D × H)	Outline mm 600 × 650 × 1800	600 × 650 × 1800	600 × 650 × 1800
Packaged	mm 803 × 703 × 2050	803 × 703 × 2050	803 × 703 × 2050
Net weight/Gross weight	kg 195/230	195/230	195/230
Loading quantity	40'GP set 46		

## Versati III (Monobloc Type)

It's a kind of integrated DC inverter unit that comprises cooling, heating and water heating functions, with up to 5.0 energy efficiency. It adopts R32 refrigerant and two-stage compressor. For heating, ambient temperature range is -25~35°C, while the leaving water temperature range is 25~60°C.



- » Floor debugging function;
- » Integrated structure, simple installation, less installation cost;
- » R32 refrigerant, low GWP;
- » Adopt two-stage compressor to widen the ambient temperature range for heating;
- » Leaving water temperature up to 60°C, applicable to various heating terminals.



Item	Water side	Heat source/User side
	Leaving water temperature(°C)	Dry bulb temperature
Cooling	7~25	10~48
Heating	20~65	-25~35
Water heating	40~80	-25~45

Note:

\*1: This product series is under development. Please confirm the final specifications with our sales representatives.

INVERTER R32

Model	GRS-CQ4.0Pd/NhG-K	GRS-CQ6.0Pd/NhG-K	GRS-CQ8.0Pd/NhG-K	GRS-CQ10Pd/NhG-K	GRS-CQ12Pd/NhG-K	GRS-CQ14Pd/NhG-K
Power supply	V/Ph/Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz
Capacity <sup>*</sup>	kW	3.80	5.80	6.80	8.80	11.00
	kW	4.00	6.00	7.50	10.00	12.00
Power input <sup>*</sup>	kW	0.82	1.35	1.58	1.96	2.56
	kW	0.78	1.20	1.63	2.17	2.64
EER/COP <sup>*</sup>	W/W	4.63/5.10	4.30/5.00	4.30/4.60	4.49/4.61	4.30/4.55
	kW	3.00	4.00	5.00	7.80	9.50
Capacity <sup>*</sup>	kW	4.00	6.00	7.50	10.00	12.00
	kW	0.94	1.29	1.61	2.48	3.11
Power input <sup>*</sup>	kW	1.00	1.58	2.00	2.70	3.48
	kW	0.94	1.35	1.61	2.48	3.11
EER/COP <sup>*</sup>	W/W	3.19/4.00	3.10/3.80	3.10/3.75	3.15/3.70	3.05/3.45
Refrigerant	kg	0.87	0.87	0.87	2.20	2.20
Sanitary water temperature	°C	40~80	40~80	40~80	40~80	40~80
Sound pressure level	dB(A)	51	52	53	56	57
	dB(A)	50	50	51	54	55
Connecting pipe	inch(mm)	/	/	/	/	/
	inch(mm)	/	/	/	/	/
Dimensions (W×D×H)	mm	1150×345×758	1150×345×758	1150×345×758	1200×482×878	1200×482×878
	mm	1258×488×900	1258×488×900	1258×488×900	1293×589×1020	1293×589×1020
Net weight/Gross weight	kg	96/109	96/109	96/109	147/160	147/160
Loading quantity	unit	84	84	84	58	58
	unit	84	84	84	58	58

Model	GRS-CQ10Pd/NhG-M	GRS-CQ12Pd/NhG-M	GRS-CQ14Pd/NhG-M	GRS-CQ16Pd/NhG-M	GRS-CQ16Pd/NhG-K
Power supply	V/Ph/Hz	380-415V 3N~ 50HZ	380-415V 3N~ 50HZ	380-415V 3N~ 50HZ	380-415V 3N~ 50HZ
Capacity <sup>*</sup>	kW	8.80	11.00	12.50	14.50
	kW	10.00	12.00	14.00	15.50
Power input <sup>*</sup>	kW	1.96	2.56	3.05	3.82
	kW	2.17	2.64	3.22	3.60
EER/COP <sup>*</sup>	W/W	4.49/4.61	4.30/4.55	4.10/4.35	3.80/4.30
	kW	7.80	9.50	12.00	13.00
Capacity <sup>*</sup>	kW	9.00	12.00	13.00	15.50
	kW	2.48	3.20	4.14	4.91
Power input <sup>*</sup>	kW	2.70	3.48	4.18	4.70
	kW	2.70	3.48	4.18	4.70
EER/COP	W/W	3.15/3.33	2.97/3.45	2.90/3.11	2.65/3.30
Refrigerant charge volume	kg	2.20	2.20	2.20	2.20
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	dB(A)	56	56	57	59
	dB(A)	54	54	55	57
Connecting pipe	inch(mm)	/	/	/	/
	inch(mm)	/	/	/	/
Dimensions (W×D×H)	mm	1200×482×878	1200×482×878	1200×482×878	1200×482×878
	mm	1293×589×1020	1293×589×1020	1293×589×1020	1293×589×1020
Net weight/Gross weight	kg	147/160	147/160	147/160	147/160
Loading quantity	unit	58	58	58	58
	unit	58	58	58	58

Note:

1. Capacity and power input are based on the following conditions:

**Cooling conditions.**

Outdoor air temperature 35°C DB/-WB.

Entering water temperature 23°C.

Leaving water temperature 18°C

**Heating conditions.**

Outdoor air temperature 7°C DB/6°C WB.

Entering water temperature 30°C.

Leaving water temperature 35°C

Standing piping length 5m.

2. Capacity and power input are based on the following conditions:

**Cooling conditions.**

Outdoor air temperature 35°C DB/-WB.

Entering water temperature 12°C.

Leaving water temperature 7°C

**Heating conditions.**

Outdoor air temperature 7°C DB/6°C WB.

Entering water temperature 40°C.

Leaving water temperature 45°C

Standing piping length 5m.

3. For floor cooling.

4. For floor heating.

5. For fan coil unit.

6. For fan coil or radiator.

Model		GRS-CQ10Pd/NhG2-K	GRS-CQ12Pd/NhG2-K	GRS-CQ14Pd/NhG2-K	GRS-CQ16Pd/NhG2-K
Power supply	V/Ph/Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz
Capacity <sup>*1</sup>	Cooling <sup>*3</sup>	kW	8.80	11.00	12.50
	Heating <sup>*4</sup>	kW	10.00	12.00	14.50
Power input <sup>*1</sup>	Cooling <sup>*3</sup>	kW	1.96	2.56	3.05
	Heating <sup>*4</sup>	kW	2.17	2.64	3.22
EER/COP <sup>*1</sup>	W/W	4.49/4.61	4.30/4.55	4.10/4.35	3.77/4.31
Capacity <sup>*2</sup>	Cooling <sup>*5</sup>	kW	7.80	9.50	12.00
	Heating <sup>*6</sup>	kW	10.00	12.00	14.00
Power input <sup>*2</sup>	Cooling <sup>*5</sup>	kW	2.48	3.11	4.14
	Heating <sup>*6</sup>	kW	2.70	3.48	4.18
EER/COP <sup>*2</sup>	W/W	3.15/3.70	3.05/3.45	2.90/3.35	2.65/3.30
Refrigerant charge volume	kg	2.20	2.20	2.20	2.20
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	56	56	57
	Heating	dB(A)	54	54	55
Connecting pipe	Gas	inch(mm)	/	/	/
	Liquid	inch(mm)	/	/	/
Dimensions (W × D × H)	Outline	mm	1200 × 482 × 878	1200 × 482 × 878	1200 × 482 × 878
	Packaged	mm	1293 × 589 × 1020	1293 × 589 × 1020	1293 × 589 × 1020
Net weight/Gross weight	kg	147/160	147/160	147/160	147/160
Loading quantity	40'GP	unit	58	58	58
	40'HQ	unit	58	58	58

Model		GRS-CQ10Pd/NhG2-M	GRS-CQ12Pd/NhG2-M	GRS-CQ14Pd/NhG2-M	GRS-CQ16Pd/NhG2-M
Power supply	V/Ph/Hz	380-415V 3N~ 50HZ	380-415V 3N~ 50HZ	380-415V 3N~ 50HZ	380-415V 3N~ 50HZ
Capacity <sup>*1</sup>	Cooling <sup>*3</sup>	kW	8.80	11.00	12.50
	Heating <sup>*4</sup>	kW	10.00	12.00	14.50
Power input <sup>*1</sup>	Cooling <sup>*3</sup>	kW	1.96	2.56	3.05
	Heating <sup>*4</sup>	kW	2.17	2.64	3.22
EER/COP <sup>*1</sup>	W/W	4.49/4.61	4.30/4.55	4.10/4.35	3.80/4.30
Capacity <sup>*2</sup>	Cooling <sup>*5</sup>	kW	7.80	9.50	12.00
	Heating <sup>*6</sup>	kW	9.00	12.00	13.00
Power input <sup>*2</sup>	Cooling <sup>*5</sup>	kW	2.48	3.20	4.14
	Heating <sup>*6</sup>	kW	2.70	3.48	4.18
EER/COP <sup>*2</sup>	W/W	3.15/3.33	2.97/3.45	2.90/3.11	2.65/3.30
Refrigerant charge volume	kg	2.20	2.20	2.20	2.20
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	56	56	57
	Heating	dB(A)	54	54	55
Connecting pipe	Gas	inch(mm)	/	/	/
	Liquid	inch(mm)	/	/	/
Dimensions (W × D × H)	Outline	mm	1200 × 482 × 878	1200 × 482 × 878	1200 × 482 × 878
	Packaged	mm	1293 × 589 × 1020	1293 × 589 × 1020	1293 × 589 × 1020
Net weight/Gross weight	kg	147/160	147/160	147/160	147/160
Loading quantity	40'GP	unit	58	58	58
	40'HQ	unit	58	58	58

## Note:

1. Capacites and power inputs are based on the following conditions:

## • Cooling conditions.

Outdoor air temperature 35°C DB/-WB.

Entering water temperature 23°C.

Leaving water temperature 18°C

## • Heating conditions.

Outdoor air temperature 7°C DB/6°C WB.

Entering water temperature 30°C.

Leaving water temperature 35°C

Standing piping length 5m.

2. Capacites and power inputs are based on the following conditions:

## • Cooling conditions.

Outdoor air temperature 35°C DB/-WB.

Entering water temperature 12°C.

Leaving water temperature 7°C

## • Heating conditions.

Outdoor air temperature 7°C DB/6°C WB.

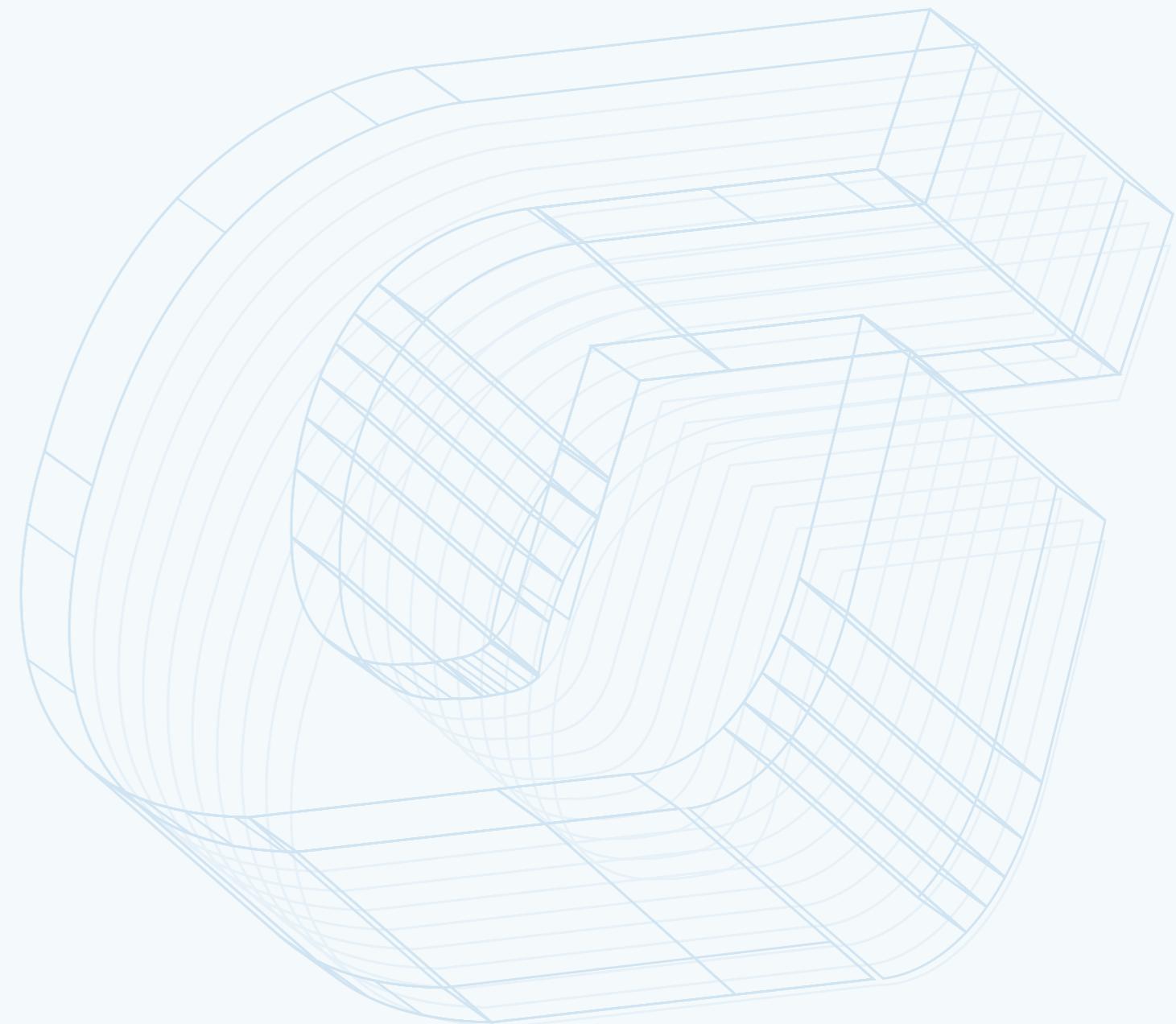
Entering water temperature 40°C.

Leaving water temperature 45°C

Standing piping length 5m.

3. For floor cooling.

4. For floor heating.



## Split Type Water Heater

Gree split type water heater offers you with sufficient hot water, ensuring a warm and comfortable life to each family. Its installation is convenient and it is applicable for a family of 3 to 5 members.



### » Safe and eco-friendly

Water and electricity are separated to avoid possible electric shock. Without possible toxicities of CO, user's safety can be ensured. No pollutant is released during operation, so there is no damage to the environment.

### » Reliable and durable

Adopting special compressor, the unit is resistant to high temperature and pressure. The entire unit is with multiple protection functions to ensure long lifespan of the system.

### » Easy installation

Without limitation of environment, the unit can be installed in garage, stock room or basement.

### » Easy operation

Water temperature can be set. Unit can be on or off depending on water temperature and water consumption. Unit on/off can be set by user according to requirements (the unit will stop once water temperature reaches the setting point). Running of unit in electric plolykurtosis is possible to reduce electricity fee.

### » Intelligent defrosting

The unit with anti-freezing and intelligent defrosting functions can efficiently prevent freezing and frosting.

### » All-day use

The unit can make and supply hot water all day in despite of night, cloudy or rainy days.



## Outdoor Unit

Model		GRS-S3.5PdG/NaA1-K
Rated heating capacity <sup>(1)</sup>	W	3500(1800~3700)
Rated input power <sup>(1)</sup>	W	833(360~910)
Load profile	-	L
COP <sub>DHW</sub> <sup>(2)</sup>	W/W	3.1
Energy efficiency class <sup>(2)</sup>	-	A <sup>+</sup>
Water heating energy efficiency <sup>(2)</sup>	-	130%
Heating time (7/6°C/15-55°C)	h	5.40
Maximum input power	W	2000+1500W (Electric heater)
Circuit breaker	A	16
Water temperature setting	°C	35 ° C~55 ° C
Power supply	V/Ph/Hz	220-240V~ 50Hz
Protection of ingress	-	I PX4
Refrigerant	Type	R410A
	Charge	kg
Outline dimensions	W×D×H	842×320×591
Package dimensions	W×D×H	948×363×660
Max. pipe length/Height	m	20
Gross/Net weight	kg	44.5/38.5
Sound power level <sup>(3)</sup>	dB(A)	63
Operating range	°C	-25~45 ° C

### Notes:

1. Value obtained with the following conditions: Outdoor temperature: 20°C DB/15°CWB; Water tank temperature (start/end): 15°C /55°C.

2. Value obtained with an air temperature of 7 ° C and a water inlet at 10°C, as per EN16147:2017+A1, (EU) No 814/2013.

3. Value obtained as per EN12102-2-2019.

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

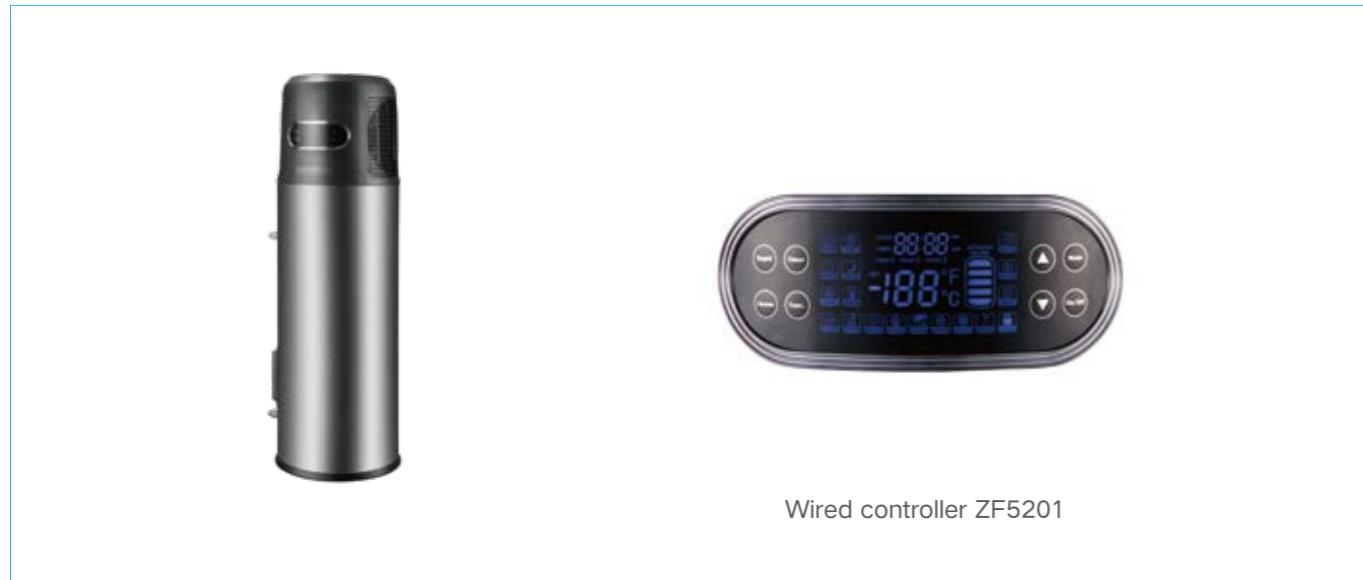
## Water Tank

Model		SXTD200LCJW/A-K
Capacity	L	185
Power supply for electric heater	-	220-240V~50Hz
Input power for electric heater	W	1500
Max. operation pressure	MPa	0.70
Outline dimensions(W×D×H)	mm	462×462×2000
Package dimensions(W×D×H)	mm	2108×583×565
Water tank gross/net weight	kg	83/72.5
Outer size of connection pipe	mm	Φ6, Φ9.52
Material of inner tank	-	Enamel
Made of defending cauterization	-	Mg anode

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

## Integral Type Water Heater

The unit adopts integrated design of outdoor unit and water tank, with beautiful appearance, small size, high-end intelligence and easy installation. It is suitable for household usage.



### » Safe and eco-friendly

Water and electricity are separated to avoid possible electric shock. Without possible toxicities of CO, user's safety can be ensured. No pollutant is released during operation, so there is no damage to the environment.

### » Reliable and durable

Adopting special compressor, the unit is resistant to high temperature and pressure. The entire unit is with multiple protection functions to ensure long lifespan of the system.

### » Easy installation

Without limitation of environment, the unit can be installed in garage, stock room or basement. Installation and maintenance is convenient for its no refrigeration system installation.

### » Easy operation

Water temperature can be set. Unit can be on or off depending on water temperature and water consumption. Unit on/off can be set by user according to requirements (the unit will stop once water temperature reaches the setting point). Running of unit in electric platzkurtosis is possible to reduce electricity fee.

### » Intelligent defrosting

The unit with anti-freezing and intelligent defrosting functions can efficiently prevent freezing and frosting.

### » All-day use

The unit can make and supply hot water all day in despite of night, cloudy or rainy days.



Model		GRS-1.5/TD150ANbA-K* <sup>1</sup>	GRS-1.5/TD200ANbA-K* <sup>1</sup>
Capacity	kW	1.5	1.5
Power input	kW	0.429	0.429
Load profile	-	L	L
COP <sub>DHW</sub>	W/W	2.47	2.24
Water heating energy efficiency		104%	95%
Energy efficiency class		A	A
Refrigerant	-	R134a	R134a
Refrigerant charge volume	kg	0.8	0.8
Circuit breaker	A	16	16
Refrigerant design pressure	MPa	2.8	2.8
Tank design pressure	MPa	0.8	0.8
Max. operation pressure	MPa	0.8	0.8
Heating time (7/6°C, 15-55°C)	h	6.50	9.20
Running ambient temperature	°C	0 ~ 45	0 ~ 45
Water temperature setting	°C	35 ~ 70	35 ~ 70
Air flow rate	m³/h	/	/
Available static pressure	Pa	/	/
Max. length of air connection	m	/	/
Sound pressure level(heating)	dB(A)	50	50
Sound power level(heating)	dB(A)	62	62
Volume	L	150	190
Water pipeline	Water inlet pipe Water outlet pipe Drainage pipe	inch inch inch	0.59 0.59 /
Dimensions(W × D × H)	Outline Packaged	mm mm	621 × 561 × 1760 731 × 717 × 1845
Net weight/Gross weight	kg	92/112	102.5/122.5
Loading quantity	40'GP/40'HQ	unit	48/48
Material of inner tank	-	Enamel	Enamel
Made of defending cauterization	-	Electronical anode	Electronical anode

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



# Heat Pump Pool Heater



GREE swimming pool heat pump adopts eco-friendly refrigerant R32, DC inverter compressor, DC fan, electronic expansion valve (EEV), corrosion-resistant titanium tube heat exchanger, high weather-resistant coating shell, gold corrosion-resistant fin, realizing adjustable load during operation, energy saving and efficiency. The product has obtained CE certification, meets Rohs requirements. It has heating, cooling, automatic mode and humanized functions such as fast, intelligent, energy-saving, timing, WiFi for users to choose.

With heating capacity ranging from 2.2 to 18.8kW, it is suitable for a family swimming pool holding the water of 20m<sup>3</sup> to 95m<sup>3</sup>. The daily water for swimming and SPA water temperature can be kept respectively between 26~30°C and below 40°C.



- » Low GWP675, R32 eco-friendly refrigerant (ODP=0, GWP=675).
- » Inverter design. DC inverter compressor + DC fan + electronic expansion valve, realizing constant water temperature control (adjusting precision is up to 0.5°C), and operating energy efficiency under high-temperature heating working condition can be up to 10 or above.
- » Anti-corrosion and low flow resistance heat exchanger and weather-proof designed case. Threaded titanium tube coil heat exchanger has excellent corrosion resistance (can be resistant to seawater corrosion). Meanwhile the shell and tube design greatly reduces the fluid flow resistance, which can effectively reduce the power consumption of circulation pump. The gold anti-corrosion fins are twice the corrosion resistance of the ordinary fins, and the outer case has a high weather-resistant polyester coating.
- » Wide application range. The unit can normally operate with voltage range of 180~264V, ambient temperature range of -15~45°C, and water temperature range of 10~40°C, which is applicable to residential swimming pool, hot tub, SPA and related locations.
- » Compact structure and simple appearance. Display board embedded panel of standard-fitting integrated WiFi module, and composite design of control panel for saving space and size, realizing modular connecting of outer case.

Model		GRS-CP11Pd/NhA-K	GRS-CP18Pd/NhA-K
High-temperature & high-humidity heating: ambient temperature: 27°C /80%, 26°C water inlet	Heating capacity Power input Energy efficiency	2.2~11.8 0.17~2.02 13.0~5.8	5.5~18.8 0.50~3.62 11.0~5.2
Medium-temperature & medium-humidity heating: ambient temperature: 15°C /70%, 26°C water inlet	Heating capacity Power input Energy efficiency	2.0~8.8 0.38~1.95 6.3~4.5	3.0~15.1 0.50~3.77 6.0~4.0
Cooling: ambient temperature: 35°C /-, 30°C water inlet	Cooling capacity Power input Energy efficiency	4.3 1.34 3.2	7.8 1.95 4.0
Maximum power <sup>①</sup>	kW	2.5	4.0
Maximum current <sup>①</sup>	A	11.0	17.5
Nominal water flow	m <sup>3</sup> /h	3.8	6.5
Water resistance	kPa	5	12
Noise <sup>②</sup>	dB(A)	52	55
Dimension(W×D×H)	Outline Packaged	980×376×554 1061×423×705	1085×402×657 1183×448×805
Net weight/Gross weight	kg	43/52	52.5/62.5
Hydraulic connection	mm	PVC 50/50	
Compressor	—	Hermetic Rotary DC Inverter Compressor	
Fan motor	—	DC Fan Motor	
Refrigerant	—	R32	
Refrigerant charge <sup>③</sup>	kg	0.52	0.73
Power supply	—	Single phase 220~240V ~ 50/60Hz	
Protection	—	IPX4	
Max. pool volume <sup>④</sup>	m <sup>3</sup>	75	95
Mode	—	Heating/Cooling/Automatic	
Loading quality(40'GP/40'HQ)	Unit	183/183	100/150

NOTES:

- ①The above maximum power or maximum current don't include the power or current of external water pump.
- ②The noise data is the average sound pressure value measured under high temperature and high humidity heating conditions(Dry air 27°C-Relative humidity 80% - Water inlet temperature 26°C) with a distance of 1m away from the unit.
- ③This parametric is the maximum refrigerant charge amount of the unit.
- ④The recommended maximum pool volume is based on the ideal heating condition that the pool is well shaded; the filtration system runs for 15h per day, water temperature is maintained at 26°C, and ambient temperature ≥28°C.



# AIR-COOLED CHILLER

---

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

A Series Inverter Modular  
Air-cooled Chiller  
Built-in Hydraulic Module  
(Heat Pump, R32)

# A Series Inverter Modular Air-cooled Chiller (Heat Pump, 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.

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.

Item	Water side (water temperature)		Air side (Ambient temperature)
	Operating range		Operating range
	Leaving water temperature (°C)	Entering and Leaving water difference temperature (°C)	Dry bulb temperature (°C)
Cooling	5~20	2.5~6	-15~52
Heating	35~50	2.5~6	-20~40



Model		LSQWRF35VM/NhA-M		LSQWRF60VM/NhA-M
Capacity	Cooling/Heating	kW	32/35	60/65
		RT	9.10/9.95	17.06/18.48
Capacity adjustment	%		31.25%~100%	15.63%~100%
EER/COP	W/W		2.74/3.30	2.88/3.27
Power supply	V/Ph/Hz		380~415/3/50	380~415/3/50
Power input	Cooling	kW	11.7	20.8
	Heating	kW	10.6	19.9
Compressor	Type	-	Inverter rotary	Inverter rotary
	Starting mode	-	Inverter starting	Inverter starting
	Quantity	-	1	2
Water side heat exchanger	Type	-	Shell-and-tube dry expansion	Shell-and-tube dry expansion
	m³/h		5.50	10.32
	GPM		24	46
	Pressure drop	kPa	80	55
		ft.WG	26.24	18.04
	Connection pipe*	-	DN32	DN50
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 airflow	m³/h	$2 \times 0.63 \times 10^4$	$2 \times 1.2 \times 10^4$
		CFM	$2 \times 0.371 \times 10^4$	$2 \times 0.707 \times 10^4$
	Total fan motor power	kW	0.75×2	0.75×2
	Sound pressure level	dB(A)	62	68
Dimension (W × D × H)	Outline	mm	1340×845×1605	2200×965×1675
	Package	mm	1420×920×1775	2267×1030×1867
Net/Gross/Operating weight	kg		405/422/445	686/722/755
Loading quantity	40'GP/40'HP	set	16/16	11/11

Remark:

- ① Working condition of cooling: Leaving chilled water temperature 7°C ; water flow volume: 0.172 m³/h per kW cooling capacity; outdoor ambient temperature 35°C (DB).
- ② Working condition of heating: Leaving water temperature 45°C; water flow volume: 0.172 m³/h per kW cooling capacity; outdoor ambient temperature 7°C (DB) / 6°C (WB).
- ③ For specific parameters, please refer to the product nameplate.
- ④ For connection pipe\*, if the size ≥ DN65, the connector is of flange type; if the size < DN65, the connector is of external thread type.

# A Series Inverter Modular Air-cooled Chiller Built-in Hydraulic Module (Heat Pump, R32)

**INVERTER** **R32**

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



	Golden fin condenser
	Inner groove copper
	High efficiency
	Intelligent defrosting
	Quiet function
	Self-diagnosis
	Low voltage startup
	Weekly timer
	Wide operation range
	Wide voltage range
	Memory function
	Compact design
	Clock display
	Long-distance monitoring
	Comprehensive protection
	All DC inverter technology
	Easier maintainability
	Multi fan speed
	Modular operating

- » 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.

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.

Item	Water side (water temperature)		Air side (Ambient temperature)
	Operating range		Operating range
	Leaving water temperature (°C)	Entering and Leaving water difference temperature (°C)	Dry bulb temperature (°C)
Cooling	5~20	2.5~6	-15~52
Heating	35~50	2.5~6	-20~40



Model		LSQWRF35VMP1/NhA-M	LSQWRF60VM/NhA-M
Capacity	Cooling/Heating	kW	33/36
	RT		9.38/10.24
Capacity adjustment	%		15.63%~100%
EER/COP	W/W		2.89/3.3
Power supply	V/Ph/Hz	380~415V AC 3Ph 50Hz	380~415V AC 3Ph 50Hz
Power input	Cooling	kW	11.4
	Heating	kW	10.9
Compressor	Type	-	Inverter rotary
	Starting mode	-	Inverter
	Quantity	-	1
Water side heat exchanger	Type	-	Plate-type heat exchanger
	Water flow volume	m³/h	5.68
		GPM	25
	Connection pipe*	-	DN32
Air side heat exchanger	Type	-	Aluminum fin-copper tube
	Fan type and quantity	-	Axial-flow/2
	Total fan airflow	m³/h	2 × 0.63 × 10⁴
		CFM	2 × 0.371 × 10⁴
	Total fan motor power	kW	750 × 2
Built-in chilled water pump	Pump power input	kW	0.55
	Pump lift	m	24
Head pressure available (cooling)	Kpa		165
	ft.WG		54.12
Head pressure available (cooling)	Kpa		140
	ft.WG		45.920
Built-in expansion vessel volume	L		8
Sound pressure level	dB(A)		62
Dimension (W × D × H)	Outline	mm	1340 × 802 × 1605
	Package	mm	1420 × 905 × 1775
Net/Gross/Operating weight	kg	323/340/355.3	609/645/669.9
Loading quantity	40'GP/40'HP	set	16/16
			11/11

Remark:

- ① Working condition of cooling: Leaving chilled water temperature 7°C ; water flow volume: 0.172 m³/h per kW cooling capacity; outdoor ambient temperature 35°C (DB).
- ② Working condition of heating: Leaving water temperature 45°C ; water flow volume: 0.172 m³/h per kW cooling capacity; outdoor ambient temperature 7°C (DB) / 6°C (WB).
- ③ For specific parameters, please refer to the product nameplate.
- ④ For connection pipe\*, if the size ≥ DN65, the connector is of flange type; if the size < DN65, the connector is of external thread type.



# SCREW CHILLER

---

High-efficiency Modular Air  
-cooled Screw Chiller

Permanent Magnetic Synchronous  
Inverter Water-cooled 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 tube		Comprehensive protection		Self-diagnosis		Memory function		24 hour timer		Long-distance monitoring		High efficiency		Intelligent defrosting		Modular structure
--	----------------------	--	--------------------------	--	--------------------------	--	----------------	--	-----------------	--	---------------	--	--------------------------	--	-----------------	--	------------------------	--	-------------------

- » Thanks to V-type fin structure, the 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.
- » The 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		LMEA30JD3E/Nb-M	LMEB30JD2E/Nb-M	LMEA40LE5E/Nb-M	LMEB40LE4E/Nb-M	LMEA50LE3E/Nb-M	LMEB50LE2E/Nb-M	
Capacity	Cooling	kW	320	350	420	470	520	580	
		TR	91.0	99.5	119.4	133.6	147.9	164.9	
Capacity steps		%	25%,50%~100%	25%,50%~100%	25%,50%~100%	25%,50%~100%	25%,50%~100%	25%,50%~100%	
EER		W/W	3.20	3.24	3.23	3.22	3.21	3.22	
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	108	130	146	162	180	
		Type	-	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	1	
Refrigerant	Type	-	R134a	R134a	R134a	R134a	R134a	R134a	
		Type	-	Flooded evaporator					
Water side heat exchanger	Water flow volume	m³/h	55.0	60.2	72.2	80.8	89.4	99.8	
		GPM	243	265	319	356	394	440	
	Pressure drop	kPa	≤35	≤35	≤45	≤45	≤45	≤45	
		ft.WG	≤11.5	≤11.5	≤14.8	≤14.8	≤14.8	≤14.8	
	Connection pipe	-	DN100	DN100	DN125	DN125	DN125	DN125	
Air side heat exchanger	Type	-	Aluminum fin-copper tube						
		Total fan air flow	m³/h	19500×6	21500	19500×8	21500×8	19500×10	21500×10
	Total fan motor power	kW	1.5×6	1.8×6	1.5×8	1.8×8	1.5×10	1.8×10	
Dimension	Outline(W×D×H)	mm	3820×2330×2550	3820×2330×2550	5040×2330×2550	5040×2330×2550	6110×2250×2550	6110×2250×2550	
	Package(W×D×H)	mm	3820×2330×2550	3820×2330×2550	5040×2330×2550	5040×2330×2550	6260×2330×2550	6260×2330×2550	
Net/Gross/Operting weight	Cooling only	kg	4130/4170/4213	4310/4350/4396	5210/5250/5314	5515/5555/5625	5980/6020/6100	6240/6280/6365	
Loading quantity	40'GP/40'HQ	unit	0/2	0/2	0/2	0/2	0/1	0/1	

Note: The parameters are estimated. Please refer to the data on the nameplate.

Model	Cooling only		LMEA33LF8E/Nb-M	LMEB33LF6E/Nb-M	LMEA43LF7E/Nb-M	LMEB43LF5E/Nb-M	LMEA44NF4E/Nb-M	LMEB44NF2E/Nb-M	
Capacity	Cooling	kW	650	700	750	820	860	940	
		TR	184.8	199.1	213.3	233.2	244.5	267.3	
Capacity steps		%	12.5%,25%~100%	12.5%,25%~100%	12.5%,25%~100%	12.5%,25%~100%	12.5%,25%~100%	12.5%,25%~100%	
EER		W/W	3.25	3.24	3.19	3.22	3.25	3.24	
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	200	216	235	255	265	290	
		Type	-	Semi-hermetic screw					
Compressor	Starting mode	-	Star delta start						
		Quantity	-	2	2	2	2	2	
Refrigerant	Type	-	R134a	R134a	R134a	R134a	R134a	R134a	
		Type	-	Flooded evaporator					
Water side heat exchanger	Water flow volume	m³/h	111.8	120.4	129.0	141.0	147.9	161.7	
		GPM	493	531	569	622	652	713	
	Pressure drop	kPa	≤55	≤55	≤55	≤55	≤65	≤60	
		ft.WG	≤18.0	≤18.0	≤18.0	≤18.0	≤21.3	≤19.7	
Water side heat exchanger	Type	-	DN150	DN150	DN150	DN150	DN150	DN150	
		Aluminum fin-copper tube							
	Total fan air flow	m³/h	19500×12	21500×12	19500×14	21500×14	19500×16	21500×16	
Water side heat exchanger	Total fan motor power	kW	1.5×12	1.8×12	1.5×14	1.8×14	1.5×16	1.8×16	
		CFM	11477×12	12654×12	11477×14	12654×14	11477×16	12654×16	
Dimension		Outline(W×D×H)	mm	7340×2250×2550	7340×2250×2550	8560×2250×2550	8560×2250×2550	9780×2250×2550	
Dimension		Package(W×D×H)	mm	7490×2330×2550	7490×2330×2550	8710×2330×2550	8710×2330×2550	9930×2330×2550	
Net/Gross/Operting Weight		kg	7920/7960/8078	8120/8160/8282	8350/8390/8517	9110/9150/9292	9860/9900/10057	9970/10010/10169	
Loading quantity		40'GP/40'HQ	set	0/1	0/1	0/1	0/1	0/1	

Note: The parameters are estimated. Please refer to the data on the nameplate.



Model	Cooling only		LMEB54NG2E/ Nb-M	LMEB33LF650LE2E/ Nb-M	LMEB33LF633LF6E/ Nb-M	LMEB33LF643LF5E/ Nb-M	LMEB43LF543LF5E/ Nb-M
Capacity	Cooling	kW	1050	1280	1400	1500	1650
		TR	298.6	364.0	398.1	426.5	469.2
Capacity steps	%	12.5%,25%~100%	8.3%,16.7%~100%	6.25%,12.5%~100%	6.25%,12.5%~100%	6.25%,12.5%~100%	6.25%,12.5%~100%
EER	W/W	3.23	3.20	3.22	3.23	3.20	3.20
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	325	400	435	465	515
Compressor	Type	-	Semi-hermetic screw				
	Starting mode	-	Star delta start				
	Quantity	-	2	3	4	4	4
Refrigerant	Type	-	R134a	R134a	R134a	R134a	R134a
Water side heat exchanger	Type	-	Flooded evaporator				
	Water flow volume	m³/h	180.6	220.2	240.8	258.0	283.8
		GPM	796	971	1062	1138	1251
	Pressure drop	kPa	≤70	≤55	≤60	≤60	≤60
		ft.WG	≤23.0	≤18.0	≤19.7	≤19.7	≤19.7
Air side heat exchanger	Connection pipe	-	DN150	DN150+DN125	2 × DN150	2 × DN150	2 × DN150
	Type	-	Aluminum fin-copper tube				
	Total fan air flow	m³/h	21500 × 18	21500 × 22	21500 × 24	21500 × 26	21500 × 28
		CFM	12654 × 18	12654 × 22	12654 × 24	12654 × 26	12654 × 28
	Total fan motor power	kW	1.8 × 18	1.8 × 22	1.8 × 24	1.8 × 26	1.8 × 28
Dimension	Outline(W × D × H)	mm	11000 × 2250 × 2550	13450 × 2250 × 2550	14670 × 2250 × 2550	15890 × 2250 × 2550	17120 × 2250 × 2550
	Package(W × D × H)	mm	11150 × 2330 × 2550	13600 × 2330 × 2550	14820 × 2330 × 2550	16040 × 2330 × 2550	17270 × 2330 × 2550
Net/Gross/Operating Weight	kg	11150/11230/11373	14470/14550/14759	15840/15920/16157	17140/17220/17483	18470/18550/18839	
Loading quantity	40'GP/40'HQ	set	0/1	0/0	0/0	0/0	0/0

Note: the parameters are estimated. Please refer to the data on the nameplate.

LMEB33LF850LE3E/Nb-M~LMEB43LF543LF5E/Nb-M can be splitted into two parts and will be transported separately.

Model	Cooling only		LMED50 LE18E/Nb-M	LMED33 LF644E/Nb-M	LMED43 LF564E/Nb-M	LMED44 NF266E/Nb-M	LMED54 NG276E/Nb-M	LMED50LE2750 LE27E/Nb-M	LMED50LE1850 LE18E/Nb-M
Capacity	Cooling	kW	808	898	1023	1148	1318	1488	1617
		TR	229.8	255.4	290.9	326.4	374.8	423.1	459.8
Capacity steps	%	25%,50%~100%	12.5%,25%~100%	25%,50%~100%	12.5%,25%~100%	25%,50%~100%	25%,50%~100%	25%,50%~100%	12.5%,25%~100%
EER	W/W	3.00	3.10	3.10	3.19	3.10	3.10	3.10	3.10
Power supply	V/Ph/Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz
Power input	Cooling	kW	269	290	330	360	425	480	522
Compressor	Type	-	Semi-hermetic screw	Semi-hermetic screw					
	Starting mode	-	Star delta start	Star delta start					
	Quantity	-	1	2	2	2	2	2	2
Refrigerant	Type	-	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Water side heat exchanger	Type	-	Flooded evaporator	Flooded evaporator					
	Water flow volume	m³/h	139.0	154.5	176.0	197.5	226.7	255.9	278.1
		GPM	613	681	776	871	1000	1128	1226
	Pressure drop	kPa	≤55	≤60	≤65	≤70	≤75	≤80	≤80
		ft.WG	≤18.0	≤19.7	≤21.3	≤23.0	≤24.6	≤26.2	≤26.2
Air side heat exchanger	Connection pipe	-	DN150	DN150	DN200	DN200	DN200	2 × DN150	2 × DN150
	Type	-	Aluminum fin-copper tube	Aluminum fin-copper tube					
	Total fan air flow	m³/h	26000 × 10	26000 × 12	26000 × 14	26000 × 16	26000 × 18	26000 × 20	26000 × 20
		CFM	15304 × 10	15304 × 12	15304 × 14	15304 × 16	15304 × 18	15304 × 20	15304 × 20
	Total fan motor power	kW	2.8 × 10	2.8 × 12	2.8 × 14	2.8 × 16	2.8 × 18	2.8 × 20	2.8 × 20
Dimension	Outline(W × D × H)	mm	6110 × 2250 × 2550	7340 × 2250 × 2550	8560 × 2250 × 2550	9780 × 2250 × 2550	11000 × 2250 × 2550	12230 × 2250 × 2550	12230 × 2250 × 2550
	Package(W × D × H)	mm	6260 × 2330 × 2550	7490 × 2330 × 2550	8710 × 2330 × 2550	9930 × 2330 × 2550	11150 × 2330 × 2550	12380 × 2330 × 2550	12380 × 2330 × 2550
Net/Gross/Operating Weight	kg	6440/6480/6569	8600/8640/8772	9645/9685/9838	10610/10650/10822	11385/11425/11613	12800/12880/13056	12880/12960/13138	
Loading quantity	40'GP/40'HQ	set	0/1	0/1	0/1	0/1	0/1	0/1	0/1

Note : Working condition of cooling: Leaving chilled water temperature 7°C , water flow volume: 0.172 m³/h per kW cooling capacity, outdoor ambient temperature 35°C (DB).

Model	Cooling only		LMEB30JD33/ Nb-M	LMED30JD24/ Nb-M	LMED30JD24E/ Nb-M	LMED40LE56/ Nb-M	LMED40LE46E/ Nb-M	LMED50LE37/ Nb-M	LMED50LE27E/ Nb-M
Capacity	Cooling	kW	358	408	448	518	573	678	743
		TR	101.8	116.0	127.4	147.3	162.9	192.8	211.3
Capacity steps	%	25%,50%~100%	25%,50%~100%	25%,50%~100%	25%,50%~100%	25%,50%~100%	25%,50%~100%	25%,50%~100%	25%,50%~100%
EER	W/W	3.17	3.11	3.11	3.18	3.18	3.18	3.11	
Power supply	V/Ph/Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz	380V/3N~/50Hz	
Power input	Cooling	kW	113	131	144	163	180	213	239
Compressor	Type	-	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw
	Starting mode	-	Star delta start	Star delta start	Star delta start	Star delta start	Star delta start	Star delta start	Star delta start
	Quantity	-	1	1	1	1	1	1	1
Refrigerant	Type	-	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Water side heat exchanger	Type	-	Flooded evaporator	Flooded evaporator	Flooded evaporator	Flooded evaporator	Flooded evaporator	Flooded evaporator	Flooded evaporator
	Water flow volume	m³/h	61.6	70.2	77.1				

# Permanent Magnetic Synchronous Inverter Water-cooled Screw Chiller



## LHVE Series

Gree LHVE-S series VFD water-cooled screw chiller is an innovative product with balanced installation and operation cost, with features of high reliability, compact structure and easy maintenance. LHVE-P is a higher-efficiency series upgraded on LHVE-S series. The capacity under nominal working condition ranges from 100 to 700RT.



	High-efficiency and energy-saving		Energy-saving and eco-friendly		Compact design		Easier maintainability		Efficient oil return		High-quality parts		Microcomputer control		Long-distance monitoring		Intelligent service
--	-----------------------------------	--	--------------------------------	--	----------------	--	------------------------	--	----------------------	--	--------------------	--	-----------------------	--	--------------------------	--	---------------------

- » Adjust the load with rotate speed to realize consecutive adjustment of 10%-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%.
- » Adopt GEX-V rotor profile design, complete free-form sealing, reduced leakage triangle, and effectively improve the adiabatic efficiency by more than 5%.
- » 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;
- » By adopting 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 by 3%; for some other loads, it has enhanced by 5% ~ 7%.
- » The control circuit adopts 24V full DC electronic control component, which effectively reduces electromagnetic interference, safe and reliable;

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	2.5-10	18-35	3.5-10

## LHVE-S Series



Model		LHVE542DD3ED4/Nb	LHVE542DD2ED3/Nb	LHVE542ED4ED2/Nb	LHVE642EE6EEA/Nb	LHVE742EE5FEC/Nb	LHVE772FE6FEB/Nb	
Cooling capacity	kW	351.6	439.5	527.4	615.3	703.2	791.1	
	RT	100.0	125.0	150.0	175.0	200.0	225.0	
Capacity adjustment range	%	10%-100%	10%-100%	10%-100%	10%-100%	10%-100%	10%-100%	
COP	W/W	6.01	6.00	5.98	6.07	6.15	6.09	
IPLV	W/W	8.57	8.55	8.54	8.59	8.71	8.64	
Power supply	-M	Ph,V,Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	
Power input	kW	58.5	73.2	88.2	101.4	114.4	130.0	
Compressor	Type	-	Semi-hermetic dual screw					
	Starting mode	-	VFD	VFD	VFD	VFD	VFD	
Refrigerant	Quantity	-	1	1	1	1	1	
	Charge volume	kg	90	115	125	150	175	
Evaporator	Type	-	Falling film evaporator					
	Fouling factor	m <sup>2</sup> ·°C /kW	0.0176	0.0176	0.0176	0.0176	0.0176	
Condenser	Water flow rate	m <sup>3</sup> /h	60	76	91	106	121	
	Pressure drop	GPM	266	333	399	466	533	
Sound pressure level	ft.WG	kPa	52.4	52.2	52.8	62.4	66.2	
	Connection pipe	ft.WG	17.2	17.1	17.3	20.5	21.7	
Dimension (WxDxH)	Type	mm	DN100	DN100	DN125	DN125	DN150	
	Fouling factor	m <sup>2</sup> ·°C /kW	0.0440	0.0440	0.0440	0.0440	0.0440	
Outline	Water flow rate	m <sup>3</sup> /h	76	94	113	132	151	
	Pressure drop	GPM	333	416	499	582	666	
Package	Connection pipe	kPa	51.9	52.3	55.4	51.7	50.2	
	Sound pressure level	ft.WG	17.0	17.2	18.2	17.0	16.5	
Net/gross/operating weight	kg	2800/2900/2990	2850/2950/3070	2930/3030/3150	3020/3120/3320	3450/3550/3770	3810/3910/4150	



Model		LHVE772FE5GEC/Nb	LHVE772GE8GEB/Nb	LHVE872GE7GEA/Nb	LHVE872GGBHGC/Nb	LHVE642HIPJIP-2/Nb	LHVE742HINJIM-2/Nb
Cooling capacity	kW	879.0	966.9	1055.0	1231.0	1231.0	1406.0
	RT	250.0	275.0	300.1	350.1	350.1	399.9
Capacity adjustment range	%	10%-100%	10%-100%	10%-100%	10%-100%	10%-100%	5%-100%
COP	W/W	6.16	6.16	6.18	6.14	6.17	6.19
IPLV	W/W	8.75	8.74	8.77	8.64	8.70	8.73
Power supply	-M	Ph,V,Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz
Power input	kW	142.6	157.0	170.6	200.5	199.5	227.1
Compressor	Type	-	Semi-hermetic dual screw				
	Starting mode	-	VFD	VFD	VFD	VFD	VFD
	Quantity	-	1	1	1	1	2
Refrigerant	Charge volume	kg	205	230	235	270	280
	Type	-	R134a	R134a	R134a	R134a	R134a
Oil charge volume	L	23	23	28	28	35	36
Evaporator	Type	-	Falling film evaporator				
	Fouling factor	m²·°C /kW	0.0176	0.0176	0.0176	0.0176	0.0176
	Water flow rate	m³/h	151	166	181	212	212
		GPM	666	732	799	932	932
	Pressure drop	kPa	76.0	77.5	76.0	65.1	70.2
		ft.WG	24.9	25.4	24.9	21.4	23.0
	Connection pipe	mm	DN150	DN150	DN150	DN200	DN200
Condenser	Type	-	Horizontal shell and tube condenser				
	Fouling factor	m²·°C /kW	0.0440	0.0440	0.0440	0.0440	0.0440
	Water flow rate	m³/h	189	208	227	265	265
		GPM	832	915	999	1165	1165
	Pressure drop	kPa	55.0	54.7	53.8	67.4	61.3
		ft.WG	18.0	17.9	17.6	22.1	20.1
	Connection pipe	mm	DN200	DN200	DN200	DN200	DN200
Sound pressure level	dB(A)	87.4	88.3	89.2	89.8	90.2	86.8
Dimension (WxDxH)	Outline	mm	3330x1610x1870	3350x1650x1900	3350x1650x1900	3760x1930x2000	4450x1830x2050
	Package	mm	3380x1660x1970	3400x1700x2000	3400x1700x2000	3810x1980x2100	4500x1880x2150
Net/gross/operating weight	kg	4200/4300/4530	4450/4550/4820	4770/4870/5200	5660/5760/6160	6650/6750/7300	7010/7160/7440

Model		LHVE772HIMKIN-2/Nb	LHVE772HILKIL-2/Nb	LHVE772JIPLIL-2/Nb	LHVE872JINMIP-2/Nb	LHVE872KINMIK-2/Nb	
Cooling capacity	kW	1582	1758	1934	2110	2461	
	RT	449.9	500.0	550.1	600.1	699.9	
Capacity adjustment range	%	5%-100%	5%-100%	5%-100%	5%-100%	5%-100%	
COP	W/W	6.15	6.20	6.20	6.21	6.19	
IPLV	W/W	8.69	8.76	8.76	8.77	8.76	
Power supply	-M	Ph,V,Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	
Power input	kW	257.2	283.6	312.0	339.9	397.3	
Compressor	Type	-	Semi-hermetic dual screw				
	Starting mode	-	VFD	VFD	VFD	VFD	VFD
	Quantity	-	2	2	2	2	2
Refrigerant	Charge volume	kg	340	360	420	460	560
	Type	-	R134a	R134a	R134a	R134a	R134a
Oil charge volume	L	36	46	46	56	56	
Evaporator	Type	-	Falling film evaporator				
	Fouling factor	m²·°C /kW	0.0176	0.0176	0.0176	0.0176	0.0176
	Water flow rate	m³/h	272	302	333	363	423
		GPM	1198	1331	1465	1598	1864
	Pressure drop	kPa	77.3	77.0	78.3	76.4	77.2
		ft.WG	25.4	25.3	25.7	25.1	25.3
	Connection pipe	mm	DN200	DN200	DN250	DN250	DN250
Condenser	Type	-	Horizontal shell and tube condenser				
	Fouling factor	m²·°C /kW	0.0440	0.0440	0.0440	0.0440	0.0440
	Water flow rate	m³/h	340	378	416	454	529
		GPM	1498	1664	1831	1997	2330
	Pressure drop	kPa	66.8	68.4	67.6	65.9	67.4
		ft.WG	21.9	22.4	22.2	21.6	22.1
	Connection pipe	mm	DN250	DN250	DN250	DN250	DN250
Sound pressure level	dB(A)	89.1	90.5	91.3	91.6	91.8	
Dimension (WxDxH)	Outline	mm	4500x1850x2100	4500x1850x2100	4500x1950x2150	4500x2000x2200	4500x2150x2200
	Package	mm	4550x1900x2200	4550x1900x2200	4550x2000x2250	4550x2050x2300	4550x2200x2300
Net/gross/operating weight	kg	7400/7550/8180	7680/7830/8530	8050/8200/9010	8900/9050/9950	10050/10200/11250	

## LHVE-P Series



Model		LHVE542DD4ED3/Nb	LHVE542DE5EE2/Nb	LHVE542EE4EE1/Nb	LHVE642EE5FE2/Nb	LHVE742FE8GE7/Nb	LHVE772FE4GE5/Nb	
Cooling capacity	kW	351.6	439.5	527.4	615.3	703.2	791.1	
	RT	100.0	125.0	150.0	175.0	200.0	225.0	
Capacity adjustment range	%	10%-100%	10%-100%	10%-100%	10%-100%	10%-100%	10%-100%	
COP	W/W	6.25	6.23	6.18	6.29	6.28	6.35	
IPLV	W/W	8.84	8.80	8.75	8.89	8.89	8.99	
Power supply	-M	Ph,V,Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	
Power input	kW	56.3	70.5	85.3	97.8	112.0	124.5	
Compressor	Type	-	Semi-hermetic dual screw					
	Starting mode	-	VFD	VFD	VFD	VFD	VFD	
Refrigerant	Quantity	-	1	1	1	1	1	
	Charge volume	kg	100	120	150	175	195	205
Oil charge volume	Type	-	R134a	R134a	R134a	R134a	R134a	
	L	13	13	13	18	18	18	
Evaporator	Type	-	Falling film evaporator					
	Fouling factor	m <sup>2</sup> ·°C /kW	0.0176	0.0176	0.0176	0.0176	0.0176	
	Water flow rate	m <sup>3</sup> /h	60	76	91	106	121	136
		GPM	266	333	399	466	533	599
	Pressure drop	kPa	42.5	52.3	58.7	53.0	58.3	55.4
		ft.WG	13.9	17.2	19.3	17.4	19.1	18.2
	Connection pipe	mm	DN100	DN100	DN125	DN150	DN150	DN150
Condenser	Type	-	Horizontal shell and tube condenser					
	Fouling factor	m <sup>2</sup> ·°C /kW	0.0440	0.0440	0.0440	0.0440	0.0440	
	Water flow rate	m <sup>3</sup> /h	76	94	113	132	151	170
		GPM	333	416	499	582	666	749
	Pressure drop	kPa	35.7	44.9	50.4	45.8	48.9	50.8
		ft.WG	11.7	14.7	16.5	15.0	16.0	16.7
	Connection pipe	mm	DN125	DN125	DN125	DN150	DN150	DN150
Sound pressure level	dB(A)	81.2	83.5	84.5	85.3	86.3	86.8	
Dimension (WxDxH)	Outline	mm	2950x1160x2070	3290x1160x2070	3290x1160x2070	3290x1250x2150	3300x1650x1860	3300x1650x1860
	Package	mm	3000x1210x2170	3340x1210x2170	3340x1210x2170	3340x1300x2250	3350x1700x1960	3350x1700x1960
Net/gross/operating weight	kg	2850/2950/3080	2910/3010/3100	3060/3160/3250	3430/3530/3710	4010/4110/4350	4170/4270/4510	

Model		LHVE772GE7HE3/Nb	LHVE772GE6HE2/Nb	LHVE872GG5JGD/Nb	LHVE872GG4JGC/Nb	LHVE642HFJD-2/Nb	LHVE742HIEJB-2/Nb	
Cooling capacity	kW	879.0	966.9	1055	1231	1231	1406	
	RT	250.0	275.0	300.1	350.1	350.1	399.9	
Capacity adjustment range	%	10%-100%	10%-100%	10%-100%	10%-100%	10%-100%	5%-100%	
COP	W/W	6.36	6.36	6.42	6.37	6.38	6.40	
IPLV	W/W	9.00	9.00	9.09	8.98	9.04	9.06	
Power supply	-M	Ph,V,Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	
Power input	kW	138.2	152.0	164.3	193.3	193.1	219.8	
Compressor	Type	-	Semi-hermetic dual screw					
	Starting mode	-	VFD	VFD	VFD	VFD	VFD	
Refrigerant	Quantity	-	1	1	1	1	2	
	Charge volume	kg	215	230	235	270	280	290
Oil charge volume	Type	-	R134a	R134a	R134a	R134a	R134a	
	L	23	23	28	28	35	36	
Evaporator	Type	-	Falling film evaporator					
	Fouling factor	m <sup>2</sup> ·°C /kW	0.0176	0.0176	0.0176	0.0176	0.0176	
	Water flow rate	m <sup>3</sup> /h	60	76	91	106	121	136
		GPM	266	333	399	466	533	599
	Pressure drop	kPa	42.5	52.3	58.7	53.0	58.3	55.4
		ft.WG	13.9	17.2	19.3	17.4	19.1	18.2
	Connection pipe	mm	DN100	DN100	DN125	DN150	DN150	
Condenser	Type	-	Horizontal shell and tube condenser					
	Fouling factor	m <sup>2</sup> ·°C /kW	0.0440	0.0440	0.0440	0.0440	0.0440	
	Water flow rate	m <sup>3</sup> /h	76	94	113	132	151	170
		GPM	333	416	499	582	666	749
	Pressure drop	kPa	35.7	44.9	50.4	45.8	48.9	50.8
		ft.WG	11.7	14.7	16.5	15.0	16.0	16.7
	Connection pipe	mm	DN125	DN125	DN125	DN150	DN150	
Sound pressure level	dB(A)	87.4	88.3	89.2	89.8	90.2	86.8	
Dimension (WxDxH)	Outline	mm	3350x1700x1950	3350x1700x1950	3760x1950x2050	3760x1950x2050	4450x1830x2050	4450x1830x2050
	Package	mm	3400x1750x2050	3400x1750x2050	3810x2000x2150	3810x2000x2150	4500x1880x2150	4500x1880x2150
Net/gross/operating weight	kg	4800/4900/5100	4870/4970/5250	6100/6200/6500	5020/5120/6650	6750/6850/7290	7110/7260/7680	

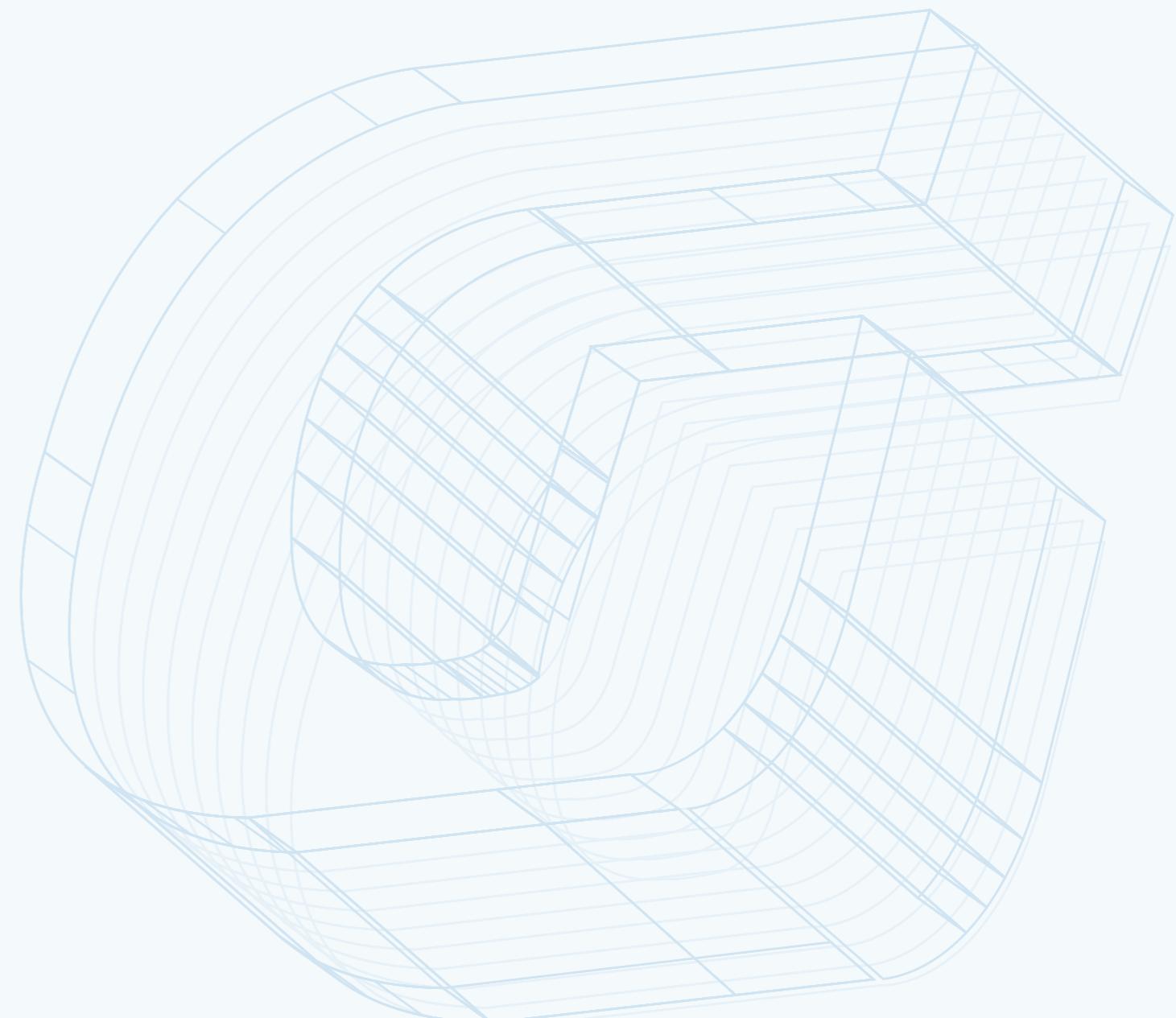




Model		LHVE672HICKIC-2/Nb	LHVE772JIFLIF-2/Nb	LHVE772JIDLIE-2/Nb	LHVE852KIFMIF-2/Nb	LHVE872KIENIE-2/Nb
Cooling capacity	kW	1582	1758	1934	2110	2461
	RT	449.9	500.0	550.1	600.1	699.9
Capacity adjustment range	%	5%-100%	5%-100%	5%-100%	5%-100%	5%-100%
COP	W/W	6.40	6.48	6.46	6.47	6.47
IPLV	W/W	9.06	9.18	9.15	9.18	9.18
Power supply	-M	Ph,V,Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz	380V 3~ 50Hz
Power input		kW	247.3	271.5	299.3	326.2
Compressor	Type	-	Semi-hermetic dual screw			
	Starting mode	-	VFD	VFD	VFD	VFD
	Quantity	-	2	2	2	2
Refrigerant	Charge volume	kg	340	420	460	560
	Type	-	R134a	R134a	R134a	R134a
Oil charge volume		L	36	46	46	56
Evaporator	Type	-	Falling film evaporator			
	Fouling factor	$m^2 \cdot ^\circ C / kW$	0.0176	0.0176	0.0176	0.0176
	Water flow rate	$m^3/h$	272	302	333	363
		GPM	1198	1331	1465	1598
	Pressure drop	kPa	89.3	81.6	85.3	79.5
	Connection pipe	ft.WG	29.3	26.8	28.0	26.1
Condenser	Type	-	Horizontal shell and tube condenser			
	Fouling factor	$m^2 \cdot ^\circ C / kW$	0.0440	0.0440	0.0440	0.0440
	Water flow rate	$m^3/h$	340	378	416	454
		GPM	1498	1664	1831	1997
	Pressure drop	kPa	80.7	77.4	81.1	80.8
	Connection pipe	ft.WG	26.5	25.4	26.6	25.6
Sound pressure level		mm	DN200	DN200	DN250	DN250
Dimension (WxDxH)	Outline	mm	4500x1850x2100	4500x1950x2150	4500x1950x2150	4500x2200x2250
	Package	mm	4550x1900x2200	4550x2000x2250	4550x2000x2250	4550x2250x2350
Net/gross/operating weight	kg	7400/7550/8160	8250/8400/9080	9000/9150/9900	10260/10410/11290	10460/10610/11506

Note:

Working conditions: Leaving chilled water temperature 7°C ,water flow 0.172[ $m^3/(h \cdot kw)$ ]; Entering cooling water temperature 30°C , water flow 0.215[ $m^3/(h \cdot kw)$ ]; Fouling factor at the chilled water side 0.0176  $m^2 \cdot ^\circ C / kW$ , fouling factor at the cooling water side 0.044  $m^2 \cdot ^\circ C / kW$





# CENTRIFUGAL CHILLER

---

CVE Series Permanent Magnet  
Synchronous Inverter Centrifugal  
Chiller



# CVE Series Permanent Magnet Synchronous Inverter Centrifugal Chiller

R134a INVERTER

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.



- High-efficiency and energy-saving
- Direct-driven impeller
- Permanent-magnet motor
- Airborne inverter
- 2-stage compression
- Wide operation range
- Advanced control

- » 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 1800rp. 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 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.



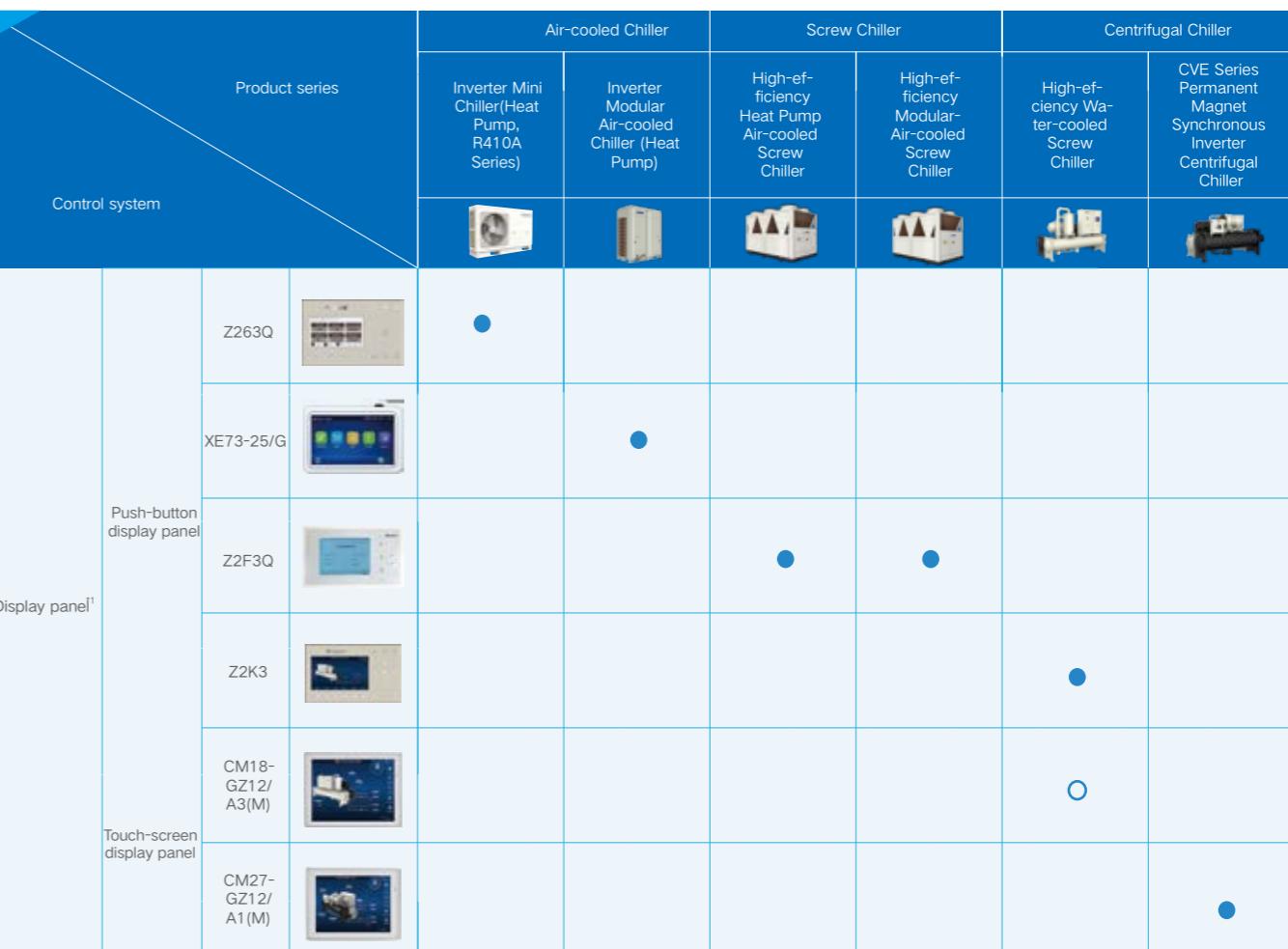
Operating Range			
Chilled Water		Cooling Water	
Outlet water temp.(°C)	Temp. Difference between Inlet&Outlet(°C)	Inlet water temp.(°C)	Temp. Difference between Inlet&Outlet(°C)
5~15	2.5~8	12~35	3.5~8

Model		CVE210GF5EF4	CVE220GF3EF2	CVE230GF2EF1	CVE310HG7GG7	CVE320KG4HG7
Cooling capacity	kW	879	1055	1231	1406	1582
	RT	250	300	350	400	450
EER	W/W	6.06	6.12	6.25	6.36	6.54
	IPLV	W/W	9.85	10.00	10.73	10.73
Power supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
	Power input	kW	145.1	172.4	196.9	221.1
RLA	A	222.7	264.6	302.2	339.3	371.3
	Capacity adjustment range	%	10~100	10~100	10~100	10~100
Compressor	Type	-	Centrifugal	Centrifugal	Centrifugal	Centrifugal
	Starting mode	-	Variable frequency start	Variable frequency start	Variable frequency start	Variable frequency start
Refrigerant	Quantity		1	1	1	1
	Type	-	R134a	R134a	R134a	R134a
oil charge volume	charge volume	kg	250	275	300	350
	oil charge volume	L	25	25	25	25
Evaporator	Type		Falling film	Falling film	Falling film	Falling film
	Fouling factor	m <sup>2</sup> · °C /kW	0.018	0.018	0.018	0.018
Condenser	Water flow volume	L/s	37.9	45.4	53.0	60.6
	Water flow volume	GPM	600.0	720.0	840.0	960.0
Condenser	Pressure drop	kPa	62.6	62.4	68.9	71.7
	Pressure drop	ft.WG	20.5	20.5	22.6	23.5
Condenser	Number of passes	-	2	2	2	2
	Connection pipe	mm	DN150	DN150	DN150	DN200
Condenser	Type	-	Shell and Tube	Shell and Tube	Shell and Tube	Shell and Tube
	Fouling factor	m <sup>2</sup> · °C /W	0.044	0.044	0.044	0.044
Condenser	Water flow volume	L/s	47.4	56.8	66.1	75.4
	Water flow volume	GPM	751.7	900.7	1047.8	1194.6
Condenser	Pressure drop	kPa	53.3	54.3	60.0	57.7
	Pressure drop	ft.WG	17.5	17.8	19.7	18.9
Condenser	Number of passes	-	2	2	2	2
	Connection pipe	mm	DN200	DN200	DN200	DN250
Condenser	Sound pressure level (Max.)	dBA(A)	80	80	80	82
	Dimension (WxDxH)	mm	3650x1490x1900	3650x1490x1900	3650x1490x1900	3900x1590x1900
Condenser	Package	mm	3700x1800x2000	3700x1800x2000	3700x1800x2000	3980x1800x2100
	Net/gross/operating weight		5155/5650/5600	5382/5880/5850	5485/6000/6000	5770/6650/6400
Condenser	Net/gross/operating weight		5155/5650/5600	5382/5880/5850	5485/6000/6000	5770/6650/6400

Model		CVE320KG3HG8	CVE410MHDJHD	CVE410MHJHC	CVE420NHCJHB	CVE420NHBJHA
Cooling capacity	kW	1758	1934	2110	2285	2461
	RT	500	550	600	650	700
EER	W/W	6.44	6.62	6.51	6.63	6.54
	IPLV	W/W	10.99	10.84	11.05	11.10
Power supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
	Power input	kW	273.0	292.1	324.1	344.7
RLA	A	419.0	448.3	497.4	529.0	577.5
	Capacity adjustment range	%	10~100	10~100	10~100	10~100
Compressor	Type	-	Centrifugal	Centrifugal	Centrifugal	Centrifugal
	Starting mode	-	Variable frequency start	Variable frequency start	Variable frequency start	Variable frequency start
Refrigerant	Quantity		1	1	1	1
	Type	-	R134a	R134a	R134a	R134a
oil charge volume	charge volume	kg	400	450	450	480
	oil charge volume	L	25	25	25	25
Evaporator	Type		Falling film	Falling film	Falling film	Falling film
	Fouling factor	m <sup>2</sup> · °C /kW	0.018	0.018	0.018	0.018
Condenser	Water flow volume	L/s	75.7	83.3	90.8	98.4
	Water flow volume	GPM	1200.0	1320.0	1440.0	1560.0
Condenser	Pressure drop	kPa	61.5	47.1	49.2	50.4
	Pressure drop	ft.WG	20.2	15.4	16.1	16.5
Condenser	Number of passes	-	2	2	2	2
	Connection pipe	mm	DN250	DN250	DN250	DN250
Condenser	Type	-	Shell and Tube	Shell and Tube	Shell and Tube	Shell and Tube
	Fouling factor	m <sup>2</sup> · °C /W	0.044	0.044	0.044	0.044
Condenser	Water flow volume	L/s	94.0	103.1	112.7	121.8
	Water flow volume	GPM	1490.7	1634.3	1786.5	1930.8
Condenser	Pressure drop	kPa	49.1	46.7	49.6	50.0
	Pressure drop	ft.WG	16.1	15.3	16.3	16.4
Condenser	Number of passes	-	2	2	2	2
	Connection pipe	mm	DN250	DN250	DN250	DN250
Condenser	Sound pressure level (Max.)	dBA(A)	82	84	84	84
	Dimension (WxDxH)	mm	3900x1765x2200	4250x1905x2250	4250x1975x2220	4250x1975x2220
Condenser	Package	mm	3980x1900x2350	4350X2050X2450	4350X2100X2450	4350X2100X2450
	Net/gross/operating weight		7125/7950/7800	7700/8500/8450	7850/8500/8600	8177/8900/9000
Condenser	Net/gross/operating weight		7125/7950/7800	7700/8500/8450	7850/8500/8600	8300/9050/9100

Model		CVE510PHEKHC	CVE510PHDKHB	CVE520PHCKHA	CVE520QHCKHB	CVE530QHAKHA
Cooling capacity	kW	2637	2813	2989	3164	3340
	RT	750	800	850	900	950
EER	W/W	6.71	6.63	6.64	6.57	6.65
IPLV	W/W	11.10	11.25	11.00	11.13	11.27
Power supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
Power input	kW	393	424.3	450.1	481.6	502.3
RLA	A	603.2	651.2	690.8	739.1	770.9
Capacity adjustment range	%	10~100	10~100	10~100	10~100	10~100
Compressor	Type	-	Centrifugal	Centrifugal	Centrifugal	Centrifugal
	Starting mode	-	Variable frequency start	Variable frequency start	Variable frequency start	Variable frequency start
Quantity		1	1	1	1	1
Refrigerant	Type	-	R134a	R134a	R134a	R134a
	charge volume	kg	550	550	575	650
oil charge volume	L	25	25	25	25	25
Evaporator	Type		Falling film	Falling film	Falling film	Falling film
	Fouling factor	m <sup>2</sup> · °C /kW	0.018	0.018	0.018	0.018
	L/s	113.6	121.1	128.7	136.3	143.8
	GPM	1800.8	1919.7	2040.2	2160.6	2279.5
	kPa	56.7	56.9	52.6	44.1	42.2
	ft.WG	18.6	18.7	17.3	14.5	13.8
Number of passes	-	2	2	2	2	2
Connection pipe	mm	DN300	DN300	DN300	DN300	DN300
Condenser	Type	-	Shell and Tube	Shell and Tube	Shell and Tube	Shell and Tube
	Fouling factor	m <sup>2</sup> · °C /W	0.044	0.044	0.044	0.044
	Water flow volume	L/s	140.3	149.9	159.2	168.8
	GPM	2224.0	2376.2	2523.6	2675.8	2820.1
	kPa	50.9	51.0	53.7	63.1	65.4
	ft.WG	16.7	16.7	17.6	20.7	21.5
Number of passes	-	2	2	2	2	2
Connection pipe	mm	DN300	DN300	DN300	DN300	DN300
Sound pressure level (Max.)	dB(A)	84	84	84	84	84
Dimension (WxDxH)	Outline	mm	4250x2080x2450	4250x2080x2450	4250x2080x2450	4250x2130x2450
Dimension (WxDxH)	Package	mm	4350X2200X2600	4350X2200X2600	4350X2200X2600	4350X2400X2650
Net/gross/operating weight		9200/10000/10200	9369/10150/10350	9501/10300/10550	9832/10800/10900	9832/10800/11000

Model		CVE532QIGMIE	CVE620QICMIC	CVE620QIBMB	CVE630RJCMJF
Cooling capacity	kW	3340	3516	3868	4219
	RT	950	1000	1100	1200
EER	W/W	6.67	6.68	6.60	6.75
IPLV	W/W	10.36	10.91	11.19	11.06
Power supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50
Power input	kW	500.8	526.4	586.0	625.1
RLA	A	768.6	807.9	899.4	959.4
Capacity adjustment range	%	10~100	10~100	10~100	10~100
Compressor	Type	-	Centrifugal	Centrifugal	Centrifugal
	Starting mode	-	Variable frequency start	Variable frequency start	Variable frequency start
Quantity		1	1	1	1
Refrigerant	Type	-	R134a	R134a	R134a
	charge volume	kg	900	900	900
oil charge volume	L	25	50	50	50
Evaporator	Type		Falling film	Falling film	Falling film
	Fouling factor	m <sup>2</sup> · °C /kW	0.018	0.018	0.018
	L/s	143.8	151.4	166.5	181.7
	GPM	2279.5	2400.0	2639.4	2880.3
	kPa	56.2	62.7	65.6	67.1
	ft.WG	18.4	20.6	21.5	22.0
Number of passes	-	2	2	2	2
Connection pipe	mm	DN300	DN300	DN300	DN350
Condenser	Type	-	Shell and Tube	Shell and Tube	Shell and Tube
	Fouling factor	m <sup>2</sup> · °C /W	0.044	0.044	0.044
	Water flow volume	L/s	177.9	187.2	206.2
	GPM	2820.1	2967.5	3268.7	3555.6
	kPa	67.2	57.9	58.0	72.9
	ft.WG	22.0	19.0	19.0	23.9
Number of passes	-	2	2	2	2
Connection pipe	mm	DN300	DN300	DN300	DN350
Sound pressure level (Max.)	dB(A)	84	85	85	85
Dimension (WxDxH)	Outline	mm	4600x2210x2500	4540x2210x2530	4540x2210x2530
Dimension (WxDxH)	Package	mm	4800X2350X2700	4650X2350X2750	4650X2350X2750
Net/gross/operating weight		10330/12000/11700	10708/12300/12150	11091/12300/12500	12300/14500/14000





# TERMINAL

---

Fan Coil Unit

ERV

Air Curtain



# Fan Coil Unit

INVERTER

## Vertical Mounted Type



» Vertical-mounted type fan coil unit has simple look, flexible design and can be easily installed.



Inner groove copper



Washable filter



Quiet function



Multi fan speed



Compact design

» 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 removal and maintenance.



Item	Operation Ambient Temperature Range(°C)	Water Supply Temperature Range(°C)
Cooling	16~40	≥ 5
Heating	10~35	≤ 65

Model	FP-22LM/D-K	FP-34LM/D-K	FP-51LM/D-K	FP-68LM/D-K	FP-85LM/D-K
Air flow volume(H/M/L)	m³/h CFM	300/250/200 177/147/118	400/350/300 235/206/177	580/500/420 341/294/247	680/530/380 400/312/224
Capacity	Cooling/Heating	kW V/Ph/Hz	1.4/2.0 220~240V~50Hz	1.9/2.3 220~240V~50Hz	2.8/3.4 220~240V~50Hz
Power system	Type				
	Input	kW L/s	0.035 0.07	0.046 0.09	0.056 0.14
	Cooling Water flow volume	GPM L/s	1.10 0.09	1.40 0.11	2.20 0.17
	Heating Water flow volume	GPM L/s	1.40 0.09	1.70 0.11	2.70 0.19
Water system	Cooling Pressure drop	kPa FtWG	10 3.3	15 4.9	18 5.9
	Heating Pressure drop	kPa FtWG	20 6.6	22 7.2	27 8.9
	Sound pressure level*2	dB(A)	36	38	39
Connection pipe	Water inlet & outlet(inner groove)	Inch mm	Rc3/4 22	Rc3/4 22	Rc3/4 22
	Condensed water drain(outer groove)				
Dimension (W × D × H)	Outline	mm	895 × 680 × 230	895 × 680 × 230	1050 × 680 × 230
	Package	mm	1120 × 690 × 285	1120 × 690 × 285	1275 × 690 × 285
Net weight/Gross weight	kg	23/30	23/30	27/34	27/34
Loading quantity	40'GP/40'HQ	Set	238/272	238/272	189/216
Thermostat		-	Unit-mounted	Unit-mounted	Unit-mounted

Model	FP-102LM/D-K	FP-119LM/D-K	FP-136LM/D-K	FP-170LM/D-K	FP-204LM/D-K
Air flow volume(H/M/L)	m³/h CFM	1000/740/510 589/435/300	1100/860/610 647/506/359	1100/870/620 647/512/364	1700/1275/850 1000/750/500
Capacity	Cooling/Heating	kW V/Ph/Hz	5.0/5.9 220~240V~50Hz	5.3/6.45 220~240V~50Hz	5.9/6.8 220~240V~50Hz
Power system	Type				
	Input	kW L/s	0.110 0.25	0.124 0.26	0.128 0.28
	Cooling Water flow volume	GPM L/s	4.00 0.28	4.10 0.30	4.40 0.32
	Heating Water flow volume	GPM L/s	4.40 0.28	4.80 0.30	5.10 0.32
Water system	Cooling Pressure drop	kPa FtWG	18 5.9	20 6.6	25 8.2
	Heating Pressure drop	kPa FtWG	25 8.2	27 8.9	30 9.8
	Sound pressure level*2	dB(A)	48	50	50
Connection pipe	Water inlet & outlet(inner groove)	Inch mm	Rc3/4 22	Rc3/4 22	Rc3/4 22
	Condensed water drain(outer groove)				
Dimension (W × D × H)	Outline	mm	1350 × 680 × 230	1350 × 680 × 230	1350 × 680 × 230
	Package	mm	1625 × 690 × 285	1625 × 690 × 285	1625 × 690 × 285
Net weight/Gross weight	kg	33/41	33/41	33/41	47/57.5
Loading quantity	40'GP/40'HQ	Set	147/168	147/168	147/168
Thermostat		-	Unit-mounted	Unit-mounted	Unit-mounted

Notes: The data are tested under these testing conditions as below:

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

## 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.



(Without air return box)

(With air return box)



### Inner groove copper



### Washable filter



### Quiet function



### Multi fan speed



Compact design

- » 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.



Item	Operation Ambient Temperature Range(°C)	Water Supply Temperature Range(°C)
Cooling	14-40	≥ 5
Heating	10-35	≤ 80

## 2 Pipes/2 Rows/High ESP Type

Model		FP-34WAH/GHL-K	FP-51WAH/GHL-K	FP-68WAH/GHL-K	FP-85WAH/GHL-K
Air flow volume(H/M/L)	m³/h	450/338/225	590/428/225	750/563/375	930/698/465
	CFM	265/119/132	347/251/168	440/330/221	547/410/274
ESP		Pa	0	0	0
Capacity	Cooling/Heating	kW	2.00/2.30	3.10/3.50	3.55/4.50
Power system	Power supply	V/Ph/Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz
	Input	kW	0.048	0.057	0.072
Water system	Cooling water flow volume	L/s	0.09	0.15	0.17
		GPM	1.43	2.38	2.70
	Heating water flow volume	L/s	0.11	0.17	0.22
		GPM	1.75	2.70	3.49
	Cooling pressure drop	kPa	23.00	41.00	32.00
		Ft.WG	7.54	13.45	10.50
	Heating pressure drop	kPa	25.00	42.00	40.00
		Ft.WG	8.20	13.78	13.12
Sound pressure level		dB(A)	39	39	41
Dimension (W×D×H)	Outline	mm	680×520×235	800×520×235	900×520×235
	Package	mm	773×603×325	893×603×325	993×603×325
Net weight/Gross weight		kg	14.5/19.2	17.0/21.9	18.9/24.0
Connection pipe	Water inlet & outlet(inner thread)	Inch	Rc3/4	Rc3/4	Rc3/4
	Condensed water drain(outer thread)	Inch	R23/4	R23/4	R23/4
Loading quantity	40'GP/40'HQ	Set	324/432	273/364	249/332
Optional	Wired remote controller	-	WK-010PV / WK-010PW / WK-011PM / WK-010PM		

Model		FP-102WAH/GHL-K	FP-136WAH/GHL-K	FP-170WAH/GHL-K	FP-204WAH/GHL-K
Air flow volume(H/M/L)	m³/h	1100/825/550	1400/1050/700	1700/1275/850	2000/1500/1000
	CFM	647/458/324	824/618/412	1000/750/500	1176/882/588
ESP		Pa	0	0	0
Capacity	Cooling/Heating	kW	5.2/6.3	6.9/8.2	7.2/9.2
Power system	Power supply	V/Ph/Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz
	Input	kW	0.111	0.152	0.185
Water system	Cooling water flow volume	L/s	0.25	0.33	0.34
		GPM	3.97	5.24	5.40
	Heating water flow volume	L/s	0.30	0.39	0.44
		GPM	4.76	6.19	6.98
	Cooling pressure drop	kPa	37.00	47.00	42.00
		Ft.WG	12.14	15.42	13.78
	Heating pressure drop	kPa	46.00	48.00	45.00
		Ft.WG	15.09	15.74	14.76
Sound pressure level		dB(A)	49	48	49
Dimension (W×D×H)	Outline	mm	1080 × 520 × 235	1380 × 520 × 235	1520 × 520 × 235
	Package	mm	1173 × 603 × 325	1473 × 603 × 325	1608 × 603 × 325
Net weight/Gross weight		kg	21.9/27.5	31.5/37.5	34.1/41.6
Connection pipe	Water inlet & outlet(inner thread)	Inch	Rc3/4	Rc3/4	Rc3/4
	Condensed water drain(outer thread)	Inch	R23/4	R23/4	R23/4
Loading quantity	40'GP/40'HQ	Set	210/280	168/224	150/200
Optional	Wired remote controller	-	WK-010PV / WK-010PW / WK-011PM / WK-010PM		

## 2 Pipes/3 Rows/Standard 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	720/540/360	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	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
Power system	Power Supply	V/Ph/Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz
	Input	kW	0.035	0.058	0.066	0.078	0.102	0.161	0.192
Water system	Cooling water flow volume	L/s	0.10	0.15	0.19	0.23	0.28	0.36	0.42
		GPM	1.59	2.38	3.02	3.65	4.44	5.71	7.94
	Heating water flow volume	L/s	0.11	0.18	0.23	0.26	0.32	0.43	0.49
		GPM	1.75	2.86	3.65	4.13	5.08	6.83	9.21
Cooling pressure drop	kPa	20.00	27.00	25.00	35.00	45.00	44.00	32.00	39.00
	Ft.WG	6.56	8.86	8.20	11.48	14.76	14.43	10.50	12.79
	Heating pressure drop	kPa	22.00	31.00	31.00	42.00	47.00	47.00	38.00
Sound pressure level	Ft.WG	7.22	10.17	10.17	13.78	15.42	15.42	12.46	13.45
	dB(A)	37.0	39.0	40.5	44.0	48.0	47.0	48.0	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	773×603×325	893×603×325	993×603×325	1093×603×325	1173×603×325	1473×603×325	1608×603×325
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	34.5/42.0	38.0/44.5
Connection pipe	Water inlet & outlet(inner thread)	Inch	Rc3/4	Rc3/4	Rc3/4	Rc3/4	Rc3/4	Rc3/4	Rc3/4
	Condensed water drain(outer thread)	Inch	R23/4	R23/4	R23/4	R23/4	R23/4	R23/4	R23/4
Loading quantity	40'GP/40'HQ	Set	324/432	273/364	249/332	225/300	210/280	168/224	150/200
Optional	Wired remote controller	-	WK-010PV / WK-010PW / WK-011PM / WK-010PM						

## 2 Pipes/3 Rows/High ESP Type

Model		FP-34WAHS/ GHL-K	FP-51WAHS/ GHL-K	FP-68WAHS/ GHL-K	FP-85WAHS/ GHL-K	FP-102WAHS/ GHL-K	FP-136WAHS/ GHL-K	FP-170WAHS/ GHL-K	FP-204WAHS/ GHL-K
Air flow volume(H/M/L)	m3/h	450/338/225	570/428/285	750/563/375	930/698/465	1100/825/550	1400/1050/700	1700/1275/850	2000/1500/1000
	CFM	265/119/132	335/251/168	441/331/221	547/410/274	647/485/324	824/618/412	1000/750/500	1176/882/588
ESP	Pa	0	0	0	0	0	0	0	0
Capacity	Cooling/Heating	kW	2.5/2.8	3.3/3.8	4.2/5.1	4.9/5.7	6.1/6.9	7.8/9.0	9.0/10.9
Power system	Power Supply	V/Ph/Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz
	Input	kW	0.046	0.057	0.072	0.083	0.108	0.164	0.185
Water system	Cooling water flow volume	L/s	0.12	0.16	0.20	0.23	0.29	0.37	0.43
		GPM	1.90	2.54	3.17	3.65	4.60	5.87	6.83
	Heating water flow volume	L/s	0.13	0.18	0.24	0.27	0.33	0.43	0.50
		GPM	2.06	2.86	3.81	4.29	5.24	6.83	7.94
Cooling pressure drop	kPa	26.00	27.00	27.00	35.00	45.00	46.00	39.00	39.00
	Ft.WG	8.53	8.86	8.86	11.48	14.76	15.09	12.79	12.79
	Heating pressure drop	kPa	31.00	30.00	31.00	43.00	49.00	47.00	40.00
Sound pressure level	Ft.WG	10.17	9.84	10.17	14.10	16.07	15.42	13.12	13.78
	dB(A)	39	40	42	46	49	49	49	52
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	773×603×325	893×603×325	993×603×325	1093×603×325	1173×603×325	1473×603×325	1608×603×325
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	34.5/42.0	38.0/44.5
Connection pipe	Water inlet & outlet(inner thread)	Inch	Rc3/4	Rc3/4	Rc3/4	Rc3/4	Rc3/4	Rc3/4	Rc3/4
	Condensed water drain(outer thread)	Inch	R23/4	R23/4	R23/4	R23/4	R23/4	R23/4	R23/4
Loading quantity	40'GP/40'HQ	Set	324/432	273/364	249/332	225/300	210/280	168/224	150/200
Optional	Wired remote controller	-	WK-010PV / WK-010PW / WK-011PM / WK-010PM						

## 4 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	0
Capacity	Cooling/Heating	kW	2.45/3.40	3.70/4.70	4.55/5.70	5.40/6.350	6.35/7.55	8.3/09.90	10.0/11.5
Power system	Power Supply	V/Ph/Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz
	Input	kW	0.045	0.066	0.071	0.09	0.113	0.169	0.186
Water system	Cooling water flow volume	L/s	0.12	0.18	0.22	0.26	0.30	0.40	0.48
		GPM	1.85	2.80	3.44	4.08	4.80	6.27	7.56
	Heating water flow volume								

## Fan Coil Unit

### Cassette Type

							
Quiet function	Multi fan speed	Compact design	Self-diagnosis	Inner groove copper	Built-in drain pump	Washable filter	Anti-cold function

- » Optimized air duct design to 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.



Item	Operation Ambient Temperature Range(°C)	Water Supply Temperature Range(°C)
Cooling	16~40	≥ 5
Heating	10~35	≤ 65

### 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	660/560/460	800/665/590	940/770/670	1090/860/760
	CFM	300/235/176	388/330/270	471/385/347	470/453/394	641/506/447
Capacity	Cooling/Heating	kW	2.75/3.40	3.40/3.80	4.50/5.40	5.00/6.10
Power system	Power supply	V/Ph/Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
	Input	kW	0.073	0.078	0.081	0.110
Water system	Cooling water flow volume	L/s	0.13	0.18	0.22	0.24
		GPM	2.10	2.80	3.50	3.80
	Heating water flow volume	L/s	0.16	0.20	0.27	0.29
		GPM	2.50	3.10	4.30	4.60
	Cooling pressure drop	kPa	30	38	27	34
		Ft.WG	9.8	12.5	8.9	11.2
	Heating pressure drop	kPa	30	38	37	46
		Ft.WG	9.8	12.5	12.1	15.1
Sound pressure level		dB(A)	46	46	39	49
Connection pipe	Water inlet & outlet(inner thread)	Inch	Rc3/4	Rc3/4	Rc3/4	Rc3/4
	Condensed water drain(outer thread)	mm	31	31	31	31
Body	Dimension (W×D×H)	mm	592x592x240	592x592x240	840x840x190	840x840x240
	Net weight/Gross weight	kg	20/24	20/24	25/33	25/33
Panel	Dimension (W×D×H)	mm	670x670x85	670x670x85	950x950x85	950x950x85
	Net weight/Gross weight	kg	3.5/5.0	3.5/5.0	7.0/11.0	7.0/11.0
Loading quantity	40'GP/40'HQ	Set	258/291	258/291	131/147	121/134
Standard	Wireless remote controller	-	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)
Optional	Wired remote controller	-	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)

Model		FP-140XD/B-T(E)	FP-160XD/B-T(E)	FP-180XD/B-T(E)	FP-200XD/D-K(E)
Air flow volume(H/M/L)	m3/h	1400/1160/1000	1500/1200/1000	1640/1360/1200	1700/1430/1150
	CFM	823/682/588	882/706/588	964/800/706	1000/841/676
Capacity	Cooling/Heating	kW	7.40/8.40	8.40/9.00	9.50/10.50
Power system	Power supply	V/Ph/Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
	Input	kW	0.143	0.152	0.160
Water system	Cooling water flow volume	L/s	0.35	0.40	0.45
		GPM	5.50	6.30	7.10
	Heating water flow volume	L/s	0.40	0.43	0.49
		GPM	6.30	6.80	7.80
	Cooling pressure drop	kPa	30	30	33
		Ft.WG	9.8	9.8	10.8
	Heating pressure drop	kPa	38	36	41
		Ft.WG	12.4	11.8	13.5
Sound pressure level	dB(A)	50	51	50	55
Connection pipe	Water inlet & outlet(inner thread)	Inch	Rc3/4	Rc3/4	Rc3/4
	Condensed water drain(outer thread)	mm	31	31	31
Body	Dimension (W×D×H)	mm	840×840×240	840×840×240	840×840×320
	Net weight/Gross weight	kg	963×963×325	963×963×409	963×963×409
Panel	Dimension (W×D×H)	mm	950×950×85	950×950×85	950×950×85
	Net weight/Gross weight	kg	1033×1038×133	1033×1038×133	1033×1038×133
Loading quantity	40'GP/40'HQ	Set	121/134	121/134	117/133
Standard	Wireless remote controller	-	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)
Optional	Wired remote controller	-	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)

### 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	680/618/571	850/764/697	1250/1108/1014	1700/1525/1421
	CFM	400/364/336	500/450/410	736/652/597	1000/897/836
Capacity	Cooling/Heating	kW	3.5/5.8	4.5/6.8	6.0/9.2
Power system	Power supply	V/Ph/Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
	Input	kW	0.082	0.090	0.135
Water system	Cooling water flow volume	L/s	0.21	0.24	0.29
		GPM	3.30	3.80	4.60
	Heating water flow volume	L/s	0.17	0.19	0.27
		GPM	2.70	3.00	4.30
	Cooling pressure drop	kPa	44	53	41
		Ft.WG	14.4	17.4	13.4
	Heating pressure drop	kPa	76	83	84
		Ft.WG	24.9	27.2	27.5
Sound pressure level	dB(A)	39	40	43	50
Connection pipe	Water inlet & outlet(inner thread)	Inch	Rc3/4	Rc3/4	Rc3/4
	Condensed water drain(outer thread)	mm	31	31	31
Body	Dimension (W×D×H)	mm	840×840×190	840×840×240	840×840×320
	Net weight/Gross weight	kg	963×963×272	963×963×325	963×963×409
Panel	Dimension (W×D×H)	mm	950×950×85	950×950×85	950×950×85
	Net weight/Gross weight	kg	1033×1038×133	1033×1038×133	1033×1038×133
Loading quantity	40'GP/40'HQ	Set	131/147	131/147	121/134
Standard	Wireless remote controller	-	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)
Optional	Wired remote controller	-	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)

Notes : The data are tested under these testing conditions as below:

Item	Nominal test condition (temperature)			
	Inlet Air	Water	Inlet(°C)	Outlet(°C)
2-Pipes	Cooling	27	19	7
	Heating	20	≤ 15	45
4-Pipes	Cooling	27	19	7
	Heating	20	≤ 15	65

## Fan Coil Unit

### Floor Ceiling Type



- 
- 
- 
- 
- 
- 
- 
- 

» Optimized air duct design to greatly improve the fan efficiency and lower the operation noise.

» The fan will be operated only if the chilled water inlet temperature is lower than the setting value to avoid warm air under cooling condition.

Item	Operation Ambient Temperature Range(°C)				Water Offer Temperature Range(°C)					
Cooling	16~40				≥5					
Heating	10~35				≤65					
Model	FP-34ZD-K(E)	FP-51ZD-K(E)	FP-68ZD-K(E)	FP-85ZD-K(E)	FP-102ZD-K(E)	FP-136ZD-K(E)	FP-170ZD-K(E)	FP-204ZD-K(E)		
	m³/h	400/300/210	510/400/310	680/550/450	690/570/485	910/756/600	1030/854/700	1800/1260/850	1940/1500/1050	
Air flow volume(H/M/L)	CFM	235/176/124	300/235/182	400/324/265	406/335/285	535/445/353	606/502/412	1059/741/500	1141/882/618	
	Capacity	Cooling/Heating	kW	1.90/2.40	2.80/3.40	3.50/4.10	3.60/4.20	5.20/6.00	6.35/6.70	8.90/10.80
Power system	Power supply	V/Ph/Hz	220~240V~50Hz	220~240V~50Hz	220~240V~50Hz	220~240V~50Hz	220~240V~50Hz	220~240V~50Hz	220~240V~50Hz	
	Input	kW	0.046	0.065	0.076	0.084	0.095	0.096	0.152	0.200
Water system	Cooling water flow volume	L/s	0.09	0.13	0.17	0.17	0.25	0.30	0.43	0.47
		GPM	1.40	2.10	2.70	2.70	4.00	4.80	6.80	7.50
	Heating water flow volume	L/s	0.17	0.16	0.19	0.22	0.30	0.32	0.48	0.52
		GPM	2.70	2.50	3.00	3.50	4.80	5.10	7.60	8.30
	Cooling pressure drop	kPa	20	20	32	16	80	99	115	100
		Ft.WG	6.6	6.6	10.5	5.2	26.2	32.3	37.7	32.8
	Heating pressure drop	kPa	20	20	32	16	80	99	115	100
		Ft.WG	6.6	6.6	10.5	5.2	26.2	32.5	37.7	32.8
Sound pressure level		dB(A)	37	38	45	47	49	48	50	55
Connection pipe	Water inlet & outlet(inner thread)	Inch	Rc3/4	Rc3/4	Rc3/4	Rc3/4	Rc3/4	Rc3/4	Rc3/4	
	Condensed water drain(outer thread)	mm	17	17	17	17	17	17	17	
Dimension (W×D×H)	Outline	mm	840×695×238	840×695×238	840×695×238	840×695×238	1300×600×188	1300×600×188	1590×695×238	1590×695×238
	Package	mm	960×830×330	960×830×330	960×830×330	960×830×330	1414×724×248	1414×724×248	1714×830×330	1714×830×330
Net weight/Gross weight	kg	26.0/33.0	26.0/33.0	27.0/34.0	27.0/34.0	31.5/36.5	31.5/36.5	48.5/57.0	48.5/57.0	
Loading quantity	40'GP/40'HQ	Set	224/267	224/267	224/267	224/267	220/244	220/244	111/117	111/117
Standard	Wireless remote controller	-	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)	
Optional	Wired remote controller	-	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)	

Notes: The data are tested under these testing conditions as below:

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

## 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.



Item	Operation Ambient Temperature Range(°C)	Water Offer Temperature Range(°C)
Cooling	16~40	≥5
Heating	10~35	≤65

### 2 Pipes

Model		FP-34BA2/D-K(E)	FP-51BA2/D-K(E)	FP-68BA2/D-K(E)	FP-85BA2/D-K(E)	FP-51BWA2/A-K(E)	FP-85BWA2/A-K(E)
Air flow volume(H/M/L)	m³/h	360/322/282	550/413/367	680/591/532	850/708/616	450/383/323	650/560/490
Capacity	CFM	212/189/166	324/242/215	400/347/312	500/416/362	265/225/190	382/329/288
Power system	kW	2.0/2.3	2.5/2.8	3.6/4.1	4.0/4.5	1.4/2	3.1/3.3
Water system	Power supply	V/Ph/Hz	220~240V~50Hz	220~240V~50Hz	220~240V~50Hz	220~240V~50Hz	220~240V~50Hz
	Input	kW	0.050	0.050	0.060	0.066	0.043
	Cooling water flow volume	L/s	0.10	0.12	0.17	0.19	0.07
		GPM	1.60	1.90	2.70	3.00	1.10
	Heating water flow volume	L/s	0.11	0.13	0.20	0.21	0.10
		GPM	1.70	2.10	3.20	3.30	1.60
	Cooling pressure drop	kPa	18	25	52	60	20
		Ft.WG	5.9	8.2	17.1	19.7	5.3
	Heating pressure drop	kPa	20	25	52	60	21
		Ft.WG	6.6	8.2	17.1	19.7	18.7
	Sound pressure level	dB(A)	35	40	43	48	50
Connection pipe	Water inlet & outlet(inner thread)	Inch	1/2	1/2	1/2	1/2	1/2
	Condensed water drain(outer thread)	mm	15.6	15.6	15.6	15.6	15.6
Dimension (W×D×H)	Outline	mm	845×180×275	845×180×275	940×200×298	940×200×298	845×180×275
	Package	mm	915×255×355	915×255×355	1010×285×380	1010×285×380	915×255×355
Net weight/Gross weight	kg	10/12.5	10/12.5	12/16	12/16	11/14	13/17
Loading quantity	40'GP/40'HQ	Set	765/850	765/850	595/671	595/671	765/850
Standard	Wireless remote controller	-	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)
Optional	Wired remote controller	-	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)

Model		FP-51BWA3/A-K(E)	FP-85BWA3/A-K(E)	FP-34BA3/D-K(E)	FP-51BA3/D-K(E)	FP-68BA3/D-K(E)	FP-85BA3/D-K(E)
Air flow volume(H/M/L)	m³/h	450/383/323	650/560/490	360/322/282	550/413/367	680/591/532	850/708/616
	CFM	265/225/190	382/329/288	212/189/166	324/242/215	400/347/312	500/416/362
Capacity	Cooling/Heating	kW	1.4/2.0	3.1/3.3	2.0/2.3	2.5/2.8	3.6/4.1
	Power supply	V/Ph/Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Power system	Input	kW	0.043	0.069	0.050	0.050	0.066
	Cooling water flow volume	L/s	0.07	0.15	0.10	0.12	0.17
Water system	Heating water flow volume	GPM	1.1	2.4	1.6	1.9	2.7
	Cooling pressure drop	L/s	0.10	0.16	0.11	0.13	0.20
Water system	Heating pressure drop	GPM	1.6	2.5	1.7	2.1	3.3
	Ft.WG	kPa	20	53	18	25	52
Water system	Heating pressure drop	Ft.WG	6.6	17.4	5.9	8.2	17.1
	Ft.WG	kPa	21	57	20	25	52
Sound pressure level	Sound pressure level	Ft.WG	6.9	18.7	6.6	8.2	17.1
	dB(A)	dB(A)	42	50	35	40	48
Connection pipe	Water inlet & outlet(inner thread)	Inch	1/2	1/2	1/2	1/2	1/2
	Condensed water drain(outer thread)	mm	15.6	15.6	15.6	15.6	15.6
Dimension (W×D×H)	Outline	mm	845×180×275	940×200×298	845×180×275	940×200×298	940×200×298
	Package	mm	915×255×355	1010×285×380	915×255×355	1010×285×380	1010×285×380
Net weight/Gross weight	kg	11/14	13/17	10/12.5	10/12.5	12/16	12/16
Loading quantity	40'GP/40'HQ	Set	765/850	595/671	765/850	595/671	595/671
Standard	Wireless remote controller	-	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)
Optional	Wired remote controller	-	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)

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	400/347/312	489/417/363
Capacity	Cooling/Heating	kW	1.85/2.45	2.65/3.05	3.50/3.85
	Power supply	V/Ph/Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Power system	Input	kW	0.03	0.03	0.04
	Cooling water flow volume	L/s	0.09	0.13	0.17
Water system	Heating water flow volume	GPM	1.4	2.1	2.7
	Cooling pressure drop	L/s	0.12	0.15	0.18
Water system	Heating pressure drop	GPM	1.9	2.4	2.9
	Ft.WG	kPa	13	25	40
Water system	Heating pressure drop	Ft.WG	4.3	8.2	13.1
	Ft.WG	kPa	16	27	44
Water system	Heating pressure drop	Ft.WG	5.2	8.9	14.4
	Sound pressure level	dB(A)	30	40	43
Connection pipe	Water inlet & outlet(inner thread)	Inch	1/2	1/2	1/2
	Condensed water drain(outer thread)	mm	15.6	15.6	15.6
Dimension (W×D×H)	Outline	mm	845×180×275	845×180×275	940×200×298
	Package	mm	915×255×355	915×255×355	1010×285×380
Net weight/Gross weight	kg	8.8/11.8	8.8/11.8	10.8/14.8	10.8/14.8
Loading quantity	40'GP/40'HQ	Set	765/850	765/850	595/671
Standard	Wireless remote controller	-	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)
Optional	Wired remote controller	-	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)

Model		FP-34BA4/D-K(E)	FP-51BA4/D-K(E)	FP-68BA4/D-K(E)	FP-85BA4/D-K(E)
Air flow volume(H/M/L)	m³/h	360/322/282	550/413/367	680/591/532	850/708/616
	CFM	212/189/166	324/242/215	400/347/312	500/416/362
Capacity	Cooling/Heating	kW	2.0/2.3	2.5/2.8	3.6/4.1
	Power supply	V/Ph/Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Power system	Input	kW	0.050	0.050	0.060
	Cooling water flow volume	L/s	0.10	0.12	0.17
Water system	Heating water flow volume	GPM	1.6	1.9	2.7
	Cooling pressure drop	L/s	0.11	0.13	0.20
Water system	Heating pressure drop	GPM	1.7	2.1	3.2
	Ft.WG	kPa	18	25	52
Water system	Heating pressure drop	Ft.WG	5.9	8.2	17.1
	Ft.WG	kPa	20	25	52
Water system	Heating pressure drop	Ft.WG	6.6	8.2	17.1
	Sound pressure level	dB(A)	35	40	43
Connection pipe	Water inlet & outlet(inner thread)	Inch	1/2	1/2	1/2
	Condensed water drain(outer thread)	mm	15.6	15.6	15.6
Dimension (W×D×H)	Outline	mm	845×180×275	845×180×275	940×200×298
	Package	mm	915×255×355	915×255×355	1010×285×380
Net weight/Gross weight	kg	10/12.5	10/12.5	12/16	12/16
Loading quantity	40'GP/40'HQ	Set	765/850	765/850	595/671
Standard	Wireless remote controller	-	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)
Optional	Wired remote controller	-	XE70-17/E(M)	XE70-17/E(M)	XE70-17/E(M)

Model		FP-34BA5/D-K(E)	FP-51BA5/D-K(E)	FP-68BA5/D-K(E)	FP-85BA5/D-K(E)
Air flow volume(H/M/L)	m³/h	360/322/282	550/413/367	680/591/532	850/708/616
	CFM	212/189/166	324/242/215	400/347/312	500/416/362
Capacity	Cooling/Heating	kW	2.0/2.3	2.5/2.8	3.6/4.1
	Power supply	V/Ph/Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Power system	Input	kW	0.050	0.050	0.060
	Cooling water flow volume	L/s	0.10	0.12	0.17
Water system	Heating water flow volume	GPM	1.6	1.9	2.7
	Cooling pressure drop	L/s	0.11	0.13	0.20
Water system	Heating pressure drop	GPM	1.7	2.1	3.2
	Ft.WG	kPa	18	25	52
Water system	Heating pressure drop	Ft.WG	5.9	8.2	17.1
	Ft.WG	kPa	20	25	52
Water system	Heating pressure drop	Ft.WG	6.6	8.2	17.1
	Sound pressure level	dB(A)	35	40	43
Connection pipe	Water inlet & outlet(inner thread)	Inch	1/2	1/2	1/2
	Condensed water drain(outer thread)	mm	15.6	15.6	15.6
Dimension (W×D×H)	Outline	mm	845×180×275	845×180×275	940×200×298
	Package	mm	915×255×355	915×255×355	1010×285×380
Net weight/Gross weight	kg	10/12.5	10/12.5	12/16	12/16
Loading quantity	40'GP/40'HQ	Set	765/850	765/850	595/671
Standard	Wireless remote controller	-	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)
Optional</					

Model		FP-34BB3/A-K(E)	FP-51BB3/A-K(E)	FP-68BB3/A-K(E)	FP-85BB3/A-K(E)
Air flow volume(H/M/L)	m3/h	360/322/282	550/413/367	680/591/532	850/708/616
	CFM	212/189/166	324/242/215	400/347/312	500/416/362
Capacity	Cooling/Heating	kW	1.8/2.3	2.4/2.6	3.5/3.7
Power system	Power supply	V/Ph/Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
	Input	kW	0.036	0.042	0.051
Water system	Cooling water flow volume	L/s	0.09	0.11	0.17
		GPM	1.4	1.7	2.7
	Heating water flow volume	L/s	0.11	0.12	0.18
		GPM	1.7	1.9	2.9
	Cooling pressure drop	kPa	18	25	52
		Ft.WG	5.9	8.2	17.1
	Heating pressure drop	kPa	20	25	52
		Ft.WG	6.6	8.2	17.1
	Sound pressure level	dB(A)	35	40	43
	Water inlet & outlet(inner thread)	Inch	1/2	1/2	1/2
Connnection pipe	Condensed water drain(outer thread)	mm	15.6	15.6	15.6
	Dimension (W×D×H)	Outline	845×180×275	845×180×275	940×200×298
	Package	mm	915×255×355	915×255×355	1010×285×380
Net weight/Gross weight		kg	10.0/12.5	10.0/12.5	12.0/16.0
Loading quantity		40'GP/40'HQ	Set	765/850	765/850
Standard	Wireless remote controller	-	YB1FA(MOTO)	YB1FA(MOTO)	YB1FA(MOTO)
Optional	Wired remote controller	-	XE7A-17/E(M)	XE7A-17/E(M)	XE7A-17/E(M)

Model		FPD-34BB6/A-K	FPD-51BB6/A-K	FPD-68BB6/A-K	FPD-85BB6/A-K
Air flow volume(H/M/L)	m3/h	340/255/170	510/382/255	680/510/340	850/637/425
	CFM	200/150/100	300/225/150	400/300/200	500/375/250
Capacity	Cooling/Heating	kW	2.2/2.4	2.7/2.9	3.6/3.9
Power system	Power supply	V/Ph/Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
	Input	kW	0.012	0.018	0.029
Water system	Cooling water flow volume	L/s	0.10	0.14	0.18
		GPM	1.6	2.2	3.3
	Heating water flow volume	L/s	0.11	0.14	0.19
		GPM	1.7	2.2	3.5
	Cooling pressure drop	kPa	20	30	43
		Ft.WG	6.6	9.8	14.1
	Heating pressure drop	kPa	24	35	55
		Ft.WG	7.9	11.5	18.0
	Sound pressure level	dB(A)	31	37	43
	Water inlet & outlet(inner thread)	Inch	1/2	1/2	1/2
Connnection pipe	Condensed water drain(outer thread)	mm	15.6	15.6	15.6
	Dimension (W×D×H)	Outline	845×209×289	845×209×289	845×209×289
	Package	mm	973×278×364	973×278×364	973×278×364
Net weight/Gross weight		kg	10.5/12.5	10.5/12.5	10.5/12.5
Loading quantity	40'GP/40'HQ	Set	604/682	604/682	604/682
Standard	Wireless remote controller	-	YAP1F	YAP1F	YAP1F
Optional	Wired remote controller	-	XE7A-17/E(M)	XE7A-17/E(M)	XE7A-17/E(M)

Notes: The data are tested under these testing conditions as below:

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

## LOMO - DC

Model		FPD-34BB4/A-K	FPD-51BB4/A-K	FPD-68BB4/A-K	FPD-85BB4/A-K
Air flow volume(H/M/L)	m3/h	340/255/170	510/382/255	680/510/340	850/637/425
	CFM	200/150/100	300/225/150	400/300/200	500/375/250
Capacity	Cooling/Heating	kW	2.2/2.4	2.7/2.9	3.6/3.9
Power system	Power supply	V/Ph/Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
	Input	kW	0.012	0.018	0.043
Water system	Cooling water flow volume	L/s	0.10	0.14	0.21
		GPM	1.6	2.2	3.3
	Heating water flow volume	L/s	0.11	0.14	0.22
		GPM	1.7	2.2	3.5
	Cooling pressure drop	kPa	20	30	52
		Ft.WG	6.6	9.8	17.1
	Heating pressure drop	kPa	24	35	65
		Ft.WG	7.9	11.5	21.3
	Sound pressure level	dB(A)	31	37	48
	Water inlet & outlet(inner thread)	Inch	1/2	1/2	1/2
Connnection pipe	Condensed water drain(outer thread)	mm	15.6	15.6	15.6
	Dimension (W×D×H)	Outline	845×209×289	845×209×289	845×209×289
	Package	mm	973×278×364	973×278×364	973×278×364
Net weight/Gross weight		kg	10.5/12.5	10.5/12.5	12.5/15.5
Loading quantity	40'GP/40'HQ	Set	604/682	604/682	461/525
Standard	Wireless remote controller	-	YAP1F	YAP1F	YAP1F
Optional	Wired remote controller	-	XE7A-17/E(M)	XE7A-17/E(M)	XE7A-17/E(M)

## ERV

The product provides fresh outside air and recovery waste heat from exhaust air leaving conditioned space, to improve indoor air quality, and it is widely used in the application which requires good air quality with energy saving such as supermarket, convenience stores, hotels, stations, hospitals, museum, theaters, ect.



- » Multiple operating modes such as bypass, total heat exchange, exhaust air or auto mode, adaptable to demands in different circumstances.
- » Reminder for filter cleaning and replacement.
- » High static pressure (up to 100Pa) and low noise.
- » Five(5) fan speed adjustable, satisfying fresh air demand under different installation environment.
- » Independent operation or interlock with VRF.
- » Connectable with Gree air box to realized auto controln Gree air box can detect and indicate the indoor air temperature/humidity, PM2.5 and CO2 level, showing the air quality in real time.

Model		FHBQGL-D8DA-K	FHBQGL-D10DA-K	FHBQGL-D15DA-K	FHBQGL-D20DA-K
Air flow volume	m³/h	800	1000	1500	2000
External residual pressure	Pa	100	100	100	100
Temperature exchange efficiency	%	73	73	73	73
Enthalpy exchange efficiency	Heating %	/	/	/	/
	Cooling %	/	/	/	/
Power supply	Ph/V/Hz	1/220~240/50			
Power input	kW	0.44	0.54	0.88	1.06
Motor		DC motor	DC motor	DC motor	DC motor
Sound power level	dB(A)	66	67	71	71.5
Dimension (W × D × H)	Outline mm	1230 × 910 × 384	1230 × 1160 × 384	1230 × 910 × 835	1230 × 1160 × 835
	Package mm	1570 × 1170 × 557	1570 × 1420 × 557	1570 × 1250 × 1007	1570 × 1500 × 1007
Net weight	kg	82.5	90.5	196.0	214.5
Gross weight	kg	131.5	142.5	265.0	285.0
Loading quantity	40'GP unit	40	32	18	14
	40'HQ unit	40	32	18	14
Standard wired controller	Z6L351S	Z6L351S	Z6L351S	Z6L351S	

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

## Air Curtain

The air curtain adopts crossflow blower to generate high speed air flow downward, which is usually installed above the entrance door or window, to isolate the indoor air from the outdoor air, reduce the loss of indoor cool air, and prevent insects and dust from entering the indoor environment.



Washable filter



Quiet function



Compact design



Easier maintainability

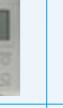
- » Optimized cross-flow fan and good performance motor are adopted.
- » Micro processor control with high reliability and long service life.
- » Anti-corrosion thanks to two-side painted electro-galvanized metal case.
- » High quality galvanized steel casing with double-sided plastic spray processing, high anti-corrosion.
- » Solid structure provides powerful airflow.
- » With 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

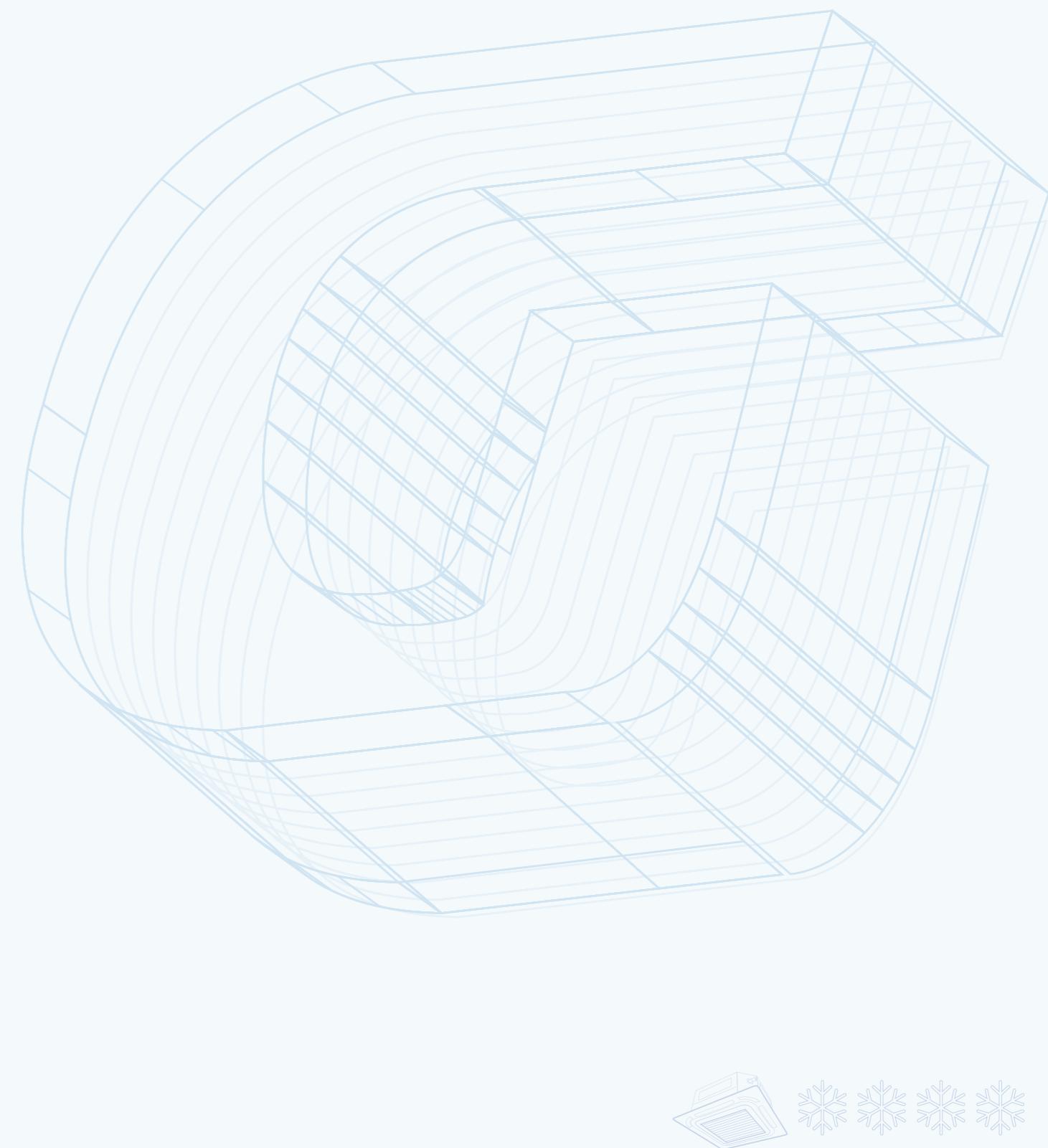
Model		FM-1.25-9-K	FM-1.25-12-K
Air flow volume	m³/h	1200	1650
Power supply	Ph/V/Hz	220~240V~50Hz	220~240V~50Hz
Power input	kW	110	140
Sound pressure level	dB(A)	59	61
"Dimension (W × D × H)"	Outline mm	900 × 225 × 220	1200 × 225 × 220
	Package mm	1015 × 270 × 256	1315 × 270 × 256
Net weight	kg	16	20
Gross weight	kg	17.5	21.8
Loading quantity	40'GP/40'HQ unit	776/873	544/612
Wireless remote controller		ZY611(MC)	ZY611(MC)

## Control System Lineup

series Control system	Product	Concealed ceiling type(2 Pipes)	Concealed ceiling type(4 Pipes)	Cassette type	Floor ceiling type	Wall mounted type	Wall- mounted type (Lomo-DC)	ERV	Air curtain
Wireless remote controller	YB1FA(MOTO)				●	●	●		
	YAP1F						●		
	ZY611(MC)								●
Wired remote controller	XE7A-17/E(M)						○		
	XE70-17/E(M) (with BMS interface)			○	○	○			
	Z6L351S							●	
Digital thermostat	WK-011PM		○						
	WK-011PN		○						
	WK-010PM		○						
	WK-010PN		○						
	WK-010PV		○						
	WK-010PW		○						
	WK-010PR		○						
	WK-010PS		○						

Note:

● means standard, ○ means optional



# OVERALL PLAN OF GREE ELECTRIC APPLIANCES



Total Employees  
**80,000+**



Engineers  
**16,000+**



Labs  
**1,411**



Countries/Regions  
**180+**

## HVAC EQUIPMENT

RAC  
CAC

Refrigeration Equipment  
Heating Equipment  
AC for Nuclear Power Stations  
Photovoltaic AC

## HOME APPLIANCES

Kitchen Appliances

Environmental Appliances

Washing Machines

Refrigerators

## HIGH-END EQUIPMENT

Intelligent Equipment

Industrial Robots

Numerical Control Machine Tools

Precision Mould

## COMMUNICATION EQUIPMENT

The Internet of Things

Smart Phones

Chips

Big Data

