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**GREE**

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

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

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Distributor information

**CAC**

T1 50Hz  
R410A/R134A/R32



# ABOUT GREE

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

2005: Gree has topped No.1 in production and sales volume of residential air conditioners for 14 consecutive years.

2015: Gree's sales revenue exceeded 15.08 billion USD.

2016: Gree's sales revenue exceeded 16.51 billion USD.

2017: Gree's sales revenue exceeded 22.21 billion USD.

2018: Gree entered into the list of Forbes Global 2000 again and ranked No. 294, moving up 70 places compared with the previous year. Gree's sales revenue exceeded 30.23 billion USD.

2019: Gree entered into Fortune Global 500. Gree's return on equity (ROE) ranked the first among the 129 Chinese enterprises on the list.

2020: Gree has ranked the 436th on the list of Fortune Global 500.

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

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

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

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

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## SOME PARTS

-  **Golden fin condenser**  
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 controller**  
One indoor unit can be connected with two wired controllers to realize controlling of the same indoor unit from different control points.
-  **Long connection pipe design**  
The total length of connection pipe reaches 1000m, which greatly improves the project flexibility of the unit.

## COMFORTABLE & HEALTHY

-  **Vertical swing**  
Air discharge flaps can move 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.

## HIGH EFFICIENCY & ENERGY SAVING

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

## CONVENIENCE

-  **Memory function**  
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.

## 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.

## 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.

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

## CONTROLLER

-  **24 hour timer**  
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**





# LIGHT COMMERCIAL AC

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## U-match

- Fixed Frequency Series (Cooling Only)
- Fixed Frequency Series (Heat Pump)
- Inverter Series (Heat Pump)

## Big Duct Type Unit

- High Capacity Series
- Cooling Only

CAC

## U-Match

R410A

### Fixed Frequency Series (Cooling Only)

It is a kind of split system that the outdoor unit can be connected to various indoor units (duct, fireproof high static pressure duct, cassette or floor ceiling type) with its cooling capacity from 5kW to 16kW.



- » Design of double ambient temperature sensors makes precision temperature monitoring.
- » With low ambient temperature cooling function, cooling is normal in 5°C.
- » The outdoor unit is universal and can be matched with duct type, fireproof high static pressure duct, cassette and floor ceiling.
- » The unit is compact. It weights less than 96kg, which is easy to install and transport.
- » All the series adopt single air duct design, the highest height is only 820mm.
- » Multiple functions for selection; WIFI module or WIFI wired controller can be selected to realize long distance control via mobile APP, and gate control, building control, centralized control, dry contact gateway and related functions are optional.

### Indoor Unit

CE

Duct type
» Ultra-thin structural design, the thinnest position is 200mm.
» Air supply outlet and air return outlet can be interchanged for convenient installation.
» Optional water pump, maximum delivery lift is 1 meter.
» Reserved fresh air outlet, which can realized 11 fresh air modes setting via dry contact gateway.

Fireproof high static pressure duct type
» Adopt steel fan fireproof design, satisfying fireproof requirements of Hong Kong.
» With high-efficiency DC fan design, 9 static pressure modes for selection, the maximum static pressure can be up to 200Pa, meeting different static pressure demands in engineering project.
» With water pump drain function, the highest delivery lift is 1 meter.

Floor ceiling type
» With double air louvers structural design, meeting 3D air supply effect.
» Both floor standing installation and ceiling installation methods can be selected.
» There are 3 types of pipe-out leading ways for selection.
» Pipe joints and electric box are designed at the unit side for convenient installation and maintenance.

Cassette type
» Standard fitting of 360° cassette type unit panel, optional independent swing function.
» Adopt fireproof electric box structural design, meeting the requirement of salt water burning experiment.
» With high-efficiency DC water pump, the highest delivery lift can be up to 1 meter.

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	5~48	

### Units Lineup

Capacity index	50	71	100
Outdoor unit			
Duct			
High ESP duct			
Cassette			
Floor ceiling			

Capacity index	125	140	160
Outdoor unit			
Duct			
High ESP duct			
Cassette			
Floor ceiling			

## Specifications

Model	Outdoor unit		GUL50W/A-K				
	Indoor unit		Duct	Duct with water pump	High ESP duct	Cassette	Floor ceiling
			GU50P/A-K	GU50PS/A-K	GUD50PHS/A-K	GUD50T/A-K	GU50ZD/A-K
Capacity	Cooling	kW	5	5	5	4.9	5
		Btu/h	17100	17100	17100	16700	17100
EER		W	3.13	3.13	3.13	3.06	3.03
Power supply		V/Ph/Hz	220-240V ~50Hz				
Power input	Cooling	kW	1.60	1.60	1.60	1.60	1.65
Current input	Cooling	A	7.5	7.5	7.5	7.5	7.7
Refrigerant charge volume		kg	0.9	0.9	0.9	0.9	0.9
Indoor unit	Air flow volume		CFM	383	383	530	412
		m³/h	650	650	900	700	700
	ESP	Pa	25	25	25	0	0
		Range	Pa	0-60	0-60	0-100	0
	Sound pressure level (SH/H/M/L)	dB(A)	33/30/27/25	33/30/27/25	41/37/33/31	44/43/38/35	41/40/37/33
Panel	Dimension	Outline	mm	1000x450x200	1000x450x200	700x700x300	570x570x265
	(WxDxH)	Package	mm	1308x568x275	1308x568x275	897x808x360	698x653x295
	Net weight/Gross weight	kg	24.0/29.0	25.0/30.0	32.0/37.0	17.0/21.0	25.0/30.0
	Dimension	Outline	mm	-	-	620x620x47.5	-
Outdoor unit	(WxDxH)	Package	mm	-	-	701x701x125	-
	Net weight/Gross weight	kg	-	-	-	3/4.5	-
	Dimension	Outline	mm	761x256x548	761x256x548	761x256x548	761x256x548
Connection pipe	(WxDxH)	Package	mm	881x363x595	881x363x595	881x363x595	881x363x595
	Net weight/Gross weight	kg	37.0/39.5	37.0/39.5	37.0/39.5	37.0/39.5	37.0/39.5
	Outer diameter	Liquid	inch(mm)	Φ1/4(6.35)			
Loading quantity	Gas	inch(mm)	Φ1/2(12.7)				
	Max. distance	Height	m	15	15	15	15
	Length	m	30	30	30	30	30
	Loading quantity	40'GP/40'HQ	set	149/171	149/171	126/140	136/162

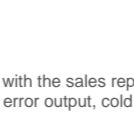
Model	Outdoor unit		GUL71W/A-K				
	Indoor unit		Duct	Duct with water pump	High ESP duct	Cassette	Floor ceiling
			GU71P/A-K	GU71PS/A-K	GUD71PHS/A-K	GU71T/A-K	GU71ZD/A-K
Capacity	Cooling	kW	7.10	7.10	7.20	7.10	7.10
		Btu/h	24200	24200	24600	24200	24200
EER		W	3.02	3.02	3.00	3.02	2.96
Power supply		V/Ph/Hz	220-240V ~50Hz				
Power input	Cooling	kW	2.35	2.35	2.40	2.35	2.40
Current input	Cooling	A	10.7	10.7	10.9	10.7	10.9
Refrigerant charge volume		kg	1.5	1.5	1.5	1.5	1.5
Indoor unit	Air flow volume		CFM	736	736	736	824
		m³/h	1250	1250	1250	1250	1400
	ESP	Pa	25	25	25	0	0
		Range	Pa	0-80	0-80	0-100	0
	Sound pressure level (SH/H/M/L)	dB(A)	40/37/33/31	40/37/33/31	48/46/44/41	46/45/42/39	47/46/44/41
Panel	Dimension	Outline	mm	1300x450x220	1300x450x220	700x700x300	840x840x240
	(WxDxH)	Package	mm	1628x578x300	1628x578x300	897x808x360	933x903x272
	Net weight/Gross weight	kg	31.0/37.0	32.0/38.0	33.0/38.0	30.0/37.0	33.0/39.0
	Dimension	Outline	mm	-	-	950x950x52	-
Outdoor unit	(WxDxH)	Package	mm	-	-	1033x1038x112	-
	Net weight/Gross weight	kg	-	-	-	6/9.5	-
	Dimension	Outline	mm	892x340x698	892x340x698	892x340x698	892x340x698
Connection pipe	(WxDxH)	Package	mm	1029x458x750	1029x458x750	1029x458x750	1029x458x750
	Net weight/Gross weight	kg	53.0/57.0	53.0/57.0	53.0/57.0	53.0/57.0	53.0/57.0
	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)			
Loading quantity	Gas	inch(mm)	Φ5/8(15.9)				
	Max. distance	Height	m	15	15	15	15
	Length	m	30	30	30	30	30
	Loading quantity	40'GP/40'HQ	set	82/114	82/114	87/105	82/78

Model	Outdoor unit		GUL100W/A-M				
	Indoor unit		Duct	Duct with water pump	High ESP duct	Cassette	Floor ceiling
			GU100PH/A-K	GU100PHS/A-K	GUD100PHS/A-K	GU100T/A-K	GU100ZD/A-K
Capacity	Cooling	kW	10.30	10.30	10.50	10.30	10.30
		Btu/h	35100	35100	35800	35100	35100
EER		W	2.94	2.94	3.00	2.94	2.94
Power supply		V/Ph/Hz	380-415V 3N~ 50Hz				
Power input	Cooling	kW	3.5	3.5	3.5	3.5	3.5
Current input	Cooling	A	7.0	7.0	6.9	7.0	7.0
Refrigerant charge volume		kg	2.2	2.2	2.2	2.2	2.2
Indoor unit	Air flow volume		CFM	971	971	1059	942
		m³/h	1650	1650	1800	1600	1700
	ESP	Pa	37	37	37	0	0
		Range	Pa	0-100	0-100	0-150	0
	Sound pressure level (SH/H/M/L)	dB(A)	44/42/38/35	44/42/38/35	44/41/38/36	52/50/48/45	51/50/49/48
Panel	Dimension	Outline	mm	1000x700x300	1000x700x300	1000x700x300	840x840x240
	(WxDxH)	Package	mm	1205x813x360	1205x813x360	1205x813x360	933x903x272
	Net weight/Gross weight	kg	40.0/46.0	41.0/47.0	42.0/48.0	30.0/37.0	36.0/42.0
	Dimension	Outline	mm	-	-	-	950x950x52
Outdoor unit	(WxDxH)	Package	mm	-	-	-	1033x1038x112
	Net weight/Gross weight	kg	-	-	-	-	6/9.5
	Dimension	Outline	mm	920x370x790	920x370x790	920x370x790	920x370x790
Connection pipe	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)			
	Gas	inch(mm)	Φ5/8(15.9)				
	Max. distance	Height	m	20	20	20	20

## Control System Lineup

Model	Outdoor unit		GUL140W/A-M					
	Indoor unit		Duct	Duct with water pump	High ESP duct	Cassette	Floor ceiling	
			GU140PH/A-K	GU140PHS/A-K	GUD140PHS/A-K	GU140T/A-K	GU140ZD/A-K	
Capacity	Cooling	kW	14.10	14.10	14.10	14.10	14.10	
		Btu/h	48100	48100	48100	48100	48100	
EER		W	2.69	2.69	2.71	2.52	2.71	
Power supply		V/Ph/Hz	380-415V 3N~ 50Hz					
Power input	Cooling	kW	5.25	5.25	5.20	5.60	5.20	
Current input	Cooling	A	10.5	10.5	10.4	11.2	10.4	
Refrigerant charge volume		kg	2.95	2.95	2.95	2.95	2.95	
Indoor unit	Air flow volume		CFM	1295	1295	1412	1177	1295
		m³/h	2200	2200	2400	2000	2200	
	ESP	Rated	Pa	50	50	50	0	0
		Range	Pa	0-150	0-150	0-200	0	0
	Sound pressure level (SH/H/M/L)	dB(A)	45/44/41/37	45/44/41/37	48/44/42/41	54/51/47/45	54/53/52/51	
	Dimension	Outline	mm	1400x700x300	1400x700x300	1400x700x300	840x840x290	1570x665x235
Panel	(WxDxH)	Package	mm	1601x813x365	1601x813x365	1678x808x365	933x903x335	1729x770x300
	Net weight/Gross weight	kg	52.0/59.0	53.0/60.0	58.0/65.0	34.0/41.0	43.0/50.0	
	Dimension	Outline	mm	-	-	950x950x52	-	-
Outdoor unit	(WxDxH)	Package	mm	-	-	1033x1038x112	-	-
	Net weight/Gross weight	kg	-	-	-	6/9.5	-	-
	Dimension	Outline	mm	940x460x820	940x460x820	940x460x820	940x460x820	940x460x820
Connection pipe	(WxDxH)	Package	mm	1083x573x973	1083x573x973	1083x573x973	1083x573x973	1083x573x973
	Net weight/Gross weight	kg	93.0/103.0	93.0/103.0	93.0/103.0	93.0/103.0	93.0/103.0	
	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)				
Loading quantity		Gas	inch(mm)	Φ5/8(15.9)				
	Max. distance	Height	m	30	30	30	30	30
		Length	m	50	50	50	50	50
Loading quantity		40'GP/40'HQ	set	51/58	51/58	43/55	54/60	58/66

Model	Outdoor unit		GUL160W/A-M					
	Indoor unit		Duct	Duct with water pump	High ESP duct	Cassette	Floor ceiling	
			GU160PH/A-K	GU160PHS/A-K	GUD160PHS/A-K	GU160T/A-K	GU160ZD/A-K	
Capacity	Cooling	kW	16	16	16	15	16	
		Btu/h	54600	54600	54600	51200	54600	
EER		W	2.99	2.99	3.02	2.88	3.02	
Power supply		V/Ph/Hz	380-415V 3N~ 50Hz					
Power input	Cooling	kW	5.35	5.35	5.30	5.20	5.30	
Current input	Cooling	A	10.6	10.6	10.5	10.3	10.5	
Refrigerant charge volume		kg	3.1	3.1	3.1	3.1	3.1	
Indoor unit	Air flow volume		CFM	1530	1530	1707	1177	1471
		m³/h	2600	2600	2900	2000	2500	
	ESP	Rated	Pa	50	50	50	0	0
		Range	Pa	0-150	0-150	0-200	0	0
	Sound pressure level (SH/H/M/L)	dB(A)	47/45/40/37	47/45/40/37	48/45/44/42	55/51/47/45	54/53/52/51	
	Dimension	Outline	mm	1400x700x300	1400x700x300	1400x700x300	840x840x290	1570x665x235
Panel	(WxDxH)	Package	mm	1601x813x365	1601x813x365	1678x808x365	933x903x335	1729x770x300
	Net weight/Gross weight	kg	54.0/61.0	55.0/62.0	60.0/67.0	34.0/41.0	45.0/52.0	
	Dimension	Outline	mm	-	-	950x950x52	-	-
Outdoor unit	(WxDxH)	Package	mm	-	-	1033x1038x112	-	-
	Net weight/Gross weight	kg	95.0/105.0	95.0/105.0	95.0/105.0	95.0/105.0	95.0/105.0	
	Dimension	Outline	mm	940x460x820	940x460x820	940x460x820	940x460x820	940x460x820
Connection pipe	(WxDxH)	Package	mm	1083x573x973	1083x573x973	1083x573x973	1083x573x973	1083x573x973
	Net weight/Gross weight	kg	95.0/105.0	95.0/105.0	95.0/105.0	95.0/105.0	95.0/105.0	
	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)				
Loading quantity		Gas	inch(mm)	Φ5/8(15.9)				
	Max. distance	Height	m	30	30	30	30	30
		Length	m	50	50	50	50	50
Loading quantity		40'GP/40'HQ	set	51/58	51/58	43/55	54/60	58/66

Controlling system	Model	Outlook	Duct	Cassette	Floor ceiling
Wired controller	XK117		●	○	○
	XE70-13/G2		○	○	○
	XE71-42/G		○	○	○
Wireless remote controller	YAW1F9*1		○	●	●
	YAP1F6(WIFI)		○	○	○
WiFi module(G-Cloud)*2	ME31-00/C4		○	○	○
	ME31-00/C6				
Centralized controller (up to 36 indoor units)	CE52-24/F(C)		○	○	○
Dry contact gateway (Extended function board)*3	ME30-42/E1		○	○	○
Door controller	MK03		○	○	○

Note: ● means standard, ○ means optional.

\*1-Controller for cooling only.

\*2-This WiFi module is only for EU market. For detailed information, please confirm it with the sales representatives.

\*3-Function: ON/OFF input control, mode input control, emergency stop input control, error output, cold plasma control, fresh air control.



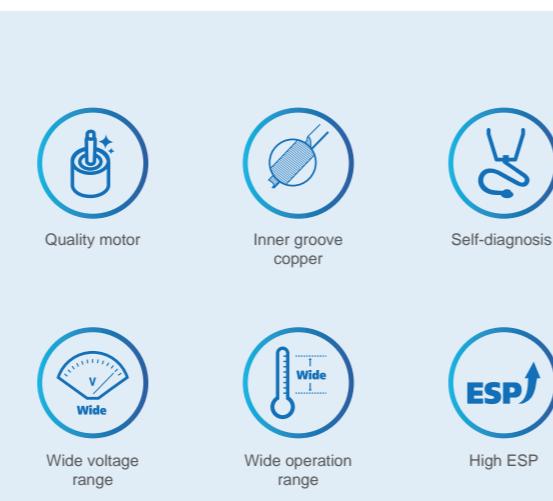
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## U-Match

R410A

### Fixed Frequency Series (Heat Pump)

It is a kind of split system that the outdoor unit can be connected to various indoor units (duct, cassette or floor ceiling type) with its cooling capacity from 5kW to 16kW.



- » Design of double ambient temperature sensors makes precision temperature monitoring.
- » With low ambient temperature cooling function, cooling is normal in -15°C.
- » The outdoor unit is universal and can be matched with duct type, cassette and floor ceiling units.
- » The unit is compact, which is easy to install and transport.
- » All the series adopt single air duct design, the highest height is only 820mm.
- » Multiple functions for selection; WIFI module or WIFI wired controller can be selected to realize long distance control via mobile APP, and gate control, building control, centralized control, dry contact gateway and related functions are optional.

### Indoor Unit

CE

#### Duct type

- » Ultra-thin structural design, the thinnest position is 200mm.
- » Air supply outlet and air return outlet can be interchanged for convenient installation.
- » Optional water pump, maximum delivery lift is 1 meter.
- » Reserved fresh air outlet, which can realized 11 fresh air modes setting via dry contact gateway.

#### Cassette type

- » Standard fitting of 360° cassette type unit panel, optional independent swing function.
- » Adopt fireproof electric box structural design, meeting the requirement of salt water burning experiment.
- » With high-efficiency DC water pump, the highest delivery lift can be up to 1 meter.

#### Floor ceiling type

- » With double air louvers structural design, meeting 3D air supply effect.
- » Both floor standing installation and ceiling installation methods can be selected.
- » There are 3 types of pipe-out leading ways for selection.
- » Pipe joints and electric box are designed at the unit side for convenient installation and maintenance.

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

### Units Lineup

Capacity index	50	71/85	100	
Outdoor unit				
Indoor unit	Duct			
	Cassette			
	Floor ceiling			

Capacity index	125	140	160	
Outdoor unit				
Indoor unit	Duct			
	Cassette			
	Floor ceiling			



CAC

## Specifications

R410A

Model	Outdoor unit		GU50W/A1-K			
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling
			GU50P/A1-K	GU50PS/A1-K	GUD50T/A1-K	GU50ZD/A1-K
Capacity	Cooling	kW	4.75	4.75	4.8	5.0
		Btu/h	16200	16200	16400	17100
	Heating	kW	4.9	4.9	5.0	5.2
		Btu/h	16700	16700	17100	17700
	EER/COP	W/W	2.97/3.50	2.97/3.50	3.10/3.70	3.03/3.59
	Power supply	V/Ph/Hz	220-240V ~50Hz			
Power input	Cooling	kW	1.60	1.60	1.55	1.65
		kW	1.40	1.40	1.35	1.45
Current input	Cooling	A	7.65	7.65	7.42	7.90
		A	6.70	6.70	6.46	6.94
Refrigerant charge volume		kg	1.20	1.20	1.20	1.20
Indoor unit	Air flow volume	CFM	383	383	412	412
		m³/h	650	650	700	700
	ESP	Pa	25	25	0	0
		Range	Pa	0-60	0	0
	Sound pressure level (SH/H/M/L)	dB(A)	35/32/30/27	35/32/30/27	44/43/38/35	41/40/37/33
	Dimension (WxDxH)	Outline	mm	1000×450×200	1000×450×200	570×570×265
Panel	Outline	Package	mm	1308×568×275	1308×568×275	698×653×295
		Net weight/Gross weight	kg	24/29	25/30	1033×770×300
	Dimension (WxDxH)	Outline	mm	-	620×620×47.5	-
		Package	mm	-	701×701×125	-
	Net weight/Gross weight	kg	-	-	3.0/4.5	-
	Sound pressure level	dB(A)	51	51	51	51
Outdoor unit	Dimension (WxDxH)	Outline	mm	761×256×548	761×256×548	761×256×548
		Package	mm	881×363×595	881×363×595	881×363×595
	Net weight/Gross weight	kg	39/41.5	39/41.5	39/41.5	39/41.5
	Outer diameter	Liquid	inch(mm)	Φ1/4(6.35)	Φ1/4(6.35)	Φ1/4(6.35)
		Gas	inch(mm)	Φ1/2(12.7)	Φ1/2(12.7)	Φ1/2(12.7)
	Max. distance	Height	m	15	15	15
Connection pipe	Length	m	30	30	30	30
		Loading quantity	40'GP/40'HQ	set	149/171	149/171
	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)
		Gas	inch(mm)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)
	Max. distance	Height	m	15	15	15
	Length	m	30	30	30	30
Loading quantity		40'GP/40'HQ	set	134/156	126/144	80/86

Model	Outdoor unit		GU71W/A1-K			
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling
			GU71P/A1-K	GU71PS/A1-K	GU71T/A1-K	GU71ZD/A1-K
Capacity	Cooling	kW	7.0	7.0	7.1	7.3
		Btu/h	23900	23900	24200	24900
	Heating	kW	7.4	7.4	7.4	7.7
		Btu/h	25200	25200	25200	26300
	EER/COP	W/W	3.26/3.79	3.26/3.79	3.3/3.61	3.24/3.42
	Power supply	V/Ph/Hz	220-240V ~50Hz			
Power input	Cooling	kW	2.15	2.15	2.15	2.25
		kW	1.95	1.95	2.05	2.25
Current input	Cooling	A	10.28	10.28	10.28	10.76
		A	9.32	9.32	9.80	10.52
Refrigerant charge volume		kg	1.90	1.90	1.90	1.90
Indoor unit	Air flow volume	CFM	677	677	736	824
		m³/h	1150	1150	1250	1400
	ESP	Pa	25	25	0	0
		Range	Pa	0-60	0	0
	Sound pressure level (SH/H/M/L)	dB(A)	37/33/30/28	37/33/30/28	46/45/42/39	47/46/44/41
	Dimension (WxDxH)	Outline	mm	1300×450×220	1300×450×220	840×840×240
Panel	Outline	Package	mm	1628×578×300	1628×578×300	933×903×272
		Net weight/Gross weight	kg	31/37	32/38	33/39
	Dimension (WxDxH)	Outline	mm	-	950×950×52	-
		Package	mm	-	1033×1038×112	-
	Net weight/Gross weight	kg	-	-	6.0/9.5	-
	Sound pressure level	dB(A)	53	53	53	53
Outdoor unit	Dimension (WxDxH)	Outline	mm	892×340×698	892×340×698	892×340×698
		Package	mm	1029×458×750	1029×458×750	1029×458×750
	Net weight/Gross weight	kg	59/63	59/63	59/63	59/63
	Outer diameter	Liquid	inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)
		Gas	inch(mm)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)
	Max. distance	Height	m	15	15	15
Loading quantity		40'GP/40'HQ	set	82/96	82/96	90/92

## Specifications

R410A

Model	Outdoor unit		GU85W/A1-K			
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling
			GU85P/A1-K	GU85PS/A1-K	GU85T/A1-K	GU85ZD/A1-K
Capacity	Cooling	kW	8.3	8.3	8.3	8.6
		Btu/h	28300	28300	28300	29300
	Heating	kW	9.3	9.3	9.2	9.3
		Btu/h	31700	31700	31400	31700
	EER/COP	W/W	3.07/3.58	3.07/3.58	3.13/3.68	3.19/3.32
	Power supply	V/Ph/Hz	220-240V ~50Hz			
Power input	Cooling	kW	2.70	2.70	2.65	2.70
		kW	2.60	2.60	2.50	2.80
Current input	Cooling	A	13.04	13.04	12.80	13.04
		A	12.56	12.56	12.08	13.53
Refrigerant charge volume		kg	1.80	1.80	1.80	1.80
Indoor unit	Air flow volume	CFM	736	736	736	883
		m³/h	1250	1250	1250	1500
	ESP	Pa	37	37	0	0
		Range	Pa	0-80	0	0
	Sound pressure level (SH/H					

CAC

## Specifications

R410A

Model	Outdoor unit		GU125W/A1-M				
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling	
	GU125PH/A1-K	GU125PHS/A1-K	GU125T/A1-K	GU125ZD/A1-K			
Capacity	Cooling	kW	12.0	12.0	12.0	12.0	
		Btu/h	40900	40900	40900	40900	
	Heating	kW	14.6	14.6	14.8	14.5	
		Btu/h	49800	49800	50500	49500	
EER/COP		W/W	2.76/3.17	2.76/3.17	2.86/3.52	2.86/3.26	
Power supply		V/Ph/Hz	380-415V 3N~ 50Hz				
Power input	Cooling	kW	4.35	4.35	4.20	4.20	
		kW	4.60	4.60	4.20	4.45	
Current input	Cooling	A	7.50	7.50	7.30	7.30	
		A	8.00	8.00	7.30	7.70	
Refrigerant charge volume		kg	2.85	2.85	2.85	2.85	
Indoor unit	Air flow volume	CFM	1000	1000	942	1000	
		m³/h	1700	1700	1600	1700	
	ESP	Rated Pa	50	50	0	0	
		Range Pa	0-100	0-100	0	0	
	Sound pressure level (SH/H/M/L)		dB(A)	44/41/38/35	44/41/38/35	52/50/49/47	
	Dimension (WxDxH)	Outline mm	1000×700×300	1000×700×300	840×840×240	1200×665×235	
		Package mm	1205×813×360	1205×813×360	933×903×272	1363×770×300	
	Net weight/Gross weight	kg	41/47	42/48	33/40	37/43	
Panel	Dimension (WxDxH)	Outline mm	-	-	950×950×52	-	
		Package mm	-	-	1033×1038×112	-	
	Net weight/Gross weight		kg	-	6.0/9.5	-	
	Sound pressure level	dB(A)	58	58	58	58	
Outdoor unit	Dimension (WxDxH)	Outline mm	940×460×820	940×460×820	940×460×820	940×460×820	
		Package mm	1083×573×973	1083×573×973	1083×573×973	1083×573×973	
	Net weight/Gross weight		kg	95/106	95/106	95/106	
	Outer diameter	Liquid inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)	
Connection pipe	Gas	inch(mm)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)	
		Max. distance m	30	30	30	30	
	Height		m	50	50	50	
	Length	m	50	50	50	50	
Loading quantity		40'GP/40'HQ	set	51/58	51/58	54/64	
					57/68		

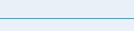
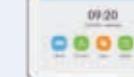
Model	Outdoor unit		GU140W/A1-M				
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling	
	GU140PH/A1-K	GU140PHS/A1-K	GU140T/A1-K	GU140ZD/A1-K			
Capacity	Cooling	kW	14.6	14.6	14.01	14.1	
		Btu/h	49800	49800	47800	48100	
	Heating	kW	16.3	16.3	15.1	16.5	
		Btu/h	55600	55600	51500	56300	
EER/COP		W/W	3.24/3.79	3.24/3.79	3.11/3.51	3.13/3.75	
Power supply		V/Ph/Hz	380-415V 3N~ 50Hz				
Power input	Cooling	kW	4.5	4.5	4.5	4.5	
		kW	4.3	4.3	4.3	4.4	
Current input	Cooling	A	7.8	7.8	7.8	7.8	
		A	7.5	7.5	7.5	7.7	
Refrigerant charge volume		kg	3.3	3.3	3.3	3.3	
Indoor unit	Air flow volume	CFM	1295	1295	1177	1295	
		m³/h	2200	2200	2000	2200	
	ESP	Rated Pa	50	50	0	0	
		Range Pa	0-150	0-150	0	0	
	Sound pressure level (SH/H/M/L)		dB(A)	45/44/41/37	45/44/41/37	54/51/47/45	
	Dimension (WxDxH)	Outline mm	1400×700×300	1400×700×300	840×840×290	1570×665×235	
		Package mm	1601×813×365	1601×813×365	933×903×335	1729×770×300	
	Net weight/Gross weight	kg	52/59	53/60	34/41	43/50	
Panel	Dimension (WxDxH)	Outline mm	-	-	950×950×52	-	
		Package mm	-	-	1033×1038×112	-	
	Net weight/Gross weight		kg	-	6.0/9.5	-	
	Sound pressure level	dB(A)	58	58	58	58	
Outdoor unit	Dimension (WxDxH)	Outline mm	940×460×820	940×460×820	940×460×820	940×460×820	
		Package mm	1083×573×973	1083×573×973	1083×573×973	1083×573×973	
	Net weight/Gross weight		kg	97/108	97/108	97/108	
	Outer diameter	Liquid inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)	
Connection pipe	Gas	inch(mm)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)	
		Max. distance m	30	30	30	30	
	Height		m	50	50	50	
	Length	m	50	50	50	50	
Loading quantity		40'GP/40'HQ	set	51/58	51/58	52/62	
					58/62		

## Specifications

R410A

Model	Outdoor unit		GU160W/A1-M				
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling	
	GU160PH/A1-K	GU160PHS/A1-K	GU160T/A1-K	GU160ZD/A1-K			
Capacity	Cooling	kW	16.0	16.0	15.0	15.8	
		Btu/h	54600	54600	51200	53900	
	Heating	kW	19.0	19.0	17.4	19.1	
		Btu/h	64800	64800	59400	65200	
EER/COP		W/W	2.91/3.52	2.91/3.52	2.83/3.11	2.88/3.54	
Power supply		V/Ph/Hz	380-415V 3N~ 50Hz				
Power input	Cooling	kW	5.50	5.50	5.30	5.48	
		kW	5.40	5.40	5.60	5.40	
Current input	Cooling	A	9.6	9.6	9.2	9.6	
		A	9.4	9.4	9.8	9.4	
Refrigerant charge volume		kg	4.2	4.2	4.2	4.2	
Indoor unit							

## Control System Lineup

Controlling system	Model	Outlook	Duct	Cassette	Floor ceiling
Wired controller	XK117		●	○	○
	XE70-13/G2		○	○	○
	XE71-42/G		○	○	○
Wireless remote controller	YB1FA		○	●	●
	YAW1F9*		○	○	○
	YAP1F6(WIFI)		○	○	○
WiFi module(G-Cloud)*2	ME31-00/C4		○	○	○
	ME31-00/C6		○	○	○
Centralized controller (up to 36 indoor units)	CE52-24/F(C)		○	○	○
Dry contact gateway (Extended function board)*3	ME30-42/E1		○	○	○
Door controller	MK03		○	○	○

Note: ● means standard, ○ means optional.

\*1-Controller for cooling only.

\*2: This WIFI module is only for EU market. For detailed information, please confirm it with the sales representatives.

\*3: Function: ON/OFF input control, mode input control, emergency stop input control, error output, cold plasma control, fresh air control.

## U-Match

INVERTER R410A

## Inverter Series (Heat Pump)

Cooling capacity is 3.5kW~16.0kW. The outdoor unit can be freely connected to duct type unit, cassette type unit and floor ceiling unit.



High efficiency



All DC inverter technology



Anti-cold function



Fresh air supply ventilation



Intelligent defrosting



Compact design



Memory function



Turbo function

- » Compact design; single fan design for the whole series; the maximum height is only 820mm.
- » With fast cooling and heating functions.
- » Connection pipe length is 75m at the most.
- » All DC inverter design.

## Indoor Unit

(CE)

## Duct type

- » Ultra-thin structural design, the thinnest position is 200mm.
- » Air supply outlet and air return outlet can be interchanged for convenient installation.
- » Optional water pump, maximum delivery lift is 1 meter.
- » Reserved fresh air outlet, which can realized 11 fresh air modes setting via dry contact gateway.

## Cassette type

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

## Floor ceiling type

- » With double air louvers structural design, meeting 3D air supply effect.
- » Both floor standing installation and ceiling installation methods can be selected.
- » There are 3 types of pipe-out leading ways for selection.
- » Pipe joints and electric box are designed at the unit side for convenient installation and maintenance.

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



## Units Lineup

Capacity index	35	50	71*
Outdoor unit			
Duct			
Indoor unit			
Floor ceiling			

Capacity index		71*2	100
Outdoor unit			
	Duct		
Indoor unit	Cassette		
	Floor ceiling		

Note: \*1: GLUD21W/A S; \*2: GLUD21W/A1 S

Capacity index	125	140	160	
Outdoor unit				
Duct				
Indoor unit	Cassette			
	Floor ceiling			

## Specification

Model	Outdoor unit		GUD35W/A-S				
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling	
Capacity	Cooling		kW	3.5	3.5	3.5	3.5
			Btu/h	11900	11900	11900	11900
	Heating		kW	4.0	4.0	4.0	4.0
			Btu/h	13600	13600	13600	13600
EER/COP		W/W	3.21/3.48	3.21/3.48	3.40/3.64	3.40/3.33	
Power supply		Ph/V/Hz	220-240V ~50/60Hz				
Power input	Cooling		kW	1.09	1.09	1.03	1.03
	Heating		kW	1.15	1.15	1.1	1.2
Current input	Cooling		A	4.75	4.75	4.45	4.45
	Heating		A	5	5	4.8	5.2
Refrigerant charge volume			kg	1			
Indoor unit	Air flow volume		CFM	383	383	382	383
	m³/h	650	650	650	650	650	
	ESP	Rated	Pa	25	25	0	0
		Range	Pa	0-50	0-50	0	0
	Sound pressure level (SH/H/M/L)		dB(A)	40/37/35/34	40/37/35/34	41/37/35/31	39/36/32/28
	Dimension (W×D×H)	Outline	mm	700×450×200	700×450×200	570×570×265	870×665×235
		Package	mm	1008×568×275	1008×568×275	698×653×295	1033×770×300
	Net weight/Gross weight		kg	19/23	20/24	17/22	25/30
Panel	Dimension (W×D×H)	Outline	mm	-	-	620×620×47.5	-
		Package	mm	-	-	701×701×125	-
	Net weight/Gross weight		kg	-	-	3.0/4.5	-
Outdoor unit	Sound pressure level		dB(A)	51	51	51	51
	Dimension (W×D×H)	Outline	mm	818×302×596	818×302×596	818×302×596	818×302×596
		Package	mm	948×420×645	948×420×645	948×420×645	948×420×645
	Net weight/Gross weight		kg	38/41	38/41	38/41	38/41
Connection pipe	Outer diameter	Liquid	inch(mm)	Φ1/4(6.35)	Φ1/4(6.35)	Φ1/4(6.35)	Φ1/4(6.35)
	Gas	inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)	
	Max. distance	Height	m	15	15	15	15
Length		m	30	30	30	30	30
Loading quantity		40'GP/40'HQ	set	141/158	141/158	120/139	110/132

CAC

Model	Outdoor unit		GUD50W/A-S			
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling
	GUD50P/A-S	GUD50PS/A-S	GUD50T/A-S	GUD50ZD/A-S		
Capacity	Cooling	kW	5.3	5.3	5	5.2
		Btu/h	18000	18000	17000	17700
	Heating	kW	5.8	5.8	5.6	5.8
EER/COP		Btu/h	19700	19700	19100	19700
	W/W	3.21/3.63	3.21/3.63	3.21/3.50	3.21/3.41	
	Power supply	Ph/V/Hz	220-240V ~50/60Hz			
Power input	Cooling	kW	1.65	1.65	1.56	1.62
	Heating	kW	1.6	1.6	1.6	1.7
Current input	Cooling	A	7.4	7.4	6.78	7
	Heating	A	7	7	7	7.4
Refrigerant charge volume		kg	1.25			
Indoor unit	Air flow volume		CFM	559	559	412
	m³/h			950	950	700
	ESP	Rated Range	Pa	25	25	0
Sound pressure level (SH/H/M/L)	Pa	0-50	0-50	0	0	
	dB(A)	40/39/37/35	40/39/37/35	44/39/35/31	44/42/39/36	
	Dimension (WxDxH)	Outline Package	mm	1000×450×200	1000×450×200	570×570×265
Panel	Net weight/Gross weight	kg	1308×568×275	1308×568×275	698×653×295	1033×770×300
	Dimension (WxDxH)	Outline Package	mm	25/30	26/31	17/22
	Net weight/Gross weight	kg	-	-	-	-
Outdoor unit	Sound pressure level	dB(A)	55	55	55	55
	Dimension (WxDxH)	Outline Package	mm	818×302×596	818×302×596	818×302×596
	Net weight/Gross weight	kg	948×420×645	948×420×645	948×420×645	948×420×645
Connection pipe	Outer diameter	Liquid Gas	inch(mm)	Φ1/4(6.35)	Φ1/4(6.35)	Φ1/4(6.35)
	Max. distance	Height Length	inch(mm)	Φ1/2(12.7)	Φ1/2(12.7)	Φ1/2(12.7)
	Net weight/Gross weight	m	20	20	20	20
Loading quantity		40'GP/40'HQ	set	124/142	124/142	120/139
						110/132

Model	Outdoor unit		GUD71W/A-S			
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling
	GUD71P/A-S	GUD71PS/A-S	GUD71T/A-S	GUD71ZD/A-S		
Capacity	Cooling	kW	7.1	7.1	7	7.1
		Btu/h	24200	24200	23800	24200
	Heating	kW	8	8	8	8
EER/COP		Btu/h	27200	27200	27200	27200
	W/W	3.21/3.4	3.21/3.4	3.21/3.64	3.23/3.08	
	Power supply	Ph/V/Hz	220-240V ~50/60Hz			
Power input	Cooling	kW	2.21	2.21	2.18	2.20
	Heating	kW	2.35	2.35	2.2	2.6
Current input	Cooling	A	9.6	9.6	9.47	9.56
	Heating	A	10.21	10.21	9.56	11.3
Refrigerant charge volume		kg	2			
Indoor unit	Air flow volume		CFM	706	706	735
	m³/h			1200	1200	1250
	ESP	Rated Range	Pa	25	25	0
Sound pressure level (SH/H/M/L)	Pa	0-75	0-75	0	0	0
	dB(A)	40/38/37/36	40/38/37/36	47/45/41/39	45/44/41/38	
	Dimension (WxDxH)	Outline Package	mm	1300×450×220	1300×450×220	840×840×200
Panel	Net weight/Gross weight	kg	1628×578×300	1628×578×300	943×923×245	1363×770×300
	Dimension (WxDxH)	Outline Package	mm	30/37	31/38	23/30
	Net weight/Gross weight	kg	-	-	-	31/37
Outdoor unit	Sound pressure level	dB(A)	56	56	56	56
	Dimension (WxDxH)	Outline Package	mm	892×340×698	892×340×698	892×340×698
	Net weight/Gross weight	kg	1029×458×750	1029×458×750	1029×458×750	1029×458×750
Connection pipe	Outer diameter	Liquid Gas	inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)
	Max. distance	Height Length	inch(mm)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)
	Net weight/Gross weight	m	25	25	25	25
Loading quantity		40'GP/40'HQ	set	84/102	84/102	83/88
						90/92

Model	Outdoor unit		GUD71W/A1-S			
	Indoor unit		Duct	Duct	Cassette	Floor Ceiling
	GUD71P/A1-S	GUD71PS/A1-S	GUD71T/A1-S	GUD71ZD/A1-S		
Capacity	Cooling	kW	7.15	7.15	7.00	7.15
		Btu/h	24300	24300	23800	24300
	Heating	kW	8	8	8	8
EER/COP		Btu/h	27200	27200	27200	27200
	W/W	2.92/3.20	2.92/3.20	3.21/3.64	2.98/3.14	
	Power supply	V/Ph/Hz	220-240V ~50/60Hz			
Power input	Cooling	kW	2.45	2.45	2.18	2.40
	Heating	kW	2.50	2.50	2.20	2.55
Current input	Cooling	A	10.65	10.65	9.47	10.43
	Heating	A	10.87	10.87	9.56	11.09
Refrigerant charge volume		kg	2	2	2	2
Indoor unit	Air flow volume		CFM	617	617	735
	m³/h			1050	1050	1250
	ESP	Rated Range	Pa	25	25	0
Sound pressure level (SH/H/M/L)	Pa	0-50	0-50	0	0	0
	dB(A)	43/42/40/38	43/42/40/38	47/45/41/39	49/48/45/43	
	Dimension (WxDxH)	Outline Package	mm	1000×450×200	1000×450×200	840×840×200
Panel	Net weight/Gross weight	kg	25/30	26/31	23/30	26/31
	Dimension (WxDxH)	Outline Package	mm	-	-	950×950×52
	Net weight/Gross weight	kg	-	-	-	6.0/9.5
Outdoor unit	Sound pressure level	dB(A)	55	55	55	55
	Dimension (WxDxH)	Outline Package	mm	892×340×698	892×340×698	892×340×698
	Net weight/Gross weight	kg	1029×458×750	1029×458×750	1029×458×750	1029×458×750
Connection pipe	Outer diameter	Liquid Gas	inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)
	Max. distance	Height Length	inch(mm)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)
	Net weight/Gross weight	m	25	25	25	25
Loading quantity		40'GP/40'HQ	set	108/120	108/120	83/88
						92/108

Model	Outdoor unit		GUD100W/A-S</			

Model	Outdoor unit		GUD125W/A-S			
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling
			GUD125PH/A-S	GUD125PHS/A-S	GUD125T/A-S	GUD125ZD/A-S
Capacity	Cooling	kW	12.02	12.02	12.02	12.02
		Btu/h	41000	41000	41000	41000
	Heating	kW	14.0	14.0	14.0	14.0
EER/COP	Power supply	Btu/h	47800	47800	47800	47800
		W/W	2.67/3.26	2.67/3.26	2.67/3.33	2.93/3.5
	V/Ph/Hz	220-240V ~50/60Hz				
Power input	Cooling	kW	4.5	4.5	4.5	4.1
	Heating	kW	4.3	4.3	4.2	4.0
Current input	Cooling	A	20.0	20.0	20.0	18.0
	Heating	A	18.8	18.8	18.4	17.6
Refrigerant charge volume		kg	3.4	3.4	3.4	3.4
Indoor unit	Air flow volume	CFM	1177	1177	883	942
		m³/h	2000	2000	1500	1600
	ESP	Rated Pa	50	50	0	0
	Range	Pa	0-150	0-150	0	0
	Sound pressure level (SH/H/M/L)	dB(A)	44/42/39/37	44/42/39/37	50/48/46/42	49/47/45/43
	Dimension (W×D×H)	Outline	mm	1000×700×300	1000×700×300	840×840×240
		Package	mm	1205×813×360	1205×813×360	963×963×325
	Net weight/Gross weight	kg	40/46	41/47	31/38	33/39
	Panel	Dimension (W×D×H)	Outline	mm	-	950×950×52
		Package	mm	-	-	1033×1038×112
	Net weight/Gross weight	kg	-	-	6.0/9.5	-
Outdoor unit	Sound pressure level	dB(A)	58	58	58	58
		Dimension (W×D×H)	Outline	mm	940×460×820	940×460×820
	Net weight/Gross weight	Package	mm	1083×573×973	1083×573×973	1083×573×973
		kg	84/96	84/96	84/96	84/96
Connection pipe	Outer diameter	Liquid inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)
	Gas	inch(mm)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)
	Max. distance	Height m	30	30	30	30
	Length	m	65	65	65	65
Loading quantity		40'GP/40'HQ	set	57/57	57/57	53/62
						57/68

Model	Outdoor unit		GUD140W/A-S			
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling
			GUD140PH/A-S	GUD140PHS/A-S	GUD140T/A-S	GUD140ZD/A-S
Capacity	Cooling	kW	14.0	14.0	14.0	14.0
		Btu/h	47800	47800	47800	47800
	Heating	kW	15.0	15.0	15.0	15.0
EER/COP	Power supply	Btu/h	51200	51200	51200	51200
		W/W	2.80/3.41	2.80/3.41	2.59/3.41	2.59/3.41
	V/Ph/Hz	220-240V ~50/60Hz				
Power input	Cooling	kW	5.0	5.0	5.4	5.4
	Heating	kW	4.4	4.4	4.4	4.4
Current input	Cooling	A	26.0	26.0	26.0	26.0
	Heating	A	21.0	21.0	21.0	21.0
Refrigerant charge volume		kg	3.7	3.7	3.7	3.7
Indoor unit	Air flow volume	CFM	1177	1177	1059	1295
		m³/h	2000	2000	1800	2200
	ESP	Rated Pa	50	50	0	0
	Range	Pa	0-150	0-150	0	0
	Sound pressure level (SH/H/M/L)	dB(A)	42/40/39/37	42/40/39/37	51/49/46/42	52/50/48/44
	Dimension (W×D×H)	Outline	mm	1400×700×300	1400×700×300	840×840×290
		Package	mm	1601×813×365	1601×813×365	963×963×379
	Net weight/Gross weight	kg	49/55	50/56	33/41	40/47
	Panel	Dimension (W×D×H)	Outline	mm	-	950×950×52
		Package	mm	-	-	1033×1038×112
	Net weight/Gross weight	kg	-	-	6.0/9.5	-
Outdoor unit	Sound pressure level	dB(A)	59	59	59	59
		Dimension (W×D×H)	Outline	mm	940×460×820	940×460×820
	Net weight/Gross weight	Package	mm	1083×573×973	1083×573×973	1083×573×973
		kg	92/104	92/104	92/104	92/104
Connection pipe	Outer diameter	Liquid inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)
	Gas	inch(mm)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)
	Max. distance	Height m	30	30	30	30
	Length	m	75	75	75	75
Loading quantity		40'GP/40'HQ	set	47/53	47/53	48/53
						54/62

Model	Outdoor unit		GUD160W/A-S			
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling
			GUD160PH/A-S	GUD160PHS/A-S	GUD160T/A-S	GUD160ZD/A-S
Capacity	Cooling	kW	15.6	15.6	15.0	15.4
		Btu/h	53200	53200	51200	52500
	Heating	kW	17.0	17.0	17.0	17.0
EER/COP	Power supply	Btu/h	58000	58000	58000	58000
		W/W	2.89/3.54	2.89/3.54	2.78/3.62	2.85/3.54
	V/Ph/Hz	220-240V ~50/60Hz				
Power input	Cooling	kW	5.4	5.4	5.4	5.4
	Heating	kW	4.8	4.8	4.7	4.8
Current input	Cooling	A	25.8	25.8	25.8	25.8
	Heating	A	23.0	23.0	22.4	23.0
Refrigerant charge volume		kg	3.8	3.8	3.8	3.8
Indoor unit	Air flow volume	CFM	1647	1647	1177	1354
		m³/h	2800	2800	2000	2300
	ESP	Rated Pa	50	50	0	0
	Range	Pa	0-200	0-200	0	0
	Sound pressure level (SH/H/M/L)	dB(A)	50/45/44/42	50/45/44/42	54/52/50/48	54/53/49/45
	Dimension (W×D×H)	Outline	mm	1400×700×300	1400×700×300	840×840×290
		Package	mm	1678×808×365	1678×808×365	963×963×379
	Net weight/Gross weight	kg	56/63	57/64	36/44	42/49
	Panel	Dimension (W×D×H)	Outline	mm	-	950×950×52
		Package	mm	-	-	1033×1038×1

## Control System Lineup

Model	Outdoor unit		GUD140W/A-X				
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling	
Capacity	Cooling		kW	14.0	14.0	14.0	14.0
	Heating		Btu/h	47800	47800	47800	47800
	Heating		kW	15.0	15.0	15.0	15.0
EER/COP		Btu/h	51200	51200	51200	51200	
Power supply		W/W	2.80/3.41	2.80/3.41	2.80/3.41	2.69/3.41	
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz				
Power input	Cooling	kW	5.0	5.0	5.0	5.2	
Power input	Heating	kW	4.4	4.4	4.4	4.4	
Current input	Cooling	A	8.6	8.6	8.6	8.6	
Current input	Heating	A	7.6	7.6	7.6	7.6	
Refrigerant charge volume		kg	3.7	3.7	3.7	3.7	
Indoor unit		Power supply	V/Ph/Hz	220-240V ~50/60Hz			
Indoor unit		Air flow volume	CFM	1177	1177	1059	1236
Indoor unit		m³/h	2000	2000	1800	2100	
Indoor unit		ESP	Rated Range	Pa	50	0	0
Indoor unit		Sound pressure level (SH/H/M/L)	dB(A)	42/40/39/37	42/40/39/37	51/49/46/42	52/50/48/44
Indoor unit		Dimension (WxDxH)	Outline Package	mm	1400×700×300	840×840×290	1570×665×235
Indoor unit		Net weight/Gross weight	kg	1601×813×365	963×963×379	1729×770×300	
Panel		Net weight/Gross weight	kg	49/55	50/56	33/41	40/47
Panel		Dimension (WxDxH)	Outline Package	mm	-	950×950×52	-
Panel		Net weight/Gross weight	kg	-	-	1033×1038×112	-
Outdoor unit		Sound pressure level	dB(A)	59	59	59	59
Outdoor unit		Dimension (WxDxH)	Outline Package	mm	940×460×820	940×460×820	940×460×820
Connection pipe		Net weight/Gross weight	kg	1083×573×973	1083×573×973	1083×573×973	
Connection pipe		Outer diameter	Liquid Gas	inch(mm)	Φ3/8(9.52) Φ5/8(15.9)	Φ3/8(9.52) Φ5/8(15.9)	Φ3/8(9.52) Φ5/8(15.9)
Connection pipe		Max. distance	Height Length	m	30	30	30
Connection pipe		Max. distance	Length	75	75	75	
Loading quantity		40'GP/40'HQ	set	47/53	47/53	48/53	54/62

Model	Outdoor unit		GUD160W/A-X					
	Indoor unit		Duct(without water pump)	Duct(with water pump)	Cassette	Floor ceiling		
Capacity	Cooling		kW	15.6	15.6	15.0	15.4	
	Heating		Btu/h	53200	53200	51200	52500	
	Heating		kW	17.0	17.0	17.0	17.0	
EER/COP		W/W	2.89/3.54	2.89/3.54	2.88/3.62	2.96/3.54		
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz					
Power input	Cooling	kW	5.4	5.4	5.2	5.2		
Power input	Heating	kW	4.8	4.8	4.7	4.8		
Current input	Cooling	A	9.4	9.4	9.0	9.0		
Current input	Heating	A	8.4	8.4	8.2	8.4		
Refrigerant charge volume		kg	3.8	3.8	3.8	3.8		
Indoor unit		Power supply	V/Ph/Hz	220-240V ~50/60Hz				
Indoor unit		Air flow volume	CFM	1647	1647	1177	1354	
Indoor unit		m³/h	2800	2800	2000	2300		
Indoor unit		ESP	Rated Range	Pa	50	0-200	0	0
Indoor unit		Sound pressure level (SH/H/M/L)	dB(A)	50/45/44/42	50/45/44/42	54/52/50/48	54/53/49/45	
Indoor unit		Dimension (WxDxH)	Outline Package	mm	1400×700×300	840×840×290	1570×665×235	
Indoor unit		Net weight/Gross weight	kg	1678×808×365	963×963×379	1729×770×300		
Panel		Dimension (WxDxH)	Outline Package	mm	-	950×950×52	-	
Panel		Net weight/Gross weight	kg	-	-	1033×1038×112	-	
Outdoor unit		Sound pressure level	dB(A)	60	60	60	60	
Outdoor unit		Dimension (WxDxH)	Outline Package	mm	940×460×820	940×460×820	940×460×820	
Connection pipe		Net weight/Gross weight	kg	1083×573×973	1083×573×973	1083×573×973		
Connection pipe		Outer diameter	Liquid Gas	inch(mm)	Φ3/8(9.52) Φ5/8(15.9)	Φ3/8(9.52) Φ5/8(15.9)	Φ3/8(9.52) Φ5/8(15.9)	
Connection pipe		Max. distance	Height Length	30	30	30		
Connection pipe		Max. distance	Length	75	75	75		
Loading quantity		40'GP/40'HQ	set	47/53	47/53	48/53	54/62	

Controlling system	Product series	Duct type	Cassette type	Floor ceiling type
Wired controller	XK117	●	○	○
	XE70-13/G2	○	○	○
	XE71-42/G	○	○	○
Remote controller	YAW1F9 (WiFi)	○	○	○
	YAP1F6 (WiFi)	○	●	●
WIFI module (G-Cloud) <sup>2</sup>	ME31-00/C4	○	○	○
	ME31-00/C6	○	○	○
MODBUS gateway	ME50-00/EG(M)	○	○	○
Centralized controller (up to 36 indoor units)	CE52-24/F(C)	○	○	○
Dry contact gateway (extended function board) <sup>3</sup>	ME30-42/E1	○	○	○
Door controller	MK03	○	○	○

Note:

● means standard, ○ means optional.

<sup>1</sup>: Controller for cooling only<sup>2</sup>: This WIFI module is only for EU market. For detailed information, please confirm it with the sales representatives.<sup>3</sup>: Function: ON/OFF input control, mode input control, emergency stop input control, error output, cold plasma control, fresh air control.

## Big Duct Type Unit

INVERTER R410A

### High Capacity Series

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



### Specifications

Capacity	Model		FGR20Pd/DNa-X	FGR25Pd/DNa-X	FGR30Pd/DNa-X	FGR40Pd/D(2)Na-X	FGR50Pd/D(2)Na-M	FGR60Pd/D(2)Na-M	
	Cooling	Heating	kW	kW	W/W	W/W	W/W	V/Ph/Hz	
EER			20.0	22.0	2.56	3.14	30.0	380-415V 3N~50/60Hz	
COP			25.0	27.5	2.65	3.10	43.0	380-415V 3N~50Hz	
Power supply			30.0	33.0	2.65	3.20	53.0	60.0	
Power input	Cooling	Heating	40.0	43.0	2.59	3.10	2.30	2.22	
Current input	Cooling	Heating	50.0	53.0	2.80	3.10	2.80	3.08	
Refrigerant charge volume			60.0	64.0					
Indoor unit	Model		FGR20Pd/DNa-X(I)	FGR25Pd/DNa-X(I)	FGR30Pd/DNa-X(I)	FGR40Pd/D(2)Na-X(I)	FGR50Pd/D(2)Na-M(I)	FGR60Pd/D(2)Na-M(I)	
	Airflow volume		CFM	2177	2472	3060	4120	5296	
	m <sup>3</sup> /h		3700	4200	5200	7000	9000	10800	
	ESP	Rated	Pa	120	120	120	120	160	
		Range	Pa	0-250	0-250	0-250	0-250	-	
	Sound pressure level		dB(A)	52	53	55	56	60	
	Dimension (W×D×H)	Outline	mm	1315×760×385	1520×840×450	1520×840×450	1680×900×650	1900×1100×700	
Outdoor unit	Net weight/Gross weight	Package	mm	1578×883×472	1788×988×580	1788×988×580	1923×1153×850	2123×1493×900	
		kg	kg	82/104	99/134	105/145	165/210	255/330	
	Model		FGR20Pd/DNa-X(O)	FGR25Pd/DNa-X(O)	FGR30Pd/DNa-X(O)	FGR40Pd/DNa-M(O)×2	FGR50Pd/DNa-M(O)×2	FGR60Pd/DNa-M(O)×2	
	Sound pressure level		dB(A)	62	63	65	62*	63*	
	Dimension (W×D×H)	Outline	mm	940×320×1430	940×460×1615	940×460×1615	(940×320×1430)×2	(940×460×1615)×2	
		Package	mm	1038×438×1580	1038×578×1765	1038×578×1765	(1038×438×1580)×2	(1038×578×1765)×2	
	Net weight/Gross weight		kg	120/130	146/162	175/190	(120/130)×2	(155/168)×2	
Connection pipe	Outer diameter	Liquid	Inch(mm)	3/8"(9.52)	3/8"(9.52)	1/2"(12.7)	3/8"(9.52)×2	3/8"(9.52)×2	
		Gas	Inch(mm)	3/4"(19.05)	7/8"(22.2)	1"(25.4)	3/4"(19.05)×2	7/8"(22.2)×2	
	Max. distance	Height	m	30	30	30	30	30	
		Length	m	70	70	70	70	70	
Loading quantity			20'GP/40'GP/40'HQ	set	15/35/41	12/28/28	12/28/28	8/16/16	
								4/10/10	

\* Single unit's noise value.

### Control System Lineup

Controlling system	Model	Outlook	Duct split unit
Wired controller	XK46		
Remote controller	YAP1F		

Note: ● means standard, ○ means optional.

- DC inverter for high efficiency and energy saving.
- High static units for longer ducted runs.
- ESP is up to 250Pa\*.

\* Indoor fan can be adjusted according to the static pressure of air duct installed by customers\*.

\*: This function is only fit for 20~40kW product models.

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

CAC

## Big Duct Type Unit

INVERTER R410A

### Cooling Only

UMLD400 inverter unit; UML 500 and UML 600 fixed-speed unit.



- » Factory installed crankcase heater, improved compressor reliability in low ambient temperature.
- » Golden fin pre-coated condenser coils, improved durability in the corrosive environments.
- » Precision EXV refrigerant metering, optimum running in the whole operating range.

Item	Nominal operating condition (temperature)				Operation range (temperature) Outdoor condition	
	Outdoor condition		Indoor condition			
	DB (°C)	WB (°C)	DB (°C)	WB (°C)		
Cooling	35	24	27	19	18~48	

### Specifications

Model (Indoor unit/Outdoor unit)		UMD400PH/A-M(P)		UM500PH/A-M(P)	
		UMLD400W/A-M(P)		UML500H/A-M(P)	
Capacity	Cooling	kW	38.1	47.7	56.5
EER		W/W	2.12	2.14	2.02
Power supply		V/Ph/Hz	380-415V 3N~50/60Hz	380V 3N~50Hz	
Power input	Cooling	kW	18.00	22.25	28.00
Current input	Cooling	A	28.79	39.77	50.05
Refrigerant charge volume		kg	11.1	13.0	18.0
Indoor unit	Airflow volume		CFM	4120	5297
			m³/h	7000	9000
	ESP	Rated	Pa	200	230
		Range	Pa	0~250	-
Outdoor unit	Sound pressure level		dB(A)	56	62
	Dimension (W×D×H)	Outline	mm	1550×850×550	1900×850×706
		Package	mm	1813×1074×855	2163×1078×895
	Net weight/Gross weight		kg	155/205	230/293
	Sound pressure level		dB(A)	66	67
	Dimension (W×D×H)	Outline	mm	940×460×1615	1340×765×1740
Connection pipe	Net weight/Gross weight		mm	1038×578×1765	1420×840×1910
	Outer diameter	Liquid	Inch(mm)	1/2"(12.7)	5/8"(15.9)
		Gas	Inch(mm)	1"(25.4)	1-3/8"(34.9)
	Max. distance	Height	m	30	30
Loading quantity	Length		m	50	50
	20'GP/40'GP/40'HQ		set	6/14/18	4/10/10
				4/10/10	

### Control System Lineup

Controlling system	Model	Outlook	Duct split unit
Wired controller	XK46		●
Wireless remote controller	YAP1F		○

Note:

● means standard, ○ means optional.





## MULTI VRF

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GMV6

GMV6 HR

GMV5

GMV5E

GMV5 Mini & Slim

GMV5 Max

GMV5 HR

GMV5 CP

GMV5 Home

GMV Water

Indoor Units

Control System

Energy Recovery Ventilation (ERV)

GMV6

**INVERTER** 

## 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 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;
  - » Provide comprehensive solution of smart management system; it enables distributed networking for satisfying LAN and WAN; support Modbus, BACnet, KNX and multiple protocols;
  - » Air-makeup enthalpy-adding compressor design is applied for stronger cooling and heating performance and wider operation range from -30°C~55°C;
  - » Engineering design is more flexible. The external static pressure is improved by 35%, reaching 110Pa. Maximum connectable indoor unit quantity of single system is improved by 25%, reaching 80 sets (It needs engineering custom if there are more than 80 indoor units and the engineering custom is available for 100 indoor units at the most) ;
  - » 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.



Item	Nominal operating condition (temperature)				Operation range (temperature)
	Outdoor condition		Indoor condition		Outdoor condition
	DB (°C)	WB (°C)	DB (°C)	WB (°C)	DB (°C)
Cooling	35	24	27	19	-15 <sup>1</sup> ~55 <sup>2</sup>
Heating	7	6	20	15	-30~24

\*1: Cooling at -15~5°C is conditional. Please inquire our engineers for more information. Generally, the lowest operating temperature for cooling is -5°C.  
\*2: The maximum operation temperature of GMV-\*\*WM/G-X series is 52°C.

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

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

Model	GMV-224WM/H-X	GMV-280WM/H-X	GMV-335WM/H-X	GMV-400WM/H-X	GMV-450WM/H-X	GMV-504WM/H-X	GMV-560WM/H-X	GMV-615WM/H-X
GMV-224WM/H-X	●							
GMV-280WM/H-X		●						
GMV-335WM/H-X			●					
GMV-400WM/H-X				●				
GMV-450WM/H-X					●			
GMV-504WM/H-X						●		
GMV-560WM/H-X							●	
GMV-615WM/H-X								●
GMV-680WM/H-X	●							
GMV-730WM/H-X	●							
GMV-784WM/H-X	●							
GMV-840WM/H-X	●							
GMV-895WM/H-X	●							
GMV-950WM/H-X			●					
GMV-1015WM/H-X				●				
GMV-1065WM/H-X					●			
GMV-1119WM/H-X						●		
GMV-1175WM/H-X							●	
GMV-1230WM/H-X								●●
GMV-1290WM/H-X	●							
GMV-1345WM/H-X	●							
GMV-1400WM/H-X		●						
GMV-1455WM/H-X	●							
GMV-1510WM/H-X	●							
GMV-1565WM/H-X			●					
GMV-1630WM/H-X				●				
GMV-1680WM/H-X					●			
GMV-1734WM/H-X						●		
GMV-1790WM/H-X						●		
GMV-1845WM/H-X							●●●	
GMV-1905WM/H-X	●							
GMV-1959WM/H-X	●							
GMV-2015WM/H-X	●							
GMV-2070WM/H-X	●							
GMV-2125WM/H-X	●							
GMV-2180WM/H-X		●						
GMV-2245WM/H-X			●					
GMV-2295WM/H-X				●				
GMV-2349WM/H-X					●			
GMV-2405WM/H-X						●		
GMV-2460WM/H-X							●●●●	

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

Model	GMV-224WM/G-X	GMV-280WM/G-X	GMV-335WM/G-X	GMV-400WM/G-X	GMV-450WM/G-X
Capacity range	HP	8	10	12	14
Cooling	kW	22.4	28.0	33.5	40.0
Heating	kW	25.0	31.5	37.5	45.0
EER	W/W	4.48	4.52	4.35	4.35
COP	W/W	5.21	5.34	4.81	4.74
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
Min. circuit/Max. fuse current	A	23.0/25.0	23.5/25.0	24.1/25.0	32.5/40.0
Power consumption	Cooling	kW	5.00	6.20	7.70
	Heating	kW	4.80	5.90	7.80
Maximum drive IDU NO.	unit	13	16	19	23
Refrigerant charge volume	kg	5.5	5.5	5.7	7.0
Sound pressure level	dB(A)	56	57	59	60
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ25.4
Dimension (W×D×H)	Outline	mm	930×775×1690	930×775×1690	930×775×1690
	Package	mm	1000×830×1855	1000×830×1855	1400×830×1855
Net weight/Gross weight	kg	215/225	215/225	220/230	290/305
Loading quantity	40' GP	unit	28	28	22
	40' HQ	unit	28	28	22

Model	GMV-504WM/G-X	GMV-560WM/G-X	GMV-615WM/G-X	GMV-680WM/G-X
Capacity range	HP	18	20	22
Cooling	kW	50.4	56.0	61.5
Heating	kW	56.5	63.0	68.0
EER	W/W	4.10	4.06	3.80
COP	W/W	4.38	4.81	3.81
Power supply	V/Ph/Hz	380-415V 3N~50/60Hz	380-415V 3N~50/60Hz	380-415V 3N~50/60Hz
Min. circuit/Max. fuse current	A	47/50	48/50	49/50
Power consumption	Cooling	kW	12.30	13.80
	Heating	kW	12.90	13.10
Maximum drive IDU NO.	unit	29	33	39
Refrigerant charge volume	kg	8.0	8.0	8.3
Sound pressure level	dB(A)	61	62	64
Connecting pipe	Liquid	mm	Φ15.9	Φ15.9
	Gas	mm	Φ28.6	Φ28.6
Dimension (W×D×H)	Outline	mm	1340×775×1690	1340×775×1690
	Package	mm	1400×830×1855	1400×830×1855
Net weight/Gross weight	kg	295/310	350/365	350/365
Loading quantity	40' GP	unit	22	22
	40' HQ	unit	22	22



Model	GMV-224WM/H-X	GMV-280WM/H-X	GMV-335WM/H-X	GMV-400WM/H-X	GMV-450WM/H-X	GMV-504WM/H-X	GMV-560WM/H-X	GMV-615WM/H-X
Capacity range	HP	8	10	12	14	16	18	20
Cooling capacity	Rated *	kW	22.4	28	33.5	40	45	50.4
Heating capacity	Rated *	kW	16.2	16.2	18.5	23.5	23.5	61.5
	Max.	kW	25	31.5	37.5	45	50	63
SEER	Ducted *	-	7.7	6.85	6.55	6.89	6.6	6.32
	Cassette *	-	7.36	6.2	7.20	6.74	6.36	5.56
SCOP	Ducted *	-	5.48	5.48	5.74	5.15	5.15	4.32
	Cassette *	-	4.75	4.75	4.84	4.44	4.44	3.71
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
Max. input power	kW	12.87	13.15	13.50	21.00	22.00	26.30	26.85
Maximum drive IDU NO.	unit	13	16	19	23	26	29	33
Refrigerant charge volume	kg	5.5	5.5	7.5	7.5	7.5	8.3	8.3
Sound pressure level(Cooling)	dB(A)	56	57	59	59	60	61	63
Sound power level(Cooling)	Ducted *	dB(A)	81	83	88	85	89	93
	Cassette *	dB(A)	81	86	88	88	93	94
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9
	Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6
Dimension(W×D×H)	Outline	mm	930×775×1690	930×775×1690	930×775×1690	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
Net weight/Gross weight	kg	220/230	220/230	240/250	300/315	300		

## Specifications of ODU Combinations

Model	Power supply V/Ph/Hz	Capacity kW	Power consumption		Dimension (W×D×H) mm	Sound pressure dB(A)	Connection pipe Liquid Gas	Min. circuit current A	Max. fuse current A	Net weight kg		
			Cooling	Heating								
			kW	kW								
GMV-735WM/G-X	380-415V 3N~ 50/60Hz	73.5	82.5	7.7+9.2	7.8+9.5	(930×775×1690)+(1340×775×1690)	62	Φ19.05	Φ31.8	24.1+32.5	25+40	220+290
GMV-785WM/G-X		78.5	87.5	7.7+10.8	7.8+10.7	(930×775×1690)+(1340×775×1690)	63	Φ19.05	Φ31.8	24.1+33.5	25+40	220+290
GMV-839WM/G-X		83.9	94	7.7+12.3	7.8+12.9	(930×775×1690)+(1340×775×1690)	64	Φ19.05	Φ31.8	24.1+47	25+50	220+295
GMV-895WM/G-X		89.5	100.5	62+16.2	5.9+16.9	(930×775×1690)+(1340×775×1690)	64	Φ19.05	Φ31.8	23.5+49	25+50	215+350
GMV-950WM/G-X		95	106.5	7.7+16.2	7.8+16.9	(930×775×1690)+(1340×775×1690)	65	Φ19.05	Φ31.8	24.1+49	25+50	220+350
GMV-1015WM/G-X		101.5	114	9.2+16.2	9.5+16.9	(1340×775×1690)×2	65	Φ19.05	Φ38.1	32.5+49	40+50	290+350
GMV-1064WM/G-X		106.4	119.5	12.3+13.8	12.9+13.1	(1340×775×1690)×2	65	Φ19.05	Φ38.1	47+48	50+50	295+350
GMV-1119WM/G-X		111.9	125.5	12.3+16.2	12.9+16.9	(1340×775×1690)×2	65	Φ19.05	Φ38.1	47+49	50+50	295+350
GMV-1175WM/G-X		117.5	132	13.8+16.2	13.1+16.9	(1340×775×1690)×2	65	Φ19.05	Φ38.1	48+49	50+50	350+350
GMV-1230WM/G-X		123	138	16.2+16.2	16.9+16.9	(1340×775×1690)×2	65	Φ19.05	Φ38.1	49+49	50+50	350+350
GMV-1295WM/G-X		129.5	145.5	16.2+20.5	16.9+20.1	(1340×775×1690)×2	65	Φ19.05	Φ38.1	49+49	50+50	350+355
GMV-1360WM/G-X		136	153	20.5+20.5	20.1+20.1	(1340×775×1690)×2	65	Φ19.05	Φ41.3	49+49	50+50	355+355
GMV-1399WM/G-X		139.9	157	7.7+12.3+13.8	7.8+12.9+13.1	(930×775×1690)+(1340×775×1690)×2	66	Φ19.05	Φ41.3	24.1+47+48	25+50+50	220+295+350
GMV-1455WM/G-X		145.5	163.5	6.2+13.8+16.2	5.9+13.1+16.9	(930×775×1690)+(1340×775×1690)×2	66	Φ19.05	Φ41.3	23.5+48+49	25+50+50	215+350+350
GMV-1510WM/G-X		151	169.5	6.2+16.2+16.2	5.9+16.9+16.9	(930×775×1690)+(1340×775×1690)×2	67	Φ19.05	Φ41.3	23.5+49+49	25+50+50	215+350+350
GMV-1565WM/G-X		156.5	175.5	7.7+16.2+16.2	7.8+16.9+16.9	(930×775×1690)+(1340×775×1690)×2	67	Φ19.05	Φ41.3	24.1+49+49	25+50+50	220+350+350
GMV-1623WM/G-X		162.3	182	12.3+12.3+16.2	12.9+12.9+16.9	(1340×775×1690)×3	67	Φ19.05	Φ41.3	47+47+49	50+50+50	295+295+350
GMV-1679WM/G-X		167.9	188.5	12.3+13.8+16.2	12.3+13.1+16.9	(1340×775×1690)×3	67	Φ19.05	Φ41.3	47+48+49	50+50+50	295+350+350
GMV-1734WM/G-X		173.4	194.5	12.3+16.2+16.2	12.9+16.9+16.9	(1340×775×1690)×3	67	Φ19.05	Φ41.3	47+49+49	50+50+50	295+350+350
GMV-1790WM/G-X		179	201	13.8+16.2+16.2	13.1+16.9+16.9	(1340×775×1690)×3	68	Φ19.05	Φ41.3	48+49+49	50+50+50	350+350+350
GMV-1845WM/G-X		184.5	207	16.2+16.2+16.2	16.9+16.9+16.9	(1340×775×1690)×3	68	Φ19.05	Φ41.3	49+49+49	50+50+50	350+350+350
GMV-1910WM/G-X		191	214.5	16.2+16.2+20.5	16.9+16.9+20.1	(1340×775×1690)×3	69	Φ22.2	Φ44.5	49+49+49	50+50+50	350+350+350
GMV-1975WM/G-X		197.5	222	16.2+20.5+20.5	16.9+20.1+20.1	(1340×775×1690)×3	69	Φ22.2	Φ44.5	49+49+49	50+50+50	350+355+355
GMV-2040WM/G-X		204	229.5	20.5+20.5+20.5	20.1+20.1+20.1	(1340×775×1690)×3	69	Φ22.2	Φ44.5	49+49+49	50+50+50	355+355+355
GMV-2069WM/G-X		206.9	232	7.7+12.3+16.2+16.2	7.8+12.9+16.9+16.9	(930×775×1690)+(1340×775×1690)×3	68	Φ22.2	Φ44.5	24.1+47+49+49	25+50+50+50	220+295+350+350
GMV-2129WM/G-X		212.9	238.5	10.8+12.3+13.8+16.2	10.7+12.9+13.1+16.9	(1340×775×1690)×4	68	Φ22.2	Φ44.5	33.5+47+48+49	40+50+50+50	290+295+350+350
GMV-2190WM/G-X		219	246	9.2+13.8+16.2+16.2	9.5+13.1+16.9+16.9	(1340×775×1690)×4	69	Φ22.2	Φ44.5	32.5+48+49+49	40+50+50+50	290+350+350+350
GMV-2245WM/G-X		224.5	252	9.2+16.2+16.2+16.2	9.5+16.9+16.9+16.9	(1340×775×1690)×4	69	Φ22.2	Φ44.5	33.5+49+49+49	40+50+50+50	290+350+350+350
GMV-2295WM/G-X		229.5	258	13.8+13.8+13.8+16.2	13.1+13.1+13.1+16.9	(1340×775×1690)×4	69	Φ22.2	Φ44.5	48+48+48+49	50+50+50+50	350+350+350+350
GMV-2350WM/G-X		235	264	13.8+13.8+16.2+16.2	13.1+13.1+16.9+16.9	(1340×775×1690)×4	69	Φ22.2	Φ44.5	48+48+49+49	50+50+50+50	350+350+350+350
GMV-2414WM/G-X		241.4	271	12.3+16.2+16.2+20.5	12.9+16.9+16.9+20.1	(1340×775×1690)×4	69	Φ22.2	Φ44.5	47+49+49+49	50+50+50+50	295+350+350+355
GMV-2470WM/G-X		247	277.5	13.8+16.2+16.2+20.5	13.1+16.9+16.9+20.1	(1340×775×1690)×4	70	Φ22.2	Φ44.5	48+49+49+49	50+50+50+50	350+350+350+355
GMV-2525WM/G-X		252.5	283.5	16.2+16.2+16.2+20.5	16.9+16.9+16.9+20.1	(1340×775×1690)×4	70	Φ22.2	Φ44.5	49+49+49+49	50+50+50+50	350+350+350+355
GMV-2590WM/G-X		259	291	16.2+16.2+20.5+20.5	16.9+16.9+20.1+20.1	(1340×775×1690)×4	70	Φ22.2	Φ44.5	49+49+49+49	50+50+50+50	350+350+355+355
GMV-2655WM/G-X		265.5	298.5	16.2+20.5+20.5+20.5	16.9+20.1+20.1+20.1	(1340×775×1690)×4	70	Φ22.2	Φ44.5	49+49+49+49	50+50+50+50	350+355+355+355
GMV-2720WM/G-X		272	306	20.5+20.5+20.5+20.5	20.1+20.1+20.1+20.1	(1340×775×1690)×4	70	Φ22.2	Φ44.5	49+49+49+49	50+50+50+50	355+355+355+355

Model
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CAC

## GMV6 HR

**INVERTER** 

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.



- » 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. 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 Box

Model	Product Outlook
NCHS1D	
NCHS2D	
NCHS4D	
NCHS8D	

## Hydro Box

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

## Outdoor Unit

Model	GMV-VQ224WM/C-X	GMV-VQ280WM/C-X	GMV-VQ355WM/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
Cooling capacity	Rated *	kW	22.4	28	33.5	40	45	50.4
Heating capacity	Rated *	kW	16.2	16.2	18.5	23.5	23.5	56
	Max.	kW	25	31.5	37.5	45	50	61.5
SEER	Ducted *	-	7.76	7.16	6.64	6.90	6.36	6.45
	Cassette *	-	7.24	6.37	6.66	5.93	5.71	5.25
SCOP	Ducted *	-	4.80	4.80	4.91	4.70	4.70	4.38
	Cassette *	-	4.41	4.41	4.69	4.31	4.31	3.59
Power supply	V/Ph/Hz		380-415V 3N~50/60Hz					
Max. circuit/Fuse current	A	23.0/25	23.5/25	24.1/25	37.5/40	39.3/40	47.0/50	48.0/50
Max. input power	kW	12.87	13.15	13.5	21	22	26.3	26.85
Maximum drive IDU NO.	unit	13	16	19	23	26	29	33
Refrigerant charge volume	kg	8.2	8.5	9.6	11.1	11.6	12.8	13.3
Sound pressure level(Cooling)	dB(A)	60	61	63	63	63	63	64
Sound power level(Cooling)	Ducted * dB(A)	80	83	83	91	91	89	89
	Cassette * dB(A)	80	85	86	87	94	87	94
Connecting pipe	Liquid mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9
	High pressure gas mm	Φ15.9	Φ19.05	Φ19.05	Φ22.2	Φ22.2	Φ25.4	Φ25.4
	Low pressure gas mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6
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
	Package mm	1000×830×1855	1000×830×1855	1000×830×1855	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
Loading quantity	40' GP set	28	28	28	22	22	22	22
	40' HQ set	28	28	28	22	22	22	22

Note: The data is Eurovent certified.

## Mode Exchange Box

Model	NCHS1D	NCHS2D	NCHS4D	NCHS8D
Number of branches	unit	1	2	4
Maximum number of connectable IDUs	Per branch	8	8	8
	Total	8	16	32
Maximum capacity of connectable IDUs	Per branch	kW	16	16
	Total	kW	16	28
Power supply	V/Ph/Hz	220-240V ~ 50/60Hz	220-240V ~ 50/60Hz	220-240V ~ 50/60Hz
Power consumption	Cooling W	14	25	32
	Heating W	14	25	32
Piping connections	ODU Liquid mm	Φ9.52	Φ9.52	Φ12.7
	High pressure gas mm	Φ19.05	Φ19.05	Φ22.2
	Low pressure gas mm	Φ22.2	Φ22.2	Φ28.6
	IDU Liquid mm	Φ6.35/9.52	Φ6.35/9.52	Φ6.35/9.52
	Gas mm	Φ12.7/15.9	Φ12.7/15.9	Φ12.7/15.9
Dimension(W×D×H)	Outline mm	340×388×250	340×388×250	460×388×250
	Package mm	863×624×298	863×624×298	979×624×303
Net weight/Gross weight	kg	12/17.5	14.5/20.5	20.6/27

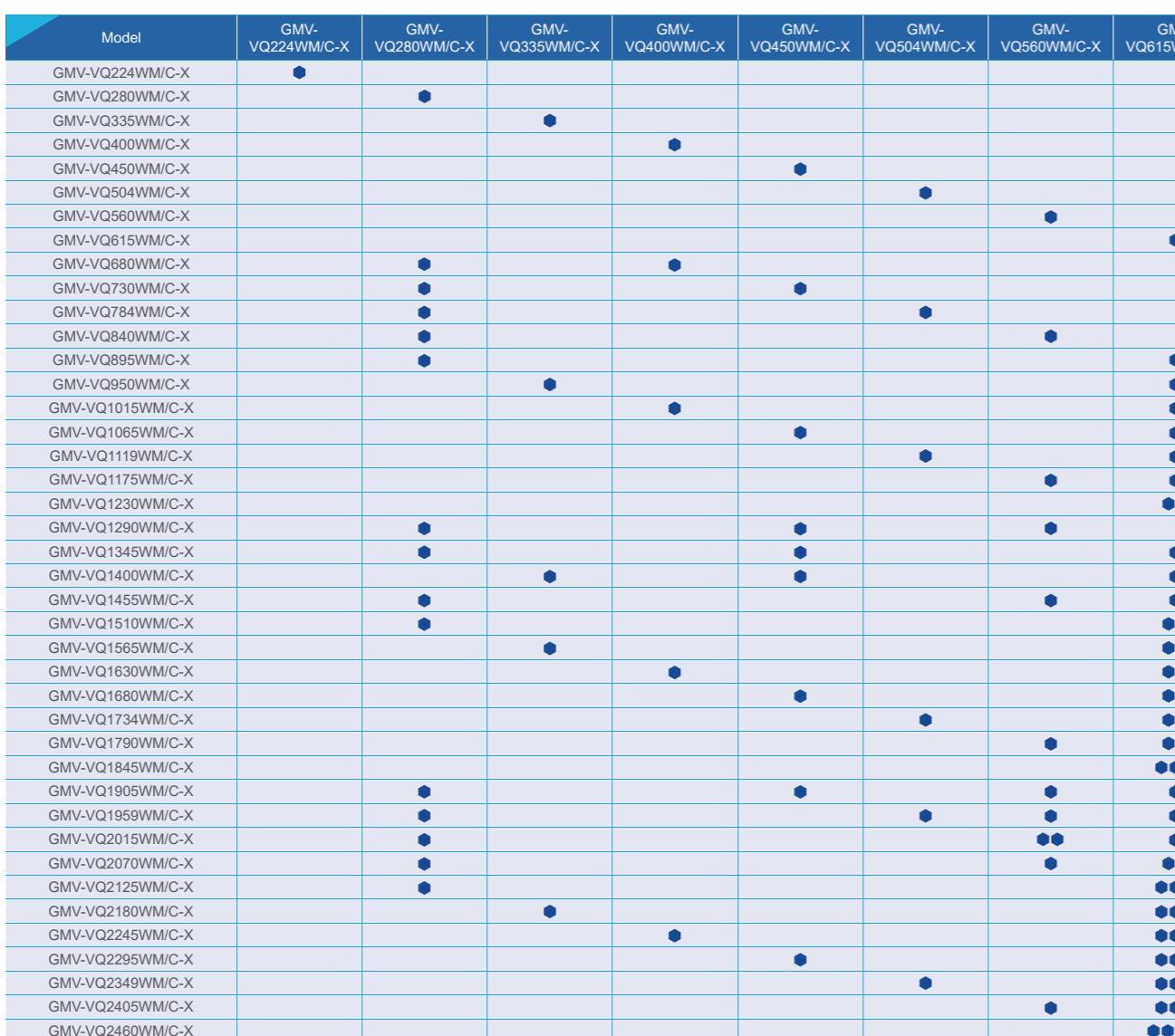


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## Hydro Box

Model			NRQR16L/A-T		NRQR30L/A-T	
Heating capacity			kW		16	
Heating power input			W		10	
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×D×H)			Outing	mm	515×330×606	
			Package	mm	685×473×657	
Net/Gross weight			kg	36/42	40/47	
Loading quantity			40' GP/40' HQ	set	252/336	252/336

## GMV6 HR Outdoor Units Lineup



Model	Capacity range	Cooling capacity		Heating capacity		Connecting pipe diameter			Power supply	Min. circuit current	Max. fuse current	Refrigerant charge volume	Net weight	Gross weight
		HP	kW	Rated	Max.	Liquid	HP Gas	LP Gas						
GMV-VQ680WM/C-X	24	68	39.7	76.5	Φ15.9	Φ25.4	Φ28.6			23.5+37.5	25+40	19.6	243+320	253+355
GMV-VQ730WM/C-X	26	73	39.7	81.5	Φ19.05	Φ28.6	Φ31.8			23.5+39.3	25+40	20.1	243+325	253+340
GMV-VQ784WM/C-X	28	78.4	47.2	88	Φ19.05	Φ28.6	Φ31.8			23.5+47	25+50	21.3	243+385	253+400
GMV-VQ840WM/C-X	30	84	47.2	94.5	Φ19.05	Φ28.6	Φ31.8			23.5+48	25+50	21.3	243+385	253+400
GMV-VQ895WM/C-X	32	89.5	49.2	100.5	Φ19.05	Φ28.6	Φ31.8			23.5+49	25+50	21.8	243+385	253+400
GMV-VQ950WM/C-X	34	95	51.5	106.5	Φ19.05	Φ28.6	Φ31.8			24.1+49	25+50	22.9	256+385	266+400
GMV-VQ1015WM/C-X	36	101.5	56.5	114	Φ19.05	Φ31.8	Φ38.1			37.5+49	40+50	24.4	320+385	355+400
GMV-VQ1065WM/C-X	38	106.5	56.5	119	Φ19.05	Φ31.8	Φ38.1			39.3+49	40+50	24.9	325+385	340+400
GMV-VQ1119WM/C-X	40	111.9	64.0	125.5	Φ19.05	Φ31.8	Φ38.1			47+49	50+50	26.1	385+385	400+400
GMV-VQ1175WM/C-X	42	117.5	64.0	132	Φ19.05	Φ31.8	Φ38.1			48+49	50+50	26.1	385+385	400+400
GMV-VQ1230WM/C-X	44	123	66.0	138	Φ19.05	Φ31.8	Φ38.1			49+49	50+50	26.6	385+385	400+400
GMV-VQ1290WM/C-X	46	129	70.7	144.5	Φ19.05	Φ31.8	Φ38.1			23.5+39.3+48	25+40+50	32.9	243+325+385	253+340+400
GMV-VQ1345WM/C-X	48	134.5	72.7	150.5	Φ19.05	Φ31.8	Φ38.1			23.5+39.3+49	25+40+50	33.4	243+325+385	253+340+400
GMV-VQ1400WM/C-X	50	140	75.0	156.5	Φ19.05	Φ38.1	Φ41.3			24.1+39.3+49	25+40+50	34.5	256+325+385	266+340+400
GMV-VQ1455WM/C-X	52	145.5	80.2	163.5	Φ19.05	Φ38.1	Φ41.3			23.5+48+49	25+50+50	34.6	243+385+385	253+400+400
GMV-VQ1510WM/C-X	54	151	82.2	169.5	Φ19.05	Φ38.1	Φ41.3			23.5+49+49	25+50+50	35.1	243+385+385	253+400+400
GMV-VQ1565WM/C-X	56	156.5	84.5	175.5	Φ19.05	Φ38.1	Φ41.3			24.1+49+49	25+50+50	36.2	256+385+385	266+400+400
GMV-VQ1630WM/C-X	58	163	89.5	183	Φ19.05	Φ38.1	Φ41.3			37.5+49+49	40+50+50	37.7	320+385+385	355+400+400
GMV-VQ1680WM/C-X	60	168	89.5	188	Φ19.05	Φ38.1	Φ41.3			39.3+49+49	40+50+50	38.2	325+385+385	340+400+400
GMV-VQ1734WM/C-X	62	173.4	97.0	194.5	Φ19.05	Φ38.1	Φ41.3			47+49+49	50+50+50	39.4	385+385+385	400+400+400
GMV-VQ1790WM/C-X	64	179	97.0	201	Φ19.05	Φ38.1	Φ41.3			48+49+49	50+50+50	39.4	385+385+385	400+400+400
GMV-VQ1845WM/C-X	66	184.5	99.0	207	Φ19.05	Φ38.1	Φ41.3			49+49+49	50+50+50	39.9	385+385+385	400+400+400
GMV-VQ1905WM/C-X	68	190.5	103.7	213.5	Φ22.2	Φ41.3	Φ44.5			23.5+39.3+48+49	25+40+50+50	46.2	243+325+385+385	253+340+400+400
GMV-VQ1959WM/C-X	70	195.9	111.2	220	Φ22.2	Φ41.3	Φ44.5			23.5+47+48+49	25+50+50+50	47.4	243+385+385+385	253+400+400+400
GMV-VQ2015WM/C-X	72	201.5	111.2	226.5	Φ22.2	Φ41.3	Φ44.5			23.5+48+48+49	25+50+50+50	47.4	243+385+385+385	253+400+400+400
GMV-VQ2070WM/C-X	74	207	113.2	232.5	Φ22.2	Φ41.3	Φ44.5			23.5+48+49+49	25+50+50+50	47.9	243+385+385+385	253+400+400+400
GMV-VQ2125WM/C-X	76	212.5	115.2	238.5	Φ22.2	Φ41.3	Φ44.5			23.5+49+49+49	25+50+50+50	48.4	243+385+385+385	253+400+400+400
GMV-VQ2180WM/C-X	78	218	117.5	244.5	Φ22.2	Φ41.3	Φ44.5			24.1+49+49+49	25+50+50+50	49.5	256+385+385+385	266+400+400+400
GMV-VQ2245WM/C-X	80	224.5	122.5	252	Φ22.2	Φ41.3	Φ44.5			37.5+49+49+49	40+50+50+50	51	320+385+385+385	355+40

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## GMV5

**INVERTER** **R410A**

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

### GMV5/GMV5E



#### 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
	Modular operating*		High ESP		Comprehensive protection								

» Outdoor unit quiet mode.

» High energy efficiency with high-performance compressor; Long connection pipe design with the maximum length of 1000m.

» Auto switch of module status in every 8hrs, which greatly improves the reliability of complete unit.

» 4 levels of static pressure for option with the maximum of 82Pa.



Max. piping length (meter)	GMV5 Mini	GMV5 Slim	GMV5/GMV5E
Total piping length	250m <sup>1</sup>	300m <sup>2</sup>	300m
Actual piping length	100m <sup>1</sup>	120m <sup>2</sup>	120m
Equivalent piping length	120m <sup>1</sup>	150m <sup>2</sup>	150m
Height difference between ODU and IDU (ODU is located above the IDU)	10m <sup>1</sup>	15m <sup>2</sup>	15m
Height difference between ODU and IDU (IDU is located above the ODU)	30m <sup>1</sup>	50m <sup>2</sup>	30m
Height difference between ODU and IDU (IDU is located above the ODU)	30m <sup>1</sup>	40m <sup>2</sup>	40m
Piping length from first indoor branch to the farthest IDU	40m <sup>1</sup>	40m <sup>2</sup>	40m

Notes:

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

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

Item	Nominal operating condition (temperature)				Operating range (temperature)				
	Outdoor condition		Indoor condition		Outdoor condition DB(°C)		GMV5 Mini	GMV5 Slim	GMV5/GMV5E
Cooling	DB(°C)	WB(°C)	DB(°C)	WB(°C)	DB(°C)	WB(°C)	-5~52	-5~52	-5~52
Heating	7	6	20	-	-20~27	-20~27	-20~24	-20~27	-20~24

### GMV5/GMV5E Lineup

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



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**GMV5 Outdoor Units Lineup (380-415V, 3N~50/60Hz)**

HP	Model	GMV-224WM/B-X	GMV-280WM/B-X	GMV-335WM/B-X	GMV-400WM/B-X	GMV-450WM/B-X	GMV-504WM/B-X	GMV-560WM/B-X	GMV-615WM/B-X
8HP	GMV-224WM/B-X	●							
10HP	GMV-280WM/B-X		●						
12HP	GMV-335WM/B-X			●					
14HP	GMV-400WM/B-X				●				
16HP	GMV-450WM/B-X					●			
18HP	GMV-504WM/B-X						●		
20HP	GMV-560WM/B-X							●	
22HP	GMV-615WM/B-X								●
24HP	GMV-680WM/B-X	●			●				
26HP	GMV-730WM/B-X	●				●			
28HP	GMV-785WM/B-X	●					●		
30HP	GMV-850WM/B-X	●						●	
32HP	GMV-900WM/B-X	●							●
34HP	GMV-960WM/B-X			●					●
36HP	GMV-1010WM/B-X				●				●
38HP	GMV-1065WM/B-X					●			●
40HP	GMV-1130WM/B-X						●		●
42HP	GMV-1180WM/B-X							●	
44HP	GMV-1235WM/B-X							●	●
46HP	GMV-1300WM/B-X	●				●			
48HP	GMV-1350WM/B-X	●				●			●
50HP	GMV-1410WM/B-X			●		●			●
52HP	GMV-1460WM/B-X	●						●	●
54HP	GMV-1515WM/B-X	●						●	●
56HP	GMV-1580WM/B-X			●				●	●
58HP	GMV-1630WM/B-X				●			●	●
60HP	GMV-1685WM/B-X					●		●	●
62HP	GMV-1750WM/B-X						●		●
64HP	GMV-1800WM/B-X							●	●
66HP	GMV-1845WM/B-X							●	●●
68HP	GMV-1908WM/B-X	●					●		●
70HP	GMV-1962WM/B-X	●					●		●
72HP	GMV-2016WM/B-X	●					●	●	●
74HP	GMV-2072WM/B-X	●					●	●	●
76HP	GMV-2128WM/B-X	●						●	●●
78HP	GMV-2184WM/B-X			●				●	●●
80HP	GMV-2240WM/B-X				●			●	●●
82HP	GMV-2295WM/B-X					●		●	●●
84HP	GMV-2350WM/B-X						●		●●
86HP	GMV-2405WM/B-X						●		●●
88HP	GMV-2460WM/B-X								●●●

**GMV5 (Cooling Only) Outdoor Units Lineup (380-415V, 3N~50/60Hz)**

HP	Model	GMVL-224WM/D-X	GMVL-280WM/D-X	GMVL-335WM/D-X	GMVL-400WM/D-X	GMVL-450WM/D-X	GMVL-504WM/D-X	GMVL-560WM/D-X	GMVL-615WM/D-X
8HP	GMVL-224WM/D-X	●							
10HP	GMVL-280WM/D-X		●						
12HP	GMVL-335WM/D-X			●					
14HP	GMVL-400WM/D-X				●				
16HP	GMVL-450WM/D-X					●			
18HP	GMVL-504WM/D-X						●		
20HP	GMVL-560WM/D-X							●	
22HP	GMVL-615WM/D-X								●
24HP	GMVL-680WM/D-X		●						
26HP	GMVL-730WM/D-X	●						●	
28HP	GMVL-785WM/D-X	●						●	
30HP	GMVL-850WM/D-X	●							●
32HP	GMVL-900WM/D-X	●							●
34HP	GMVL-960WM/D-X					●			●
36HP	GMVL-1010WM/D-X						●		●
38HP	GMVL-1065WM/D-X							●	●
40HP	GMVL-1130WM/D-X								●
42HP	GMVL-1180WM/D-X								●
44HP	GMVL-1235WM/D-X								●●
46HP	GMVL-1300WM/D-X		●						●
48HP	GMVL-1350WM/D-X		●						●
50HP	GMVL-1410WM/D-X			●					●
52HP	GMVL-1460WM/D-X	●							●
54HP	GMVL-1515WM/D-X	●							●●
56HP	GMVL-1580WM/D-X			●					●●
58HP	GMVL-1630WM/D-X				●				●●
60HP	GMVL-1685WM/D-X					●			●●
62HP	GMVL-1750WM/D-X						●		●●
64HP	GMVL-1800WM/D-X								●●
66HP	GMVL-1845WM/D-X								●●●
68HP	GMVL-1908WM/D-X	●							●
70HP	GMVL-1962WM/D-X	●							●
72HP	GMVL-2016WM/D-X	●							●●
74HP	GMVL-2072WM/D-X	●							●●
76HP	GMVL-2128WM/D-X	●							●●●
78HP	GMVL-2184WM/D-X			●					●●●
80HP	GMVL-2240WM/D-X				●				●●●
82HP	GMVL-2295WM/D-X					●			●●●
84HP	GMVL-2350WM/D-X						●		●●●
86HP	GMVL-2405WM/D-X							●	●●●
88HP	GMVL-2460WM/D-X								●●●●



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## GMV5 Specifications of ODU

GMV5 380-415V, 50/60Hz

Model		-	GMV-224WM/B-X	GMV-280WM/B-X	GMV-335WM/B-X	GMV-400WM/B-X	GMV-450WM/B-X	GMV-504WM/B-X	GMV-560WM/B-X	GMV-615WM/B-X	
Capacity range		HP	8	10	12	14	16	18	20	22	
Capacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5	
	Heating	kW	25	31.5	37.5	45	50	56.5	63	69	
EER	W/W		4.40	4.51	4.33	4.30	4.11	3.91	3.89	3.51	
COP	W/W		5.20	5.34	4.72	4.50	4.17	4.09	4.00	3.67	
Power supply	V/Ph/Hz					380-415V 3N~ 50/60Hz					
Min. circuit/Max. fuse current	A	15.7/20	20.9/25	24.7/32	28.8/40	33.2/40	45.4/50	51.1/63	59.2/63		
Power consumption	Cooling	kW	5.09	6.21	7.74	9.30	10.95	12.90	14.40	17.50	
	Heating	kW	4.81	5.90	7.95	10.00	12.00	13.80	15.75	18.80	
Maximum drive IDU NO.	unit		13	16	19	23	26	29	33	36	
Refrigerant charge volume	kg	5.9	6.7	8.2	9.8	10.3	11.3	14.3	14.3		
Sound pressure level	dB(A)	60	61	63	63	63	63	63	64		
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9		
	Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6		
	Oil balance	mm			Φ9.52			Φ9.52			
Dimension (W×D×H)	Outline	mm	930×765×1605		1340×765×1605		1340×765×1740				
	Package	mm	1010×840×1775		1420×840×1775		1420×840×1910				
Net weight/Gross weight	kg	225/235	225/235	285/300	360/375	360/375	360/375	385/400	385/400		
Loading quantity	40' GP	unit	28	28	22	22	22	22	22	22	
	40' HQ	unit	28	28	22	22	22	22	22	22	

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

Model		-	GMVL-224 WM/D-X	GMVL-280 WM/D-X	GMVL-335 WM/D-X	GMVL-400 WM/D-X	GMVL-450 WM/D-X	GMVL-504 WM/D-X	GMVL-560 WM/D-X	GMVL-615 WM/D-X	
Capacity range		HP	8	10	12	14	16	18	20	22	
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	61.5	
	Heating	W/W	4.31	4.00	3.76	3.74	3.49	3.29	3.20	3.15	
Power supply	V/Ph/Hz				380-415V 3N~ 50/60Hz						
Min. circuit/Max. fuse current	A	16.1/20	20.9/25	24.6/32	28.8/40	33.2/40	42.9/50	46.5/63	48.3/63		
Power consumption	Cooling	kW	5.2	7	8.9	10.7	12.9	15.3	17.5	19.5	
	Heating	W/W	13	16	19	23	26	29	33	36	
Maximum drive IDU NO.	unit		5.9	6.7	7.2	8.2	8.7	10.8	11.3		
Refrigerant charge volume	kg	56	57	59	59	60	61	63	64		
Sound pressure level	dB(A)	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9		
Connecting pipe	Liquid	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6		
	Gas	mm			Φ9.52		Φ12.7		Φ15.9		
Dimension (W×D×H)	Outline	mm	930×765×1605		1340×765×1605		1340×765×1740				
	Package	mm	1010×840×1775		1420×840×1775		1420×840×1910				
Net weight/Gross weight	kg	211/224	211/224	211/224	325/343	325/343	325/343	354/372	354/372		
Loading quantity	40' GP	unit	28	28	28	22	22	22	22	22	
	40' HQ	unit	28	28	28	22	22	22	22	22	

## Specifications of ODU Combination

GMV5 380-415V, 50/60Hz

HP	Model	Power supply	Capacity		Power input		Dimension(W×D×H)	Airflow volume	ESP	Sound pressure level at night	Connecting pipe			Min. circuit current	Max. fuse current	Weight	
			Cooling	Heating	Cooling	Heating					Liquid	Gas	Oil balance				
			kW	kW	kW	kW					mm	m³/h	Pa	dB(A)	dB(A)		
24HP	GMV-680WM/B-X		68	76.5	15.51	15.90	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25+40	225+360
26HP	GMV-730WM/B-X		73	81.5	17.16	17.90	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25+40	225+360
28HP	GMV-785WM/B-X		78.4	88	19.11	19.70	(930×765×1605)+(1340×765×1740)	11400+16000	82	66	43	Φ19.05	Φ31.8	Φ9.52	20.9+45.4	25+50	225+360
30HP	GMV-850WM/B-X		84	94.5	20.61	21.65	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+51.1	25+63	225+385
32HP	GMV-900WM/B-X		89.5	100.5	23.71	24.70	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+59.2	25+63	225+385
34HP	GMV-960WM/B-X		95	106.5	25.24	26.75	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	24.7+59.2	32+63	285+385
36HP	GMV-1010WM/B-X		101.5	114	26.80	28.80	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+59.2	40+63	360+385
38HP	GMV-1065WM/B-X		106.5	119	28.45	30.80	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+59.2	40+63	360+385
40HP	GMV-1130WM/B-X		111.9	125.5	30.40	32.60	(1340×765×1740) ×2	16000×2	82	68	43	Φ19.05	Φ38.1	Φ9.52	45.4+59.2	50+63	360+385
42HP	GMV-1180WM/B-X		117.5	132	31.90	34.											

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

HP	Model	Power supply	Cooling capacity	Power input	Dimension (W×D×H)		Airflow volume	ESP	Noise	Noise at night		Connecting pipe		Oil balance pipe	Min. circuit current	Max.fuse current	Weight	
			Cooling	Cooling						Pa	db(A)	db(A)	Liquid	Gas				
			kW	kW	mm	m³/h	Pa	db(A)	mm	mm	mm	mm	A	A	kg			
24HP	GMVL-680WM/D-X	380~415V 50~60Hz	68.0	19.7	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25+40	211+325			
26HP	GMVL-730WM/D-X		73.0	19.9	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25+40	211+325			
28HP	GMVL-785WM/D-X		78.4	22.3	(930×765×1605)+(1340×765×1605)	11400+14000	82	66	43	Φ19.05	Φ31.8	Φ9.52	20.9+42.9	25+50	211+325			
30HP	GMVL-850WM/D-X		84.0	24.5	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+46.5	25+63	211+354			
32HP	GMVL-900WM/D-X		89.5	26.5	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+48.3	25+63	211+354			
34HP	GMVL-960WM/D-X		95.0	28.4	(930×765×1605)+(1340×765×1740)	11400+16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	24.6+48.3	32+63	211+354			
36HP	GMVL-1010WM/D-X		101.5	30.2	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+48.3	40+63	325+354			
38HP	GMVL-1065WM/D-X		106.5	32.4	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+48.3	40+63	325+354			
40HP	GMVL-1130WM/D-X		111.9	34.8	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	42.9+48.3	50+63	325+354			
42HP	GMVL-1180WM/D-X		117.5	37.0	(1340×765×1740)×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	46.5+48.3	63+63	354+354			
44HP	GMVL-1235WM/D-X		123.0	39.0	(1340×765×1740)×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	48.3+48.3	63+63	354+354			
46HP	GMVL-1300WM/D-X		129.0	37.4	(930×765×1605)+(1340×765×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+46.5	25+40+63	211+325+354			
48HP	GMVL-1350WM/D-X		134.5	39.4	(930×765×1605)+(1340×765×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+48.3	25+40+63	211+325+354			
50HP	GMVL-1410WM/D-X		140.0	41.3	(930×765×1605)+(1340×765×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	24.6+33.2+48.3	32+40+63	211+325+354			
52HP	GMVL-1460WM/D-X		145.5	44.0	(930×765×1605)+(1340×765×1605)+(1340×765×1740)×2	11400+16000×2	82	69	45	Φ19.05	Φ41.3	Φ9.52	20.9+46.5+48.3	25+63+63	211+354+354			
54HP	GMVL-1515WM/D-X		151.0	46.0	(930×765×1605)+(1340×765×1605)+(1340×765×1740)×2	11400+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	20.9+48.3+48.3	25+63+63	211+354+354			
56HP	GMVL-1580WM/D-X		156.5	47.9	(930×765×1605)+(1340×765×1605)+(1340×765×1740)×2	11400+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	24.6+48.3+48.3	32+63+63	211+354+354			
58HP	GMVL-1630WM/D-X		163.0	49.7	(1340×765×1605)+(1340×765×1605)+(1340×765×1740)×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	28.8+48.3+48.3	40+63+63	325+354+354			
60HP	GMVL-1685WM/D-X		168.0	51.9	(1340×765×1605)+(1340×765×1605)+(1340×765×1740)×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	33.2+48.3+48.3	40+63+63	325+354+354			
62HP	GMVL-1750WM/D-X		173.4	54.3	(1340×765×1605)+(1340×765×1605)+(1340×765×1740)×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	42.9+48.3+48.3	50+63+63	325+354+354			
64HP	GMVL-1800WM/D-X		179.0	56.5	(1340×765×1740)×3	16000×3	82	71	45	Φ19.05	Φ41.3	Φ9.52	46.5+48.3+48.3	63+63+63	354+354+354			
66HP	GMVL-1845WM/D-X		184.5	58.5	(1340×765×1740)×3	16000×3	82	71	45	Φ19.05	Φ41.3	Φ9.52	48.3+48.3+48.3	63+63+63	354+354+354			
68HP	GMVL-1908WM/D-X		190.5	56.9	(930×765×1605)+(1340×765×1605)+(1340×765×1740)×2	11400+14000+16000×2	82	72	47	Φ22.2	Φ44.5	Φ9.52	20.9+33.2+46.5+48.3	25+40+63+63	211+325+354+354			
70HP	GMVL-1962WM/D-X		195.9	59.3	(930×765×1605)+(1340×765×1605)+(1340×765×1740)×2	11400+14000+16000×2	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+42.9+46.5+48.3	25+50+63+63	211+325+354+354			
72HP	GMVL-2016WM/D-X		201.5	61.5	(930×765×1605)+(1340×765×1605)+(1340×765×1740)×3	11400+16000×3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+46.5+46.5+48.3	25+63+63+63	211+354+354+354			
74HP	GMVL-2072WM/D-X		207.0	63.5	(930×765×1605)+(1340×765×1605)+(1340×765×1740)×3	11400+16000×3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+46.5+48.3+48.3	25+63+63+63	211+354+354+354			
76HP	GMVL-2128WM/D-X		212.5	65.5	(930×765×1605)+(1340×765×1605)+(1340×765×1740)×3	11400+16000×3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+48.3+48.3+48.3	25+63+63+63	211+354+354+354			
78HP	GMVL-2184WM/D-X		218.0	67.4	(930×765×1605)+(1340×765×1605)+(1340×765×1740)×3	11400+16000×3	82	74	47	Φ22.2	Φ44.5	Φ9.52	24.6+48.3+48.3+48.3	32+63+63+63	211+354+354+354			
80HP	GMVL-2240WM/D-X		224.5	69.2	(1340×765×1605)+(1340×765×1605)+(1340×765×1740)×3	14000+16000×3	82	74	47	Φ22.2	Φ44.5	Φ9.52	28.8+48.3+48.3+48.3	40+63+63+63	325+354+354+354			
82HP	GMVL-2295WM/D-X		229.5	71.4	(1340×765×1605)+(1340×765×1605)+(1340×765×1740)×3	14000+16000×3	82	74	47	Φ22.2	Φ44.5	Φ9.52	33.2+48.3+					

## GMV5E Specifications of ODU

### GMV5E 380-415V, 50/60Hz

Model	HP	GMV-224WM/E-X	GMV-280WM/E-X	GMV-280WM/E1-X	GMV-335WM/E-X	GMV-400WM/E-X
Capacity range	HP	8	10	10	12	14
Cooling capacity	Rated *	kW	22.4	28.0	33.5	40.0
	Rated *	kW	20.0	22.0	20.5	23.5
Heating capacity	Max.	kW	25.0	31.5	31.5	45.0
SEER	Ducted *	-	8.30	8.41	7.25	5.81
	Cassette *	-	6.07	6.80	5.72	5.93
SCOP	Ducted *	-	4.97	4.99	4.60	4.34
	Cassette *	-	4.07	4.10	3.92	3.94
Power supply	V/Ph/Hz		380-415V 3N~50/60Hz			
Min. circuit current	A	16.1	20.9	20.9	24.6	28.8
Max. fuse current	A	20	25	25	32	40
Maximum drive IDU NO.	unit	13	16	16	19	23
Refrigerant charge volume	kg	5.9	9	6.7	8.2	9.8
Sound pressure level(Cooling)	dB(A)	60	61	61	63	63
Sound power level(Cooling)	Ducted *	dB(A)	85	86	85	86
	Cassette *	dB(A)	84	86	85	85
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ22.2	Φ25.4
	Oil balance	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension(W×D×H)	Outline	mm	930×765×1605	930×765×1605	1340×765×1605	1340×765×1605
	Package	mm	1010×840×1775	1010×840×1775	1010×840×1775	1420×840×1775
Net weight/Gross weight	kg	225/235	235/245	225/235	285/300	360/375
Loading quantity	40' GP	set	28	28	28	22
	40' HQ	set	28	28	28	22

Model	HP	GMV-450WM/E-X	GMV-450WM/E1-X	GMV-504WM/E-X	GMV-560WM/E-X	GMV-615WM/E-X
Capacity range	HP	16	16	18	20	22
Cooling capacity	Rated *	kW	45.0	45.0	50.4	56.0
	Rated *	kW	33.5	30.5	37.5	40.5
Heating capacity	Max.	kW	50.0	50.0	56.5	63.0
SEER	Ducted *	-	6.74	4.79	6.79	6.79
	Cassette *	-	6.10	5.21	6.02	5.73
SCOP	Ducted *	-	4.89	3.96	4.68	4.66
	Cassette *	-	3.90	3.37	4.00	4.15
Power supply	V/Ph/Hz		380-415V 3N~50/60Hz			
Min. circuit current	A	33.2	33.2	44.7	50	53.6
Max. fuse current	A	40	40	50	63	63
Maximum drive IDU NO.	unit	26	26	29	33	36
Refrigerant charge volume	kg	10.3	10.3	11.3	14.3	14.3
Sound pressure level(Cooling)	dB(A)	63	63	63	63	64
Sound power level(Cooling)	Ducted *	dB(A)	80	89	86	92
	Cassette *	dB(A)	89	86	85	89
Connecting pipe	Liquid	mm	Φ 12.7	Φ 12.7	Φ 15.9	Φ 15.9
	Gas	mm	Φ 28.6	Φ 28.6	Φ 28.6	Φ 28.6
	Oil balance	mm	Φ 9.52	Φ 9.52	Φ 9.52	Φ 9.52
Dimension(W × D × H)	Outline	mm	1340 × 765 × 1740	1340 × 765 × 1605	1340 × 765 × 1740	1340 × 765 × 1740
	Package	mm	1420 × 840 × 1910	1420 × 840 × 1775	1420 × 840 × 1910	1420 × 840 × 1910
Net weight/Gross weight	kg	360/375	360/375	360/375	385/400	385/400
Loading quantity	40' GP	set	22	22	22	22
	40' HQ	set	22	22	22	22

Note: The data is Eurovent certified.



## Specifications of ODU Combination

### GMV5E 380-415V, 50/60Hz

HP	Model	Power Supply	Cooling capacity	Heating capacity		Connecting pipe diameter			Min. circuit current	Max. fuse current	Refrigerant charge volume	Net weight	Gross weight					
				Rated	Max.	Liquid	Gas	Oil Balance										
24	GMV-680WM/E-X		68	53.5	76.5	Φ 15.9	Φ 28.6	Φ 9.52	20.9+28.8	25+40	18.8	595	620					
26	GMV-730WM/E-X		73	55.5	81.5	Φ 19.05	Φ 31.8	Φ 9.52	20.9+33.2	25+40	19.3	595	620					
28	GMV-785WM/E-X		78.4	59.5	88	Φ 19.05	Φ 31.8	Φ 9.52	20.9+44.7	25+50	20.3	595	620					
30	GMV-850WM/E-X		84	62.5	94.5	Φ 19.05	Φ 31.8	Φ 9.52	20.9+50	25+63	23.3	620	645					
32	GMV-900WM/E-X		89.5	62.5	100.5	Φ 19.05	Φ 31.8	Φ 9.52	20.9+53.6	25+63	23.3	620	645					
34	GMV-960WM/E-X		95	64	106.5	Φ 19.05	Φ 31.8	Φ 9.52	24.6+53.6	32+63	22.5	670	700					
36	GMV-1010WM/E-X		101.5	72	114	Φ 19.05	Φ 38.1	Φ 9.52	28.6+53.6	40+63	24.1	745	775					
38	GMV-1065WM/E-X		106.5	74	119	Φ 19.05	Φ 38.1	Φ 9.52	33.2+53.6	40+63	24.6	745	775					
40	GMV-1130WM/E-X		111.9	78	125.5	Φ 19.05	Φ 38.1	Φ 9.52	44.7+53.6	50+63	25.6	745	775					
42	GMV-1180WM/E-X		117.5	81	132	Φ 19.05	Φ 38.1	Φ 9.52	50+53.6	60+63	28.6	770	800					
44	GMV-1235WM/E-X		123	81	138	Φ 19.05	Φ 38.1	Φ 9.52	53.6+53.6	60+63	28.6	770	800					
46	GMV-1300WM/E-X		129	96	144.5	Φ 19.05	Φ 38.1	Φ 9.52	20.9+33.2+53.6	25+40+63	33.6	980	1020					
48	GMV-1350WM/E-X		134.5	96	150.5	Φ 19.05	Φ 38.1	Φ 9.52	20.9+33.2+53.6	25+40+63	33.6	980	1020					
50	GMV-1410WM/E-X		140	97.5	156.5	Φ 19.05	Φ 41.3	Φ 9.52	24.6+33.2+53.6	32+40+63	32.8	1030	1075					
52	GMV-1460WM/E-X		145.5	103	163.5	Φ 19.05	Φ 41.3	Φ 9.52	20.9+50+53.6	25+63+63	37.6	1005	1045					
54	GMV-1515WM/E-X		151	103	169.5	Φ 19.05	Φ 41.3	Φ 9.52	20.9+53.6+53.6	25+63+63	37.6	1005	1045					
56	GMV-1580WM/E-X		156.5	104.5	175.5	Φ 19.05	Φ 41.3	Φ 9.52	24.6+53.6+53.6	32+63+63	36.8	1055	1175					
58	GMV-1630WM/E-X		163	112.5	183	Φ 19.05	Φ 41.3	Φ 9.52	28.8+53.6+53.6	40+63+63	38.4	1130	1175					
60	GMV-1685WM/E-X		168	114.5	188	Φ 19.05	Φ 41.3	Φ 9.52	33.2+53.6+53.6	40+63+63	38.9	1130	1175					
62	GMV-1750WM/E-X		173.4	118.5	194.5	Φ 19.05	Φ 41.3	Φ 9.52										

CAC

## GMV5 Mini & Slim

### 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	

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

HP	Model	Product
3	GMV-80WL/C-T	
3.5	GMV-100WL/C-T	
4	GMV-121WL/C-T	
5	GMV-141WL/C-T	

### Slim Lineup (380-415V, 50/60Hz )

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

## Mini

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

Model	GMV-80WL/C-T	GMV-100WL/C-T	GMV-121WL/C-T
Capacity range	HP	3	3.5
Capacity	Cooling kW	8	10
	Heating kW	9	11
EER	WW	3.90	3.70
COP	WW	4.74	4.40
Power supply	V/Ph/Hz	220-240/1/50 & 208-230/1/60	
Max circuit/Fuse current	A	25	25
Power consumption	Cooling kW	2.05	2.7
	Heating kW	1.9	2.5
Maximum drive IDU NO.	unit	4	5
Refrigerant charge volume	kg	1.8	1.8
Sound pressure level	dB(A)	56	56
Connecting pipe	Liquid mm	Φ9.52	Φ9.52
	Gas mm	Φ15.9	Φ15.9
Dimension(WxDxH)	Outline mm	980x360x790	980x360x790
	Package mm	1097x477x937	1097x477x937
Net weight/Gross weight	kg	80/90	80/90
Loading quantity	40' GP unit	96	96
	40' HQ unit	96	96

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

Model	GMV-120WL/C-T	GMV-140WL/C-T	GMV-141WL/C-T	GMV-160WL/C-T
Capacity range	HP	4	5	6
Capacity	Cooling kW	12.1	14	14.1
	Heating kW	14	16.5	16
EER	WW	3.99	3.90	3.60
COP	WW	4.28	4.18	3.85
Power supply	V/Ph/Hz	220-240/1/50 & 208-230/1/60		
Max circuit/Fuse current	A	32	40	40
Power consumption	Cooling kW	3.03	3.59	3.92
	Heating kW	3.27	3.95	4.16
Maximum drive IDU NO.	unit	7	8	8
Refrigerant charge volume	kg	3.3	3.3	3.3
Sound pressure level	dB(A)	57	58	58
Connecting pipe	Liquid mm	Φ9.52	Φ9.52	Φ9.52
	Gas mm	Φ15.9	Φ15.9	Φ15.9
Dimension(WxDxH)	Outline mm	900x340x1345	900x340x1345	940x460x820
	Package mm	998x458x1500	998x458x1500	1023x563x973
Net weight/Gross weight	kg	112/123	112/123	98/108
Loading quantity	40' GP unit	57	57	88
	40' HQ unit	57	57	57

Note:  
(1)The ODU operation temperature range is -5~52°C in cooling and -20~27°C in heating.  
(2) Heat radiation by refrigerant.

### 50Hz&60Hz (380-415V)

Model	GMV-120WL/C-X	GMV-140WL/C-X	GMV-160WL/C-X
Capacity range	HP	4	5
Capacity	Cooling kW	12.1	14
	Heating kW	14	16.5
EER	WW	3.99	3.90
COP	WW	4.28	4.18
Power supply	V/Ph/Hz	380V-415V 3N~ 50/60Hz	
Max circuit/Fuse current	A	16	16
Power consumption	Cooling kW	3.03	3.59
	Heating kW	3.27	3.95
Maximum drive IDU NO.	unit	7	8
Refrigerant charge volume	kg	3.3	3.3
Sound pressure level	dB(A)	57	58
Connecting pipe	Liquid mm	Φ9.52	Φ9.52
	Gas mm	Φ15.9	Φ15.9
Dimension(WxDxH)	Outline mm	900x340x1345	900x340x1345
	Package mm	998x458x1500	998x458x1500
Net weight/Gross weight	kg	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.



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## Slim

50Hz&60Hz (380-415V)

Model		GMV-224WL/C-X	GMV-280WL/C-X	GMV-280WL/C1-X	GMV-335WL/C-X	GMV-335WL/C1-X
Capacity range	HP	8	10	10	12	12
Cooling	kW	22.4	28.0	28.0	33.5	33.5
Heating	kW	24	30	28	35	33.5
EER	W/W	3.66	3.60	2.40	3.50	2.60
COP	W/W	4.90	4.90	3.50	4.90	3.20
Max. circuit/Fuse current	A	5	5	5	5	5
Power supply	V/Ph/Hz	380V-415V 3N~ 50/60Hz				
Power consumption	Cooling	kW	6.12	7.78	11.67	9.57
	Heating	kW	4.90	6.12	8.00	7.14
Maximum drive IDU NO.	unit	13	17	17	20	20
Refrigerant charge volume	kg	5.5	7.1	7.1	8.0	8.5
Sound pressure level	dB(A)	61	63	63	63	64
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ22.2	Φ25.4
Dimension (WxDxH)	Outline	mm	940x320x1430	940x460x1615	940x460x1615	940x460x1615
	Package	mm	1038x438x1580	1038x578x1765	1038x578x1765	1038x578x1765
Net weight/Gross weight	kg	133/144	166/183	163/175	177/194	174/187
Loading quantity	40' GP	unit	56	44	44	44
	40' HQ	unit	56	44	44	44

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

## GMV5 Max

INVERTER R410A

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



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

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

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



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

## Specifications

Model	GMV-785W/B-X	GMV-900W/B-X
Capacity range	HP	28
Capacity	Cooling kW	78.5
	Heating kW	87.5
EER	W/W	3.35
COP	W/W	3.80
Power supply	V/Ph/Hz	380-415V 3N~ 50/60Hz
Min. circuit/Max. fuse current	A	55.4/63
Power consumption	Cooling kW	23.4
	Heating kW	23
Maximum drive IDU NO.	unit	46
Refrigerant charge volume	kg	18.9
Sound pressure level	dB(A)	65
Connecting pipe	Liquid mm	Φ19.05
	Gas mm	Φ31.8
Dimension (WxDxH)	Outline mm	2200x880x1675
	Package mm	2267x952x1867
Net weight/Gross weight	kg	500/535
Loading quantity	40'GP unit	12
	40'HQ unit	12
		12

## GMV5 HR

INVERTER R410A

### Heat Recovery Series

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



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

- » All DC Inverter Technology. All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.
- » 82 Pa wide application location.
- » Advanced control functions.
- » Better reliability.
- » Wide operation range: Cooling:-5°C~52°C; Heating:-20°C~24°C; Cooling and heating:-10°C~20°C.
- » Flexible piping design.



### HR Lineup

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

Model	Product Outlook
NCHS1C	
NCHS2C	
NCHS4C	
NCHS8C	



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## ODU Combination Lineup-GMV5 HR\*

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

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

## Specifications

## 50/60Hz

Model		GMV-Q224WM/E-X	GMV-Q280WM/E-X	GMV-Q335WM/E-X	GMV-Q400WM/E-X	GMV-Q450WM/E-X
Capacity range	HP	8	10	12	14	16
Cooling capacity	Rated *	kW	22.4	28	33.5	40
Heating capacity	Rated *	kW	19.5	21.0	23.5	31.5
	Max.	kW	25	31.5	37.5	45
SEER	Ducted *	-	6.83	9.22	7.59	7.28
	Cassette *	-	6.15	5.78	5.88	6.19
SCOP	Ducted *	-	4.53	4.76	4.80	4.16
	Cassette *	-	3.74	3.99	3.62	4.01
Power supply	V/Ph/Hz		380-415V 3N~50/60Hz			
Min. circuit/Max. fuse current	A	16.3/20	20.9/25	24.7/32	28.8/40	33.2/40
Maximum drive IDU NO.	unit	13	16	19	23	26
Refrigerant charge volume	kg	6.2	7.1	9.6	11.1	11.6
Sound pressure level(Cooling)	dB(A)	60	61	63	63	63
Sound power level(Cooling)	Ducted *	dB(A)	84	84	80	86
	Cassette *	dB(A)	84	85	86	91
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7
	High Pressure Gas	mm	Φ15.9	Φ19.05	Φ19.05	Φ22.2
	Low Pressure Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ28.6
Dimension (WxDxH)	Outline	mm	930×765×1605	930×765×1605	1340×765×1605	1340×765×1605
	Package	mm	1010×840×1775	1010×840×1775	1420×840×1775	1420×840×1775
Net weight/Gross weight	kg	233/243	233/243	302/317	346/361	346/361
Loading quantity	40' GP	unit	28	28	22	22
	40' HQ	unit	28	28	22	22

Note: The data is Eurovent certified.

## 50/60Hz

Model		NCHS1C	NCHS2C	NCHS4C	NCHS8C	
Max. IDU branches	unit	1	2	4	8	
No. of connectable IDU of each branch	unit	8	8	8	8	
Total connectable IDU	unit	8	16	32	64	
Max. capacity of each branch	kW	14.2	14.2	14.2	14.2	
Max. capacity of connectable IDU	kW	14.2	28	45	68	
Power supply	V/Ph/Hz		220-240V 1Ph~50/60Hz			
Power consumption	W	8	28	44	80	
Max. branch quantity of connecting IDU	unit	1	2	4	8	
Outdoor unit piping connection	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	
	Gas (Low pressure)	mm		Φ22.2	Φ28.6	
	Gas (High pressure)	mm	Φ15.9	Φ19.05	Φ22.2	
Indoor unit piping connection	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	
Dimensions (WxDxH)	Outline	mm	388×302×225	468×377×225	587×399×225	
	Package	mm	805×403×305	946×646×365	1123×676×345	
Net weight/Gross weight	kg	9/12.2	15.6/23.4	18.6/29	37/46.6	

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



## Specification of ODU Combination of GMV5 HR\*

Model	Capacity range	Cooling capacity	Heating capacity		Power supply	Min. circuit current	Max. fuse current	Refrigerant charge volume	Connecting pipe			Net weight	Gross weight
		Rated	Rated	Max.					Liquid	High pressure gas	Low pressure gas		
		HP	kW	kW					V/Ph/Hz	A	A	kg	kg
GMV-Q504WM/E-X	18	50.4	40.5	56.5	380-415V 3N-50/60Hz	16.3+20.9	20+25	13.3	Φ15.9	Φ25.4	Φ28.6	466	486
GMV-Q560WM/E-X	20	56	42.0	63		20.9+20.9	25+25	14.2	Φ15.9	Φ25.4	Φ28.6	466	486
GMV-Q615WM/E-X	22	61.5	44.5	69		20.9+24.7	25+32	16.7	Φ15.9	Φ25.4	Φ28.6	535	560
GMV-Q680WM/E-X	24	68	52.5	76.5		20.9+28.8	25+40	18.2	Φ15.9	Φ25.4	Φ28.6	579	604
GMV-Q730WM/E-X	26	73	51.5	81.5		20.9+33.2	25+40	18.7	Φ19.05	Φ28.6	Φ31.8	579	604
GMV-Q785WM/E-X	28	78.5	54.0	87.5		24.7+33.2	32+40	21.2	Φ19.05	Φ28.6	Φ31.8	648	678
GMV-Q850WM/E-X	30	85	62.0	95		28.8+33.2	40+40	22.7	Φ19.05	Φ28.6	Φ31.8	692	722
GMV-Q900WM/E-X	32	90	61.0	100		33.2+33.2	40+40	23.2	Φ19.05	Φ28.6	Φ31.8	692	722
GMV-Q960WM/E-X	34	96	73.5	108		20.9+20.9+28.8	25+25+40	25.3	Φ19.05	Φ28.6	Φ31.8	812	847
GMV-Q1010WM/E-X	36	101	72.5	113		20.9+20.9+33.2	25+25+40	25.8	Φ19.05	Φ31.8	Φ38.1	812	847
GMV-Q1065WM/E-X	38	106.5	75.0	119		20.9+24.7+33.2	25+32+40	28.3	Φ19.05	Φ31.8	Φ38.1	881	921
GMV-Q1130WM/E-X	40	113	83.0	126.5		20.9+28.8+33.2	25+40+40	29.8	Φ19.05	Φ31.8	Φ38.1	925	965
GMV-Q1180WM/E-X	42	118	82.0	131.5		20.9+33.2+33.2	25+40+40	30.3	Φ19.05	Φ31.8	Φ38.1	925	965
GMV-Q1235WM/E-X	44	123.5	84.5	137.5		24.7+33.2+33.2	32+40+40	32.8	Φ19.05	Φ31.8	Φ38.1	994	1039
GMV-Q1300WM/E-X	46	130	92.5	145		28.8+33.2+33.2	40+40+40	34.3	Φ19.05	Φ31.8	Φ38.1	1038	1083
GMV-Q1350WM/E-X	48	135	91.5	150		33.2+33.2+33.2	40+40+40	34.8	Φ19.05	Φ31.8	Φ38.1	1038	1083
GMV-Q1410WM/E-X	50	141	104.0	158		20.9+20.9+28.8+33.2	25+25+40+40	36.9	Φ19.05	Φ38.1	Φ41.3	1158	1208
GMV-Q1460WM/E-X	52	146	103.0	163		20.9+20.9+33.2+33.2	25+25+40+40	37.4	Φ19.05	Φ38.1	Φ41.3	1158	1208
GMV-Q1515WM/E-X	54	151.5	105.5	169		20.9+24.7+33.2+33.2	25+32+40+40	39.9	Φ19.05	Φ38.1	Φ41.3	1227	1282
GMV-Q1580WM/E-X	56	158	113.5	176.5		20.9+28.8+33.2+33.2	25+40+40+40	41.4	Φ19.05	Φ38.1	Φ41.3	1271	1326
GMV-Q1630WM/E-X	58	163	112.5	181.5		20.9+33.2+33.2+33.2	25+40+40+40	41.9	Φ19.05	Φ38.1	Φ41.3	1271	1326
GMV-Q1685WM/E-X	60	168.5	115.0	187.5		24.7+33.2+33.2+33.2	32+40+40+40	44.4	Φ19.05	Φ38.1	Φ41.3	1340	1400
GMV-Q1750WM/E-X	62	175	123.0	195		28.8+33.2+33.2+33.2	40+40+40+40	45.9	Φ19.05	Φ38.1	Φ41.3	1384	1444
GMV-Q1800WM/E-X	64	180	122.0	200		33.2+33.2+33.2+33.2	40+40+40+40	46.4	Φ19.05	Φ38.1	Φ41.3	1384	1444

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

## GMV5 CP

INVERTER R410A

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



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

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



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

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## ODU Combination Lineup

Model	GMV-224WM/B1-X	GMV-280WM/B1-X	GMV-335WM/B1-X	GMV-400WM/B1-X	GMV-450WM/B1-X	GMV-504WM/B1-X	GMV-560WM/B1-X	GMV-615WM/B1-X
GMV-224WM/B1-X	●							
GMV-280WM/B1-X		●						
GMV-335WM/B1-X			●					
GMV-400WM/B1-X				●				
GMV-450WM/B1-X					●			
GMV-504WM/B1-X						●		
GMV-560WM/B1-X							●	
GMV-615WM/B1-X								●
GMV-680WM/B1-X	●			●				
GMV-730WM/B1-X	●				●			
GMV-785WM/B1-X	●					●		
GMV-850WM/B1-X	●						●	
GMV-900WM/B1-X	●							●
GMV-960WM/B1-X			●					●
GMV-1010WM/B1-X				●				●
GMV-1065WM/B1-X					●			●
GMV-1130WM/B1-X						●		●
GMV-1180WM/B1-X							●	●
GMV-1235WM/B1-X								●●
GMV-1300WM/B1-X	●				●		●	
GMV-1350WM/B1-X	●				●			●
GMV-1410WM/B1-X			●		●			●
GMV-1460WM/B1-X	●					●		●
GMV-1515WM/B1-X	●						●●	
GMV-1580WM/B1-X			●				●●	
GMV-1630WM/B1-X				●			●●	
GMV-1685WM/B1-X					●		●●	
GMV-1750WM/B1-X						●	●●	
GMV-1800WM/B1-X						●	●●	
GMV-1854WM/B1-X							●●●	
GMV-1908WM/B1-X	●				●		●	
GMV-1962WM/B1-X	●					●	●	
GMV-2016WM/B1-X	●					●●		●
GMV-2072WM/B1-X	●					●	●●	
GMV-2128WM/B1-X	●						●●●	
GMV-2184WM/B1-X			●				●●●	
GMV-2240WM/B1-X				●			●●●	
GMV-2295WM/B1-X					●		●●●	
GMV-2350WM/B1-X						●	●●●	
GMV-2405WM/B1-X						●	●●●	
GMV-2460WM/B1-X							●●●●	

## Lineup

HP	Model	Product
8HP	GMV-224WM/B1-X	
10HP	GMV-280WM/B1-X	
12HP	GMV-335WM/B1-X	
14HP	GMV-400WM/B1-X	
16HP	GMV-450WM/B1-X	
18HP	GMV-504WM/B1-X	
20HP	GMV-560WM/B1-X	
22HP	GMV-615WM/B1-X	

## Specifications

Model		GMV-224WM/B1-X	GMV-280WM/B1-X	GMV-335WM/B1-X	GMV-400WM/B1-X
Capacity range	HP	8	10	12	14
Capacity	Cooling	kW	22.4	28	33.5
	Heating	kW	25	31.5	37.5
EER	W/W	4.31	4.00	3.85	3.76
COP	W/W	4.55	4.32	4.84	4.05
Power supply	V/Ph/Hz	380-415V 3N~50/60Hz			
Min. circuit/Max. fuse current	A	15.7/20	20.9/25	22.5/32	28.8/40
Power consumption	Cooling	kW	5.2	7	10.65
	Heating	kW	5.5	7.3	11.1
Maximum drive IDU NO.	unit	13	16	19	23
Refrigerant charge volume	kg	5.9	6.7	9	9.8
Sound pressure level	dB(A)	60	61	61	63
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ25.4
	Oil balance	mm	Φ9.52	Φ9.52	Φ9.52
Dimension (WxDxH)	Outline	mm	930x765x1605	930x765x1605	930x765x1605
	Package	mm	1010x840x1775	1010x840x1775	1010x840x1775
Net weight/Gross weight	kg	225/235	225/235	235/250	360/375
Loading quantity	40' GP	unit	28	28	28
	40' HQ	unit	28	28	22

Model		GMV-450WM/B1-X	GMV-504WM/B1-X	GMV-560WM/B1-X	GMV-615WM/B1-X
Capacity range	HP	16	18	20	22
Capacity	Cooling	kW	45	50.4	56
	Heating	kW	50	56.5	63
EER	W/W	3.56	3.55	3.50	3.32
COP	W/W	3.85	4.01	3.80	3.65
Power supply	V/Ph/Hz	380-415V 3N~50/60Hz			
Min. circuit/Max. fuse current	A	33.2/40	45.4/50	51.1/63	59.2/63
Power consumption	Cooling	kW	12.65	14.2	18.5
	Heating	kW	13	14.1	18.9
Maximum drive IDU NO.	unit	26	29	33	36
Refrigerant charge volume	kg	10.3	11.3	14.3	14.3
Sound pressure level	dB(A)	63	63	63	64
Connecting pipe	Liquid	mm	Φ12.7	Φ15.9	Φ15.9
	Gas	mm	Φ28.6	Φ28.6	Φ28.6
	Oil balance	mm	Φ9.52	Φ9.52	Φ9.52
Dimension (WxDxH)	Outline	mm	1340x765x1605	1340x765x1740	1340x765x1740
	Package	mm	1420x840x1775	1420x840x1910	1420x840x1910
Net weight/Gross weight	kg	360/375	360/375	385/400	385/400
Loading quantity	40' GP	unit	22	22	22
	40' HQ	unit	22	22	22

## Specifications of ODU Combination of GMV5 CP

Model	Power supply	Capacity		Power input		Dimension(WxDxH)	Airflow volume	ESP	Sound pressure level	Operation sound pressure level at night			Connecting pipe			Min.circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating					Liquid	Gas	Oil	mm	mm³/h	Pa	dB(A)	dB(A)	
		KW	KW	KW	KW								A	A				kg
GMV-680WM/ B1-X	380- 415V/ 3N- 50/60Hz	68.0	76.5	17.7	18.4	(930x765x1605) +(1340x765x1605)	11400+ 14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8		25+40	225+360	
GMV-730WM/ B1-X		73.0	81.5	19.7	20.3	(930x765x1605) +(1340x765x1605)	11400+ 14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2		25+40	225+360	
GMV-785WM/ B1-X		78.4	88.0	21.2	21.4	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	66	43	Φ19.05	Φ31.8	Φ9.52	20.9+45.4		25+50	225+360	
GMV-850WM/ B1-X		84.0	94.5	23.0	23.9	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+51.1		25+63	225+385	
GMV-900WM/ B1-X		89.5	100.5	25.5	26.2	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+59.2		25+63	225+385	
GMV-960WM/ B1-X		95.0	106.5	27.2	26.7	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	22.5+59.2		32+63	235+385	
GMV-1010WM/ B1-X		101.5	114.0	29.2	30.0	(1340x765x1605) +(1340x765x1740)	14000+ 16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+59.2		40+63	360+385	
GMV-1065WM/ B1-X		106.5	119.0	31.2	31.9	(1340x765x1605) +(1340x765x1740)	14000+ 16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+59.2		40+63	360+385	
GMV-1130WM/ B1-X		111.9	125.5	32.7	33.0	(1340x765x1740) x2	16000x2	82	68	43	Φ19.05	Φ38.1	Φ9.52	45.4+59.2		50+63	360+385	
GMV-1180WM/ B1-X		117.5	132.0	34.5	35.5	(1340x765x1740) x2	16000x2	82	69	43	Φ19.05	Φ38.1	Φ9.52	51.1+59.2		63+63	385x2	
GMV-1235WM/ B1-X		123.0	138.0	37.0	37.8	(1340x765x1740) x2	16000x2	82	69	43	Φ19.05	Φ38.1	Φ9.52	59.2+59.2		63+63	385x2	
GMV-1300WM/ B1-X		129.0	144.5	35.7	36.9	(930x765x1605)+(1340x765x1605) +(1340x765x1740)	11400+14000+ 16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+51.1		25+40+63	225+360+385	
GMV-1350WM/ B1-X		134.5	150.5	38.2	39.2	(930x765x1605)+(1340x765x1605) +(1340x765x1740)	11400+14000+ 16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+59.2		25+40+63	225+360+385	
GMV-1410WM/ B1-X		140.0	156.5	39.9	39.7	(930x765x1605)+(1340x765x1605) +(1340x765x1740)	11400+14000+ 16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	22.5+33.2+59.2		32+40+63	235+360+385	
GMV-1460WM/ B1-X		145.5	163.5	41.5	42.8	(930x765x1605) +(1340x765x1740) x2	11400+ 16000x2	82	69	45	Φ19.05	Φ41.3	Φ9.52	20.9+51.1+59.2		25+63+63	225+385x2	
GMV-1515WM/ B1-X		151.0	169.5	44.0	45.1	(930x765x1605) +(1340x765x1740) x2	11400+ 16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	20.9+59.2+59.2		25+63+63	225+385x2	
GMV-1580WM/ B1-X		156.5	175.5	45.7	45.6	(930x765x1605) +(1340x765x1740) x2	11400+ 16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	22.5+59.2+59.2		32+63+63	235+385x2	
GMV-1630WM/ B1-X		163.0	183.0	47.7	48.9	(1340x765x1605) +(1340x765x1740) x2	14000+ 16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	28.8+59.2+59.2		40+63+63	360+385x2	
GMV-1685WM/ B1-X		168.0	188.0	49.7	50.8	(1340x765x1605) +(1340x765x1740) x2	14000+ 16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	33.2+59.2+59.2		40+63+63	360+385x2	
GMV-1750WM/ B1-X		173.4	194.5	51.2	51.9	(1340x765x1740) x3	16000x3	82	70	45	Φ19.05	Φ41.3	Φ9.52	45.4+59.2+59.2		50+63+63	360+385x2	
GMV-1800WM/ B1-X		179.0	201.0	53.0	54.4	(1340x765x1740) x3	16000x3	82	71	45	Φ19.05	Φ41.3	Φ9.52	51.1+59.2+59.2		63+63+63	385x3	
GMV-1854WM/ B1-X		184.5	207.0	55.5	56.7	(1340x765x1740) x3	16000x3	82	71	45	Φ19.05	Φ41.3	Φ9.52	59.2+59.2+59.2		63+63+63	385x3	
GMV-1908WM/ B1-X		190.5	213.5	54.2	55.8	(930x765x1605)+(1340x765x1605) +(1340x765x1740) x2	11400+14000+ 16000x2	82	72	47	Φ22.2	Φ44.5	Φ9.52	20.9+33.2+51.1+59.2		25+40+63+63	225+360+385x2	
GMV-1962WM/ B1-X		195.9	220.0	55.7	56.9	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+45.4+51.1+59.2		25+50+63+63	225+360+385x2	
GMV-2016WM/ B1-X		201.5	226.5	57.5	59.4	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+51.1+51.1+59.2		25+63+63+63	225+385x3	
GMV-2072WM/ B1-X		207.0	232.5	60.0	61.7	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+51.1+59.2+59.2		25+63+63+63	225+385x3	
GMV-2128WM/ B1-X		212.5	238.5	62.5	64.0	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+59.2+59.2+59.2		25+63+63+63	225+385x3	
GMV-2184WM/ B1-X		218.0	244.5	64.2	64.5	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	74	47	Φ22.2	Φ44.5	Φ9.52	22.5+59.2+59.2+59.2		32+63+63+63	235+385x3	
GMV-2240WM/ B1-X		224.5	252.0	66.2	67.8	(1340x765x1605) +(1340x765x1740) x3	14000+ 16000x3	82	74	47	Φ22.2	Φ44.5	Φ9.52	28.8+59.2+59.2+59.2		40+63+63+63	360+385x3	
GMV-2295WM/ B1-X		229.5	257.0	68.2	69.7	(1340x765x1605) +(												

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	52

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

## Outdoor Unit

Model	GMV-S120WL/A-S	GMV-S140WL/A-S	GMV-S160WL/A-S
Capacity	Cooling kW	12.1	14
	Heating kW	14	16.5
Power supply	V/Ph/Hz	220-240V~50/60Hz	
Refrigerant charge volume	kg	5	5
Rated power input	Cooling kW	3.05	3.98
	Heating kW	3.30	4.10
	Water heating kW	/	/
Airflow volume	m³/h	6000	6300
	CFM	3531	3708
Sound pressure level	dB(A)	55	56
Connecting pipe diameter	Gas mm	Φ15.9	Φ15.9
	Liquid mm	Φ9.52	Φ9.52
	Gas (high pressure) mm	Φ12.7	Φ12.7
Dimension (WxDxH)	Outline mm	900x340x1345	900x340x1345
	Package mm	998x458x1500	998x458x1500
Net weight/Gross weight	kg	113/123	113/123
Loading quantity	40' GP unit	57	57
	40' HQ unit	57	57

Model	GMV-S224W/A-X	GMV-S280W/A-X	
Cooling capacity	Rated kW	22.4	28
Heating capacity	Rated kW	21.5	21
	Max. kW	25	31.5
ECOP	-	7	7
SEER	Ducted -	8.46	7.58
	Cassette -	7.2	6.45
SCOP	Ducted -	5.5	5.58
	Cassette -	4.22	4.35
Power supply	V/Ph/Hz	380-415V 3N~50/60Hz	
Min. circuit current	A	16.1	20.9
Max. fuse current	A	20	25
Refrigerant charge volume	kg	10.5	11
Airflow volume	m³/h	14000	14000
	CFM	8239	8239
Sound pressure level(cooling)	dB(A)	57	58
Sound power level(cooling)	dB(A)	79	82
Connecting pipe	Gas mm	Φ19.05	Φ22.2
	Liquid mm	Φ9.52	Φ9.52
	Gas(high pressure) mm	Φ15.9	Φ15.9
Dimension (WxDxH)	Outline mm	1340x765x1605	1340x765x1605
	Package mm	1420x840x1775	1420x840x1775
Net weight	kg	295	295
Gross weight	kg	310	310
Loading quantity	40' GP set	22	22
	40' HQ set	22	22

## Water Tank

Model	SXTD200LCJW/A-K
Capacity	185
Power supply for electric heater	-
Input power for electric heater	220-240V~50Hz
Max. operation pressure	0.70
Outline dimensions(WxDxH)	462x462x1944
Package dimensions(WxDxH)	583x583x2045
Water tank gross/net weight	88/75
Outer size of connection pipe	Φ6, Φ9.52
Material of inner tank	Enamel
Made of defending cauterization	Mg anode

Note: This water tank is matched with side-discharged outdoor unit.

Model	SXTVD300LCJ2/A-K
Water tank volume	300
Power supply	230V~50Hz
Electric heater power	3000
Screw thread spec of pipe	3/4" (19.05)
Cool water inlet	inch(mm)
Hot water outlet	inch(mm)
Dimension	Outline
Packaged	DiameterxH mm
Net weight/Gross weight	Φ620x1725 kg
Loading quantity	738x870x1843 unit
40'GP/40'HQ	135/163
	38/57

## Hydro Box

Model	NRQD16G/A-S
Heating capacity	kW 4.5(3.6-16)
Dimension (WxDxH)	Outline mm 500x919x328
	Package mm 1158x608x400
Power supply	V/Ph/Hz 220-240V ~50/60Hz
Connecting pipe diameter	to ODU Gas mm Φ15.9
	Liquid mm Φ9.52
	Gas(high pressure) mm Φ12.7
	to water tank mm Φ25
Water pump	Type — PB-2.5/11-A
	Power input kW 0.08-0.14
	Water flow L/h 1700.00
	GPM 7.48
	Delivery lift m 6.00
Net weight/Gross weight	kg 56/62
Loading quantity	unit 1058/1196

## Hot Water Converter

Model	NRZ16G/A-S
Heating capacity	kW 4.5(2.8~5.6)
Dimension (WxDxH)	Outline mm 370x135x485
	Package mm 473x238x660
Power supply	V/Ph/Hz 220-240V ~50/60Hz
Connecting pipe diameter	to ODU Gas mm Φ15.9
	Liquid mm Φ9.52
	Gas(high pressure) mm Φ12.7
Net weight/Gross weight	kg 8.5/13.5
Loading quantity	unit 660
40'GP	660

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.



## GMV Water

**INVERTER R410A**

Water Source Heat Pump VRF System integrates the advantages of a water system and DC inverter VRF units. It features the high efficiency and energy saving of water-cooled units and the comfortable and flexible characteristics of VRF units. It utilizes renewable sources as the heating and cooling sources. It can be used in coordination with relevant policy projects or energy conservation projects, providing a new air conditioning solution for tall building structures, hotels, office buildings, shopping centers, etc.



### » An external energy source for water source heat pump VRF system

Gree self-developed water source heat pump VRF system utilizes renewable sources such as water and geo-thermal or ground, with higher operating efficiency and lower energy consumption. The waterside can be a cooling tower or boiler or the application of surface water (river water, lake water, seawater), groundwater, geo-thermal or ground heat, solar power, waste heat, wastewater or other kinds of renewable sources.

### » System structure of water source heat pump VRF system

The water source heat pump VRF system is made up of two parts. The first part is the water system that exchanges heat between outdoor units and water/geo-thermal or ground sources. The application of water source/geo-thermal or ground source is varied and can be coordinated with constant-temperature water/geo-thermal or ground, cooling tower or boiler. Compared with the common air-cooled system, it is more energy-saving and space-saving. The second part is the VRF system of outdoor and indoor units, which features the advantages of flexible installation, easy construction, and intelligent control. There is a variety of combinations of indoor units to cope with different applications.

### » Suitable for different construction applications, no influence on building appearance

The water source heat pump VRF system is suitable for different constructions, with no influence on building appearance. The water source heat pump VRF air conditioners do not need to exchange heat with the outdoor air, so it can be installed flexibly to coordinate with the building structure.

### » No influence of weather

The water source heat pump VRF system exchanges heat with water or geo-thermal or ground source through outdoor units, so it won't be affected by the air temperature. In winter, when the system is in the heating operation, outdoor units won't get frosted or run in defrosting mode, so as to guarantee stable heating performance.

### » Same as GMV5, the water source heat pump VRF system adopts CAN communication, so it can be connected with any one type of GMV5 indoor units.

## ODU Combination Lineup

380-415V, 50/60Hz

Model	GMV-W224WMA-X	GMV-W280WMA-X	GMV-W335WMA-X
GMV-W448WMA-X	● ●		
GMV-W504WMA-X	●	●	
GMV-W560WMA-X		● ●	
GMV-W615WMA-X		●	
GMV-W670WMA-X			● ●
GMV-W728WMA-X	● ●	●	
GMV-W784WMA-X	●	● ●	
GMV-W840WMA-X		● ● ●	
GMV-W895WMA-X		● ●	●
GMV-W950WMA-X		●	● ●
GMV-W1005WMA-X			● ● ●
GMV-W1064WMA-X	●	● ● ●	
GMV-W1120WMA-X		● ● ● ●	
GMV-W1175WMA-X		● ● ● ●	●
GMV-W1230WMA-X		● ●	● ●
GMV-W1285WMA-X		●	● ● ●
GMV-W1340WMA-X			● ● ● ●

## Outdoor Unit

380-415V, 50/60Hz

Model		GMV-W224WMA-X	GMV-W280WMA-X	GMV-W335WMA-X
Capacity	Cooling	kW	22.4	28
	Heating	kW	25	31.5
Sound pressure level		dB(A)	50	52
Power supply		V/Ph/Hz	380-415V 3N~50/60Hz	
Water flow volume		m³/h	4.8	6
Water pressure drop		kPa	16	24
Rated power input	Cooling	kW	3.9	5.7
	Heating	kW	4	5.4
Refrigerant connecting pipe diameter	Gas	mm	Φ22.2	Φ22.2
	Liquid	mm	Φ9.52	Φ9.52
Dimension(WxDxH)	Outline	mm	780×550×1000	780×550×1000
	Package	mm	833×599×1160	833×599×1160
Net weight/Gross weight		kg	162/175	162/175
Loading quantity	40' GP	unit	108	108
	40' HQ	unit	108	108



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## Specifications of ODU Combination

380-415V, 50/60Hz

Model	Power supply	Capacity		Power input		Dimension (WxDxH)	Water flow volume	Connecting pipe		Min. circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating			Liquid	Gas			
		V/Ph/Hz	kW	kW	kW			mm	m³/h	A	A	kg
GMV-W448WM/A-X	380-415V 3N~ 50/60Hz	44.8	50.0	3.9×2	4.0×2	(780×550×1000)×2	4.8×2	Φ12.7	Φ28.6	16.1×2	20×2	162×2
GMV-W504WM/A-X		50.4	56.5	3.9+5.7	4.0+5.4	(780×550×1000)×2	4.8+6.0	Φ15.9	Φ28.6	16.1+19.7	20×2	162×2
GMV-W560WM/A-X		56.0	63.0	5.7×2	5.4×2	(780×550×1000)×2	6.0×2	Φ15.9	Φ28.6	19.7×2	20×2	162×2
GMV-W615WM/A-X		61.5	69.0	5.7+7.9	5.4+7.35	(780×550×1000)×2	6.0+7.2	Φ15.9	Φ28.6	19.7+26.8	20+32	162×2
GMV-W670WM/A-X		67.0	75.0	7.9×2	7.35×2	(780×550×1000)×2	7.2×2	Φ15.9	Φ28.6	26.8×2	32×2	162×2
GMV-W728WM/A-X		72.8	81.5	3.9×2+5.7	4.0×2+5.4	(780×550×1000)×3	4.8×2+6.0	Φ19.05	Φ31.8	16.1×2+19.7	20×3	162×3
GMV-W784WM/A-X		78.4	88.0	3.9+5.7×2	4.0+5.4×2	(780×550×1000)×3	4.8+6.0×2	Φ19.05	Φ31.8	16.1+19.7×2	20×3	162×3
GMV-W840WM/A-X		84.0	94.5	5.7×3	5.4×3	(780×550×1000)×3	6.0×3	Φ19.05	Φ31.8	19.7×3	20×3	162×3
GMV-W895WM/A-X		89.5	100.5	5.7×2+7.9	5.4×2+7.35	(780×550×1000)×3	6.0×2+7.2	Φ19.05	Φ31.8	19.7×2+26.8	20×2+32	162×3
GMV-W950WM/A-X		95.0	106.5	5.7+7.9×2	5.4+7.35×2	(780×550×1000)×3	6.0+7.2×2	Φ19.05	Φ31.8	19.7+26.8×2	20+32×2	162×3
GMV-W1005WM/A-X		100.5	112.5	7.9×3	7.35×3	(780×550×1000)×3	7.2×3	Φ19.05	Φ38.1	26.8×3	32×3	162×3
GMV-W1064WM/A-X		106.4	119.5	3.9+5.7×3	4.0+5.4×3	(780×550×1000)×4	4.8+6.0×3	Φ19.05	Φ38.1	16.1+19.7×3	20×4	162×4
GMV-W1120WM/A-X		112.0	126.0	5.7×4	5.4×4	(780×550×1000)×4	6.0×4	Φ19.05	Φ38.1	19.7×4	20×4	162×4
GMV-W1175WM/A-X		117.5	132.0	5.7×3+7.9	5.4×3+7.35	(780×550×1000)×4	6.0×3+7.2	Φ19.05	Φ38.1	19.7×3+26.8	20×3+32	162×4
GMV-W1230WM/A-X		123.0	138.0	5.7×2+7.9×2	5.4×2+7.35×2	(780×550×1000)×4	6.0×2+7.2×2	Φ19.05	Φ38.1	19.7×2+26.8×2	20×2+32×2	162×4
GMV-W1285WM/A-X		128.5	144.0	5.7+7.9×3	5.4+7.35×3	(780×550×1000)×4	6.0+7.2×3	Φ19.05	Φ38.1	19.7+26.8×3	20+32×3	162×4
GMV-W1340WM/A-X		134.0	150.0	7.9×4	7.35×4	(780×550×1000)×4	7.2×4	Φ19.05	Φ38.1	26.8×4	32×4	162×4

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## Indoor Units Lineup

Type of indoor unit	Specification	15	18	22	25	28	32	36	40	45	50	56	63	71	72	80	90	100	112	125	140	160	180	224	250	280	450	560
High Static Pressure Duct Type Unit																												
General Static Pressure Duct Type Unit																												
360° Air Discharge Cassette Indoor Unit																												
360° Air Discharge Compact Cassette Indoor Unit																												
2-way Cassette Indoor Unit																												
1-way Cassette Unit																												
Wall-mounted																												
Floor Ceiling Type Indoor Unit																												
Console Indoor Unit																												
Floor Standing Type Indoor Unit																												
Fresh Air Processing Indoor Unit																												
AHU KIT																												
Concealed Floor Standing Type																												



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## High Static Pressure Duct Type Indoor Unit

50/60Hz

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

Model		GMV-ND160PHS/B-T	GMV-ND180PHS/B-T	GMV-ND224PH/A-T	GMV-ND280PH/A-T			
Capacity	Cooling	kW	16.0	18.0	22.4			
	Heating	kW	18.0	20.0	25.0			
Power supply		V/Ph/Hz	220-240V~50Hz & 208-230V~60Hz					
Power consumption		W	230	350	800	900		
Airflow volume(H/M/L)		m³/h	2500/2000/1750	3000/2600/2000	4000/3600/3200	4400/4000/3600		
Rated current	Cooling	A	1.5	2.0	3.7	4.1		
	Heating	A	1.5	2.0	3.7	4.1		
ESP		Pa	90/0~200	90/0~170	100/50~200	100/50~200		
Sound pressure level(H/M/L)		dB(A)	44/41/38	49/47/44	54/52/49	55/52/50		
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ19.05	Φ19.05		
	Gas	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05		
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25	
Thickness		mm	2.5	2.5	2.0	2.0		
Dimension (WxDxH)	Outline	mm	1400×700×300	1400×700×300	1483×791×385	1686×870×450		
	Package	mm	1678×808×365	1678×808×365	1578×833×472	1788×988×580		
Net weight/Gross weight		kg	58/67	58/67	82/104	105/140		
Loading quantity		40' GP	unit	84	84	60	52	
40' HQ		unit	98	98	75	52		

Model		GMV-ND45PHS/B-T	GMV-ND50PHS/B-T	GMV-ND56PHS/B-T	GMV-ND63PHS/B-T	GMV-ND71PHS/B-T	GMV-ND80PHS/B-T	
Capacity	Cooling	kW	4.5	5.0	5.6	6.3	8.0	
	Heating	kW	5.0	5.6	6.3	7.1	9.0	
Power supply		V/Ph/Hz	220-240V~50Hz & 208-230V~60Hz					
Power consumption		W	85	85	90	90	100	100
Airflow volume(H/M/L)		m³/h	850/700/600	850/700/600	1000/800/700	1000/800/700	1250/1050/950	1250/1050/950
Rated current	Cooling	A	0.5	0.5	0.8	0.8	0.8	0.8
	Heating	A	0.5	0.5	0.8	0.8	0.8	0.8
ESP		Pa	60/0~150	60/0~150	90/0~200	90/0~200	90/0~200	90/0~200
Sound pressure level(H/M/L)		dB(A)	36/34/32	36/34/32	37/35/33	37/35/33	38/36/34	38/36/34
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
Thickness		mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	700×700×300	700×700×300	1000×700×300	1000×700×300	1000×700×300	1000×700×300
	Package	mm	897×808×360	897×808×360	1205×813×360	1205×813×360	1205×813×360	1205×813×360
Net weight/Gross weight		kg	34/40	34/40	43/49	43/49	43/49	43/49
Loading quantity		40' GP	unit	168	168	138	138	138
40' HQ		unit	196	196	161	161	161	161

Model		GMV-ND90PHS/B-T	GMV-ND100PHS/B-T	GMV-ND112PHS/B-T	GMV-ND125PHS/B-T	GMV-ND140PHS/B-T		
Capacity	Cooling	kW	9.0	10.0	11.2	12.5		
	Heating	kW	10.0	11.2	12.5	14.0		
Power supply		V/Ph/Hz	220-240V~50Hz & 208-230V~60Hz					
Power consumption		W	140	140	160	160	220	
Airflow volume(H/M/L)		m³/h	1800/1450/1250	1800/1450/1250	2000/1600/1400	2000/1600/1400	2350/1900/1650	
Rated current	Cooling	A	1.1	1.1	1.1	1.1	1.5	
	Heating	A	1.1	1.1	1.1	1.1	1.5	
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)	40/37/35	40/37/35	40/38/36	40/38/36	42/39/37	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm						

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Model		GMV-ND80PLS/C-T	GMV-ND90PLS/C-T	GMV-ND100PLS/C-T	GMV-ND112PLS/C-T	GMV-ND125PLS/C-T	GMV-ND140PLS/C-T		
Capacity	Cooling	kW	8	9	10	11.2	12.5		
	Heating	kW	9	10	11.2	12.5	14		
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208/230V ~ 60Hz						
Power consumption		W	110	130	130	170	170		
Airflow volume (H/M/L)		m³/h	1250/1100/900	1500/1250/900	1500/1350/1000	1700/1500/1100	2000/1700/1400	2000/1700/1400	
Rated current	Cooling	A	0.53	0.63	0.63	0.63	0.8	0.8	
	Heating	A	0.53	0.63	0.63	0.63	0.8	0.8	
ESP		Pa	50/0~80	50/0~80	50/0~80	50/0~80	50/0~80	50/0~80	
Sound pressure level(H/M/L)		dB(A)	37/34/31	40/36/32	40/36/32	42/40/37	42/40/37	42/40/37	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	
Dimension (WxDxH)		Outline	mm	1200x655x260	1340x655x260	1340x655x260	1340x655x260	1340x655x260	
Package		mm	1448x858x315	1588x858x315	1588x858x315	1588x858x315	1588x858x315	1588x858x315	
Net weight/Gross weight		kg	39.0/48.0	45.5/54.5	45.5/54.5	45.5/54.5	46.5/55.5	46.5/55.5	
Loading quantity	40'GP	unit	154	105	105	105	105	105	
	40'HQ	unit	176	120	120	120	120	120	

Model		GMV-ND71T/C-T	GMV-ND80T/C-T	GMV-ND90T/C-T	GMV-ND100T/C-T	GMV-ND112T/C-T	GMV-ND125T/C-T	GMV-ND140T/C-T	
Capacity	Cooling	kW	7.1	8.0	9.0	10.0	11.2	12.5	
	Heating	kW	8.0	9.0	10.0	11.2	12.5	14.0	
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	60	85	85	85	115	115	
Airflow volume(H/M/L)		m³/h	1150/950/850	1250/1000/900	1250/1000/900	1250/1000/900	1650/1300/1100	1650/1300/1100	
Rated current	Cooling	A	0.4	0.4	0.4	0.4	0.6	0.6	
	Heating	A	0.4	0.4	0.4	0.4	0.6	0.6	
Sound pressure level(H/M/L)		dB(A)	37/34/31	39/37/34	39/37/34	39/37/34	43/41/39	43/41/39	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	
Main body		Dimension (WxDxH)	Outline	mm	840x840x240	840x840x240	840x840x240	840x840x290	
Panel		Package	mm	963x963x325	963x963x325	963x963x325	963x963x379	963x963x379	
		Net weight/Gross weight	kg	28/36	29/37	29/37	33/42	33/42	
Main body		Dimension (WxDxH)	Outline	mm	950x950x65	950x950x65	950x950x65	950x950x65	
		Package	mm	1038x1033x112	1038x1033x112	1038x1033x112	1038x1033x112	1038x1033x112	
Panel		Net weight/Gross weight	kg	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	
		Loading quantity	40'GP	unit	120	120	120	120	
			40'HQ	unit	140	140	140	140	

## 360° Air Discharge Cassette Indoor Unit

50/60Hz

Model		GMV-ND22T/C-T	GMV-ND28T/C-T	GMV-ND36T/C-T	GMV-ND45T/C-T	GMV-ND50T/C-T	GMV-ND63T/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	6.3		
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	26	26	26	28	35	60	
Airflow volume(H/M/L)		m³/h	800/700/600	800/700/600	800/700/600	900/800/700	950/850/750	1150/950/850	
Rated current	Cooling	A	0.2	0.2	0.2	0.2	0.2	0.4	
	Heating	A	0.2	0.2	0.2	0.2	0.2	0.4	
Sound pressure level(H/M/L)		dB(A)	33/30/28	33/30/28	33/30/28	34/30/28	35/32/29	37/33/30	
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	
Main body	Dimension (WxDxH)	Outline	mm	840x840x240	840x840x240	840x840x240	840x840x240	840x840x240	
	Package	mm	963x963x325	963x963x325	963x963x325	963x963x325	963x963x325	963x963x325	
Panel	Net weight/Gross weight	kg	27/35	27/35	27/35	28/36	28/36	28/36	
	Dimension (WxDxH)	Outline	mm	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	
Panel	Package	mm	1038x1033x112	1038x1033x112	1038x1033x112	1038x1033x112	1038x1033x112	1038x1033x112	
	Net weight/Gross weight	kg	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	
Loading quantity		40'GP	unit	120	120	120	120	120	
		40'HQ	unit	140	140	140	140	140	

## Fresh Air Ventilation Kit

Model		XF150A-T*							
Dimension	Outline	%	10						
		mm	834x834x60						
Dimension	Package								

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## 2-way Cassette Indoor Unit

50/60Hz

Model		GMV-ND28TS/A-T	GMV-ND36TS/A-T	GMV-ND45TS/A-T	GMV-ND50TS/A-T	GMV-ND56TS/A-T	GMV-ND63TS/A-T	GMV-ND71TS/A-T
Capacity	Cooling	kW	2.8	3.6	4.5	5.0	5.6	7.1
	Heating	kW	3.2	4.0	5.0	5.6	6.3	8.0
Power supply		V/Ph/Hz	220-240V~50Hz & 208-230V~60Hz					
Power consumption		W	55.0	55.0	55.0	55.0	103.0	103.0
Airflow volume(H/M/L)		m³/h	830/660/580	830/660/580	830/660/580	830/660/580	1100/900/750	1100/900/750
CFM		490/390/340	490/390/340	490/390/340	490/390/340	650/530/440	650/530/440	650/530/440
Rated current	Cooling	A	0.4	0.4	0.4	0.4	0.7	0.7
	Heating	A	0.4	0.4	0.4	0.4	0.7	0.7
Sound pressure level(H/M/L)		dB(A)	35/32/29	35/32/29	35/32/29	35/32/29	39/36/33	39/36/33
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9
Drain pipe		External dia.	mm	25	25	25	25	25
Thickness		mm	2.5	2.5	2.5	2.5	2.5	2.5
Main body (WxDxH)	Dimension Outline	mm	1200×520×315	1200×520×315	1200×520×315	1200×520×315	1200×520×315	1200×520×315
	Package	mm	1523×658×430	1523×658×430	1523×658×430	1523×658×430	1523×658×430	1523×658×430
Net weight/Gross weight		kg	43/54	43/54	43/54	46/56	46/56	46/56
Panel (WxDxH)	Dimension Outline	mm	1416×630×33	1416×630×33	1416×630×33	1416×630×33	1416×630×33	1416×630×33
	Package	mm	1578×768×120	1578×768×120	1578×768×120	1578×768×120	1578×768×120	1578×768×120
Net weight/Gross weight		kg	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0
Loading quantity		40'GP	unit	90	90	90	90	90
40'HQ		unit	105	105	105	105	105	105

## 1-way Cassette Indoor Unit

50/60Hz

Model		GMV-ND22TD/A-T	GMV-ND28TD/A-T	GMV-ND36TD/A-T	GMV-ND45TD/A-T	GMV-ND50TD/A-T	GMV-ND56TD/A-T	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0	
	Heating	kW	2.5	3.2	4.0	5.0	6.3	
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
CFM		353/294/265	353/294/265	353/294/265	488/353/294	488/353/294	524/393/332	
Rated current	Cooling	A	0.2	0.2	0.2	0.3	0.3	0.3
	Heating	A	0.2	0.2	0.2	0.3	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	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9
Drain pipe		External dia.	mm	25	25	25	25	25
Thickness		mm	2.5	2.5	2.5	2.5	2.5	2.5
Main body (WxDxH)	Dimension Outline	mm	987×385×178	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	1307×501×310
Net weight/Gross weight		kg	20.0/27.0	20.0/27.0	20.0/27.0	21.0/28.5	21.0/28.5	21.0/28.5
Panel (WxDxH)	Dimension Outline	mm	1200×460×55	1200×460×55	1200×460×55	1200×460×55	1200×460×55	1200×460×55
	Package	mm	1265×536×121	1265×536×121	1265×536×121	1265×536×121	1265×536×121	1265×536×121
Net weight/Gross weight		kg	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0
Loading quantity		40'GP	unit	138	138	138	138	138
40'HQ		unit	138	138	138	138	138	138

## Floor Standing Type

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

## Wall-mounted Type Indoor Unit

50/60 Hz

Model		GMV-ND15G/B4B-T	GMV-ND18G/B4B-T	GMV-ND22G/B4B-T	GMV-ND28G/B4B-T	GMV-ND36G/B4B-T	GMV-ND45G/B4B-T	GMV-ND50G/B4B-T
Capacity	Cooling	kW	1.5	1.8	2.2	2.8	3.6	4.5
	Heating	kW	1.8	2.5	2.5	3.2	4	5
Power supply		V/Ph/Hz	220-240V~50Hz & 208-230V~60Hz					
Power consumption		W	20	20	20	25	35	35
Airflow volume (H/M/L)		m³/h	500/440/300	500/44				

## Fresh Air Processing Indoor Unit

50/60Hz

Model		GMV-NDX125P/A-T	GMV-NDX140P/A-T	GMV-NDX224P/A-T	GMV-NDX250P/A-T	GMV-NDX280P/A-T	GMV-NX450P/A(X4.0)-M
Capacity	Cooling	kW	12.5	14.0	22.4	25.0	28.0
		kW <sup>1</sup>	8.5	10.0	16.0	18.0	20.0
		kW <sup>2</sup>	10.5	12.0	20.0	20.0	22.0
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				380-415V 3N~50Hz
Power consumption		W	200/350	200/350	400/760	520/860	520/860
Airflow volume (default/range)		m <sup>3</sup> /h	1200/1000~2000	1200/1000~2000	2000/1500~3000	2500/2000~3500	2500/2000~3500
Rated current	Cooling	A	1.5/2.0	1.5/2.0	2.5/4.3	3.1/4.9	3.1/4.9
	Heating	A	1.5/2.0	1.5/2.0	2.5/4.3	3.1/4.9	3.1/4.9
ESP	Pa	150/50~200	150/50~200	200/50~300	200/50~300	200/50~300	200
Sound pressure level(Default/Range)	dB(A)	46/40~50	46/40~50	45/45~54	47/47~54	47/47~54	58
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ15.9	Φ15.9	Φ19.05	Φ22.2	Φ28.6
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ33
	Thickness	mm	2.5	2.5	2.0	2.0	3.0
Dimension (WxDxH)	Outline	mm	1400×700×300	1400×700×300	1483×791×385	1483×791×385	1700×1100×650
	Package	mm	1601×813×365	1601×813×365	1578×883×472	1578×883×472	1893×1463×838
Net weight/Gross weight		kg	54/61	54/61	82/104	82/104	208/266
Loading quantity	40'GP	unit	84	84	52	52	16
	40'HQ	unit	98	98	65	65	16

- \*1 Note:  
 1. Rated cooling capacity test conditions: indoor 35°C DB/28°C WB, outdoor 35°C DB; connection pipe length: 7.5m, without height drop between units. The default air outlet temperature of the unit is 18°C.  
 2. Rated heating capacity test conditions: 1: indoor 7°C DB, outdoor 7°C DB/6°C WB, 2: indoor -7°C DB, outdoor 0°C DB / -2.9°C WB; connection pipe length: 7.5m, without height drop between units. The default air outlet temperature of the unit is 22°C.  
 3. Input power: the left side of " " is the rated power while the right side is the maximum power;  
 4. External static pressure: the left side of " " is the static pressure of a standard unit while the right side is the static pressure option of a non-standard unit;  
 5. Air volume: the left side of " " is the rated air volume while the right side is the adjustable fresh air volume.  
 6. Input current: the left side of " " is the rated current while the right side is the maximum current.  
 7. As to noise: the left side of " " is the noise value under rated static pressure while the right side is the noise range with the change of static pressure.

## Console Indoor Unit

50/60Hz

Model		GMV-ND22C/A-T	GMV-ND28C/A-T	GMV-ND36C/A-T	GMV-ND45C/A-T	GMV-ND50C/A-T
Capacity	Cooling	kW	2.2	2.8	3.6	4.5
	Heating	kW	2.5	3.2	4.0	5.5
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz			
Power consumption		W	15	15	20	40
Airflow volume(H/M/L)		m <sup>3</sup> /h	400/320/270	400/320/270	480/400/310	680/600/500
Rated current	Cooling	A	0.17	0.17	0.25	0.4
	Heating	A	0.17	0.17	0.25	0.4
ESP	Pa	0	0	0	0	0
Sound pressure level(H/M/L)	dB(A)	38/33/27	38/33/27	40/37/32	46/43/39	46/43/39
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	28	28	28	28
	Thickness	mm	1	1	1	1
Dimension (WxDxH)	Outline	mm	700×215×600	700×215×600	700×215×600	700×215×600
	Package	mm	788×283×777	788×283×777	788×283×777	788×283×777
Net weight/Gross weight		kg	16/19	16/19	16/19	16/19
Loading quantity	40' GP	unit	348	348	348	348
	40' HQ	unit	348	348	348	348

## Floor Ceiling Type Indoor Unit

50/60Hz

Model		GMV-ND28ZD/A-T	GMV-ND36ZD/A-T	GMV-ND50ZD/A-T	GMV-ND56ZD/A-T	GMV-ND63ZD/A-T
Capacity	Cooling	kW	2.8	3.6	5.0	5.6
	Heating	kW	3.2	4.0	5.6	6.3
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz			
Power consumption		W	40	40	50	50
Airflow volume(H/M/L)		m <sup>3</sup> /h	650/580/500	650/580/500	950/850/700	950/850/700
Rated current	Cooling	A	0.3	0.3	0.4	0.4
	Heating	A	0.3	0.3	0.4	0.4
Sound pressure level(H/M/L)		dB(A)	36/34/32	36/34/32	42/38/33	42/38/33
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75
Dimension (WxDxH)	Outline	mm	1220×700×225			
	Package	mm	1343×823×315			
Net weight/Gross weight		kg	40/49	40/49	40/49	40/49
Loading quantity	40' GP	unit	145	145	145	145
	40' HQ	unit	158	158	158	158

Model		GMV-ND71ZD/A-T	GMV-ND90ZD/A-T	GMV-ND112ZD/A-T	GMV-ND125ZD/A-T	GMV-ND140ZD/A-T	GMV-ND160ZD/A-T
Capacity	Cooling	kW	7.1	9.0	11.2	12.5	14.0
	Heating	kW	8.0	10.0	12.5	14.0	16.0
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption		W	75	140	160	160	200
Airflow volume(H/M/L)		m <sup>3</sup> /h	1400/1150/1000	1600/1400/1200	2000/1800/1450	2000/1800/1450	2300/2100/1900
Rated current	Cooling	A	0.6	1.1	1.4	1.4	1.9
	Heating	A	0.6	1.1	1.4	1.4	1.9
Sound pressure level(H/M/L)		dB(A)	44/42/39	50/47/43	51/47/42	52/49/45	52/49/45
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75	1.75
Dimension (WxDxH)	Outline	mm	1420×700×245				1700×700×245</

Model		GMV-ND90ZD/B-T <sup>1</sup>	GMV-ND100ZD/B-T <sup>1</sup>	GMV-ND112ZD/B-T <sup>1</sup>	GMV-ND125ZD/B-T <sup>1</sup>	GMV-ND140ZD/B-T <sup>1</sup>	GMV-ND160ZD/B-T <sup>1</sup>		
Capacity	Cooling	kW	9.0	10.0	11.2	12.5	14.0	16.0	
	Heating	kW	10.0	11.2	12.5	14.0	16.0	17.0	
Power supply		V/Ph/Hz	220-240V~50Hz & 208-230V~60Hz						
Power consumption		W	140	140	160	160	160	200	
Airflow volume (SL/H/M/L)		m <sup>3</sup> /h	1500/1380/1200/1020	1600/1500/1350/1260	1800/1700/1540/1400	1800/1700/1540/1400	2100/2000/1800/1480	2300/2200/1870/1590	
Rated current	Cooling	A	1.1	1.1	1.4	1.4	1.4	1.9	
	Heating	A	1.1	1.1	1.4	1.4	1.4	1.9	
Sound pressure level(H/M/L)		dB(A)	47/43/39	47/43/39	47/44/42	47/44/42	50/48/44	53/49/45	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05	
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17	
	Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75	
Dimension (WxDxH)	Outline	mm	1200x665x235	1200x665x235	1570x665x235	1570x665x235	1570x665x235	1570x665x235	
	Package	mm	1363x770x300	1363x770x300	1729x770x300	1729x770x300	1729x770x300	1729x770x300	
Net weight/Gross weight		kg	31.0/37.0	31.0/37.0	40.0/47.0	40.0/47.0	42.0/49.0	42.0/49.0	
Loading quantity	40'GP	unit	98	98	53	53	53	53	
	40'HQ	unit	113	113	64	64	64	64	

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

## Concealed Floor Standing Type

50/60Hz

Model		GMV-ND22ZA/A-T	GMV-ND28ZA/A-T	GMV-ND36ZA/A-T	GMV-ND45ZA/A-T	GMV-ND56ZA/A-T	GMV-ND63ZA/A-T	GMV-ND71ZA/A-T	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	6.3	7.1
	Heating	kW	2.5	3.2	4	5	6.3	7.1	8
Power supply		V/Ph/Hz	220-240V~50Hz & 208-230V~60Hz						
Power consumption		W	35	35	43	45	80	80	90
Airflow volume(H/M/L)		m <sup>3</sup> /h	450/350/250	450/350/250	550/450/350	650/500/400	900/750/600	900/750/600	1100/900/700
Rated current	Cooling	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
	Heating	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
ESP		Pa	10.0~40	10.0~40	10.0~40	15.0~60	15.0~60	15.0~60	15.0~60
Sound pressure level(H/M/L)		dB(A)	30/28/25	30/28/25	33/31/28	33/31/28	35/33/30	35/33/30	37/35/33
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Dimension (WxDxH)	Outline	mm	700x615x200	700x615x200	700x615x200	900x615x200	1100x615x200	1100x615x200	1100x615x200
	Package	mm	893x743x305	893x743x305	893x743x305	1123x743x305	1323x743x305	1323x743x305	1323x743x305
Net weight/Gross weight		kg	23/30	23/30	23/30	27/36	32/41	32/41	32/41
Loading quantity	40'GP	unit	273	273	273	217	175	175	175
	40'HQ	unit	312	312	312	248	200	200	200

Model		GMV-ND100L/A-T							GMV-ND140L/A-T															
Capacity	Cooling	kW	10							14														
	Heating	kW	11							15														
Power supply		V/Ph/Hz	220-240V~50Hz & 208-230V~60Hz																					
Power consumption		W	200																					
Airflow volume(H/M/L)		m <sup>3</sup> /h	1850/1600/1400							1850/1600/1400							1089/942/824							
Rated current	Cooling	A	1.5							1.5							1.5							
	Heating	A	1.5							1.5							0							
ESP	Liquid	Pa	50/48/46							50/48/46							50/48/46							
	Gas	Pa	Φ9.52							Φ9.52							Φ9.52							
Drain pipe	External dia.	mm	Φ15.9							Φ15.9							Φ15.9							
	Thickness	mm	Φ31							Φ31							Φ31							
Dimension (WxDxH)	Outline	mm	580x400x1870							580x400x1870							580x400x1870							
	Package	mm	738x545x2083							738x545x2083							738x545x2083							

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## Control System Lineup

Controlling systems		Outdoor series									
		GMV6	GMV5	GMV5E	GMV5 Mini	GMV5 Slim	GMV5 Max	GMV5/6	GMV5 CP	GMV5 Home	GMV Water
Long-distance monitor	Intelligent remote eudemon	FE30-24/DF(B)		○	○	○	○	○	○	○	
		ME30-24/DF(B)		○	○	○	○	○	○	○	
	Gateway of building protocol	ME30-24/E5(M)		○	○	○	○	○	○	○	○
		ME30-24/E6(M)		○	○	○	○	○	○	○	○
		ME30-24/D4(B)		○	○	○	○	○	○	○	○
		ME31-33/EH1(M)		○	○	○	○	○	○	○	○
		ME30-24/F1(K)		○	○	○	○	○	○	○	○
		FE11-24/D4(B)		○	○	○	○	○	○	○	
	Intelligent billing eudemon	ME11-24/D4(B)		○	○	○	○	○	○	○	
		ME31-00C7 ME31-00C3		○	○	○	○	○	○	○	
Other modules	Optoelectronic isolated converter	GD02		○	○	○	○	○	○	○	
	Optoelectronic isolated signal multiplier	RS485-W		○	○	○	○	○	○	○	

Controlling system		Indoor series			Cassette type	(High ESP, Low ESP, Slim ducted Duct type)	Fresh air processing	Wall mounted type	Floor ceiling type	Console type	Floor standing type	Concealed floor standing type
		YAP1F	YV1L1	XK46	XK79	XK55	XE70-33/H	JS05(receiver)	CE52-24/F(C)	CE54-24/F(C)	CE42-24/F(C)	CE42-24/F(C)
Wireless controller	Wireless controller	●	○	○	●	●	●	●	●	●	●	○
	YV1L1	○	○	○	○	○	○	○	○	○	○	○
	XK46	○	●	●	●	○	○	○	○	○	○	●
	XK79	○	○	○	○	○	○	○	○	○	○	○
	XK55	○	○	○	○	○	○	○	○	○	○	○
	XE70-33/H	○	○	○	○	○	○	○	○	○	○	○
	JS05(receiver)	○	○	○	○	○	○	○	○	○	○	○
Central controller	CE52-24/F(C)	○	○	○	○	○	○	○	○	○	○	○
E-Smart zone controller	CE54-24/F(C)	○	○	○	○	○	○	○	○	○	○	○
Debugger	CE42-24/F(C)	○	○	○	○	○	○	○	○	○	○	○

Note: ● means standard, ○ means optional.

## Branching Joint (For GMV5 and GMV6 units)

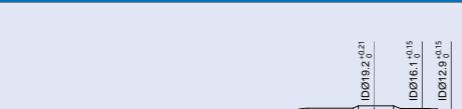
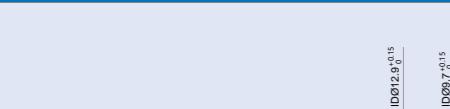
For Indoor & Outdoor Units		Appearance	
Model	Total capacity (xkW)	Gas pipe	Liquid pipe
FQ01A/A	X<20		
FQ01B/A	20≤X≤30		
FQ02/A	30<X≤70		
FQ03/A	70<X≤135		
FQ04/A	135<X		
For Outdoor Units		Appearance	
Model		Gas pipe	Liquid pipe
ML01/A			

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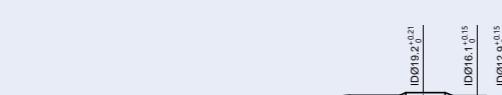
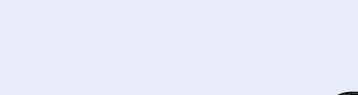
## Branching Joint (For GMV5 and GMV6 units)

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

## Branching Joint (For GMV5 Home Hydro box to IDU)

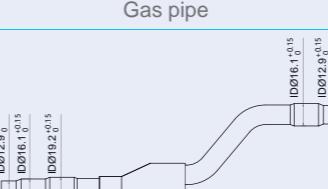
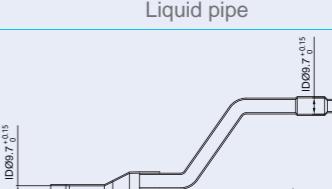
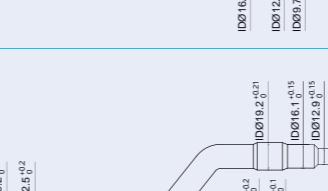
Model	Appearance	
	Gas Pipe	Liquid Pipe
FQ01B/A	 <p>Gas Pipe Dimensions:</p> <ul style="list-style-type: none"> <li>ID Ø19.2 <math>\pm 0.2</math></li> <li>OD Ø22.5 <math>\pm 0.2</math></li> <li>ID Ø19.2 <math>\pm 0.2</math></li> <li>ID Ø16.1 <math>\pm 0.1</math></li> <li>ID Ø19.2 <math>\pm 0.2</math></li> <li>ID Ø16.1 <math>\pm 0.1</math></li> <li>ID Ø12.9 <math>\pm 0.15</math></li> </ul>	 <p>Liquid Pipe Dimensions:</p> <ul style="list-style-type: none"> <li>ID Ø9.7 <math>\pm 0.15</math></li> <li>ID Ø12.9 <math>\pm 0.15</math></li> <li>ID Ø9.7 <math>\pm 0.15</math></li> <li>ID Ø12.9 <math>\pm 0.15</math></li> <li>ID Ø9.7 <math>\pm 0.15</math></li> <li>ID Ø12.9 <math>\pm 0.15</math></li> <li>ID Ø6.5 <math>\pm 0.15</math></li> </ul>

## Branching Joint (For GMV5 Home Hydro box)

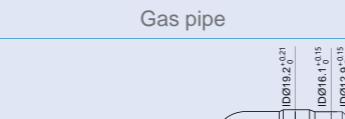
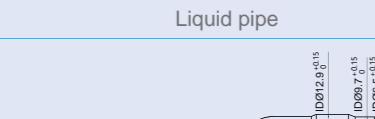
Model	Appearance	
	Gas Pipe	Liquid Pipe
FQ02W/A	 <p>Gas Pipe Dimensions:</p> <ul style="list-style-type: none"> <li>Outer Diameter: ID Ø19.2 ±0.15 mm</li> <li>Inner Diameter: ID Ø16.1 ±0.15 mm</li> <li>Flange Dimensions: Outer Diameter ID Ø22.5 ±0.2 mm, Inner Diameter ID Ø19.2 ±0.2 mm</li> </ul>	 <p>Liquid Pipe Dimensions:</p> <ul style="list-style-type: none"> <li>Outer Diameter: ID Ø19.2 ±0.15 mm</li> <li>Inner Diameter: ID Ø16.1 ±0.15 mm</li> <li>Flange Dimensions: Outer Diameter ID Ø26.5 ±0.15 mm, Inner Diameter ID Ø19.7 ±0.15 mm</li> </ul>

## Branching Joint (For GMV5 HR and GMV6 HR unit)

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			

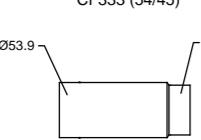
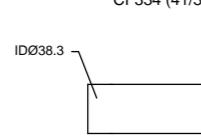
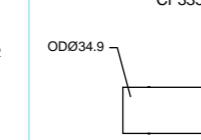
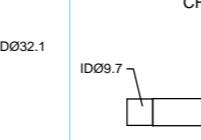
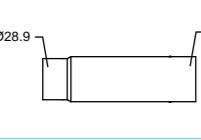
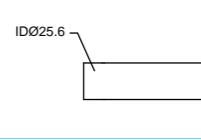
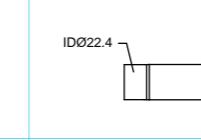
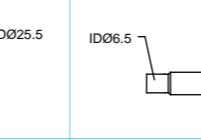
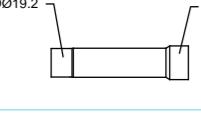
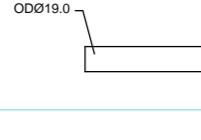
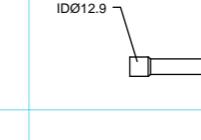
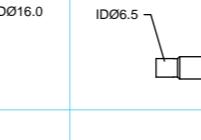
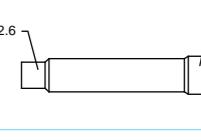
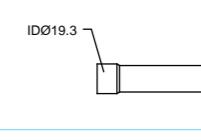
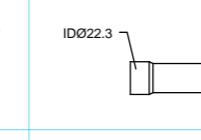
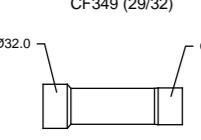
For Indoor & Mode Exchanger			
Model	Total capacity of the downstream indoor units X(Kw)	Appearance	
		Gas pipe	Liquid pipe
FQ01A/A	X≤14.2		
FQ01B/A	14.2<X≤28.0		

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					

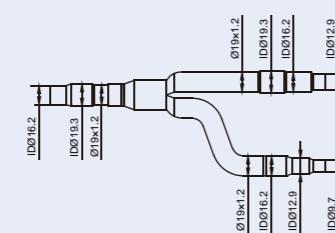
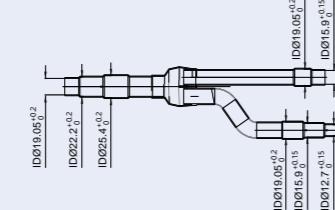
For GMV6 Mode Exchanger and Hydro Box			
Model	Capacity of the hydro box X(kW)	Appearance	
		Gas pipe	Liquid pipe
FQ01B/A	X=30	 <p>Gas pipe dimensions:</p> <ul style="list-style-type: none"> <li>ID Ø19.2 ±0.15</li> <li>OD Ø22.5 ±0.2</li> <li>ID Ø19.2 ±0.2</li> <li>ID Ø19.2 ±0.2</li> <li>ID Ø19.2 ±0.2</li> <li>ID Ø16.1 ±0.15</li> <li>ID Ø12.9 ±0.15</li> </ul>	 <p>Liquid pipe dimensions:</p> <ul style="list-style-type: none"> <li>ID Ø9.7 ±0.15</li> <li>ID Ø12.9 ±0.15</li> <li>ID Ø12.9 ±0.15</li> <li>ID Ø9.7 ±0.15</li> <li>ID Ø12.9 ±0.15</li> <li>ID Ø6.5 ±0.15</li> <li>ID Ø6.0 ±0.15</li> </ul>

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**Reducer/expander pipe dimensions**

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

**Branching Joint (For AHU KIT)**

Model	Appearance	
	Liquid pipe	Air pipe
FQ01U/A		
FQ02U/A		

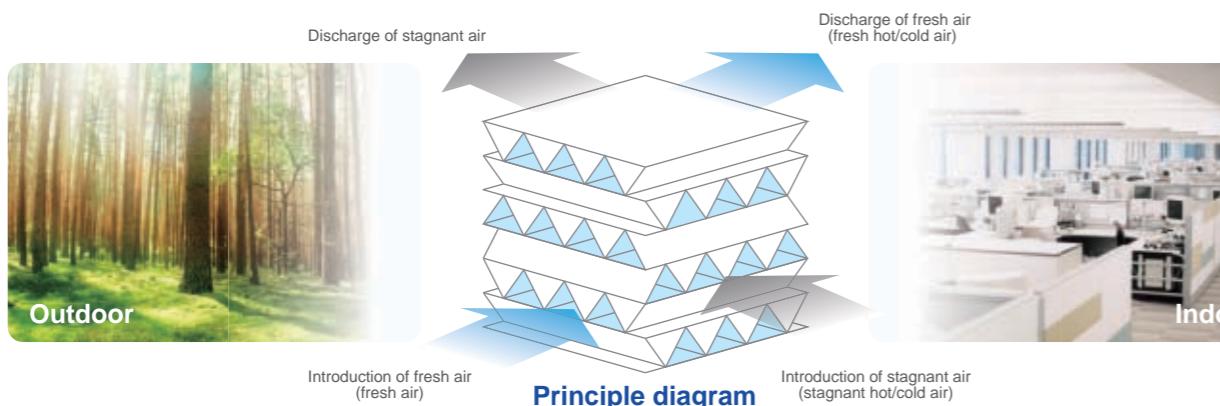
# Energy Recovery Ventilation(ERV)

Air flow: 800~3000m<sup>3</sup>/ h

Energy Recovery Ventilation System can supply fresh air freely on the condition that all the windows closed or exhausted fan uninstalled. It can solve the problem of stagnant air effectively. It is usually installed in the ceiling of corridor and supplies fresh air to each room through ducts.

## Adopt Advanced Heat Exchange Core

> ERV adopts cross flow plate exchanger with air volume below 3000m<sup>3</sup>/h. Fresh air will be supplied and internal leakage is low, which effectively prevent pollution to fresh air.



## Energy Recovery Ventilation(ERV)

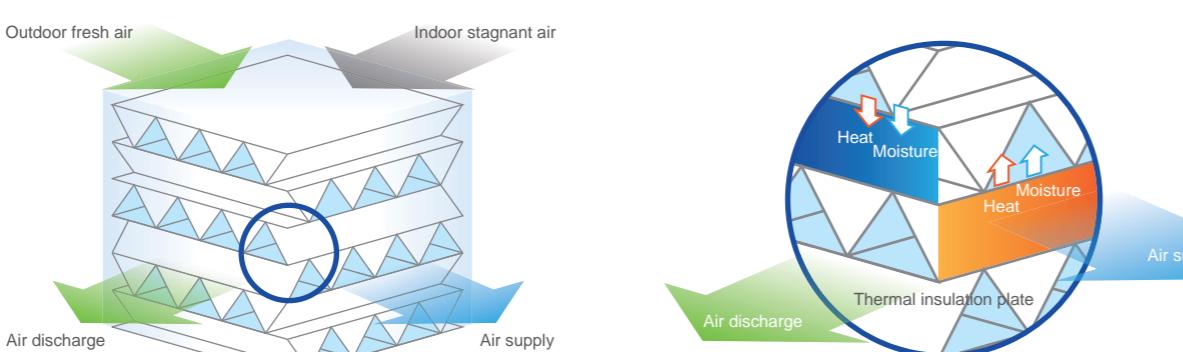
Model		FHBQ-D8-K	FHBQ-D10-K	FHBQ-D15-M	FHBQ-D20-M	FHBQ-D30-M
Air flow volume	H/M/L	m <sup>3</sup> / h	800	820	1500	1800
ESP	H/M/L	Pa	50	50	150	50
Temperature exchange efficiency	H/M/L	%	70	70	73	71
Enthalpy exchange efficiency(H/M/L)	Heating Cooling	%	63 58	63 58	65 60	62 58
Power supply	Ph/V/Hz	1/220/50	1/220/50	3/380/50	3/380/50	3/380/50
Power input	kW	0.4	0.44	0.9	1.2	2.80
Sound pressure level	dB(A)	45	46	48	50	62
Dimension (WxDxH)	Outline Package	mm mm	832x1016x380 1087x1320x400	832x1016x380 1087x1320x400	1210x1215x452 1540x1550x470	1210x1215x452 1540x1550x470
Net weight	kg	57.0	57.0	110.0	110.0	215.0
Gross weight	kg	66.5	66.5	130.0	130.0	236.0
Loading quantity	40'GP 40'HQ	unit unit	85 104	85 104	37 44	37 44
Standard wired controller		Z4E35M	Z4E35M	Z4E35M	Z4E35M	/

## Double-way Ventilation for Fresh Air

> ERV can not only introduce lots of fresh air, but also discharge the stagnant air at the same time, which effectively minimizes the toxic air from the inner and other materials. The ventilation effect is very obvious, ensuring enough supply of fresh air to the indoor space.

## No Cross Contamination for Ensuring Healthy Fresh Air

> The unique cross-flow heat exchange valve sub-assy is adopted. There is only energy exchange between indoor air and outdoor air with little exchange of air, which effectively prevents cross contamination and "air conditioning sickness".



## Pretreatment of Fresh Air for Energy-saving

> When fresh air is supplied, its temperature and humidity will be exchanged with the discharged warm air. As the fresh air is preheated and humidified, energy is saved and load of unit is reduced.

Model		FHBQ-D8-D*1	FHBQ-D10-D	FHBQ-D15-D*1	FHBQ-D20-D*1
Air flow volume	H/M/L	m <sup>3</sup> / h	800	1000	1500
ESP	H/M/L	Pa	100	50	150
Temperature exchange efficiency	H/M/L	%	70	72	73
Enthalpy exchange efficiency(H/M/L)	Heating Cooling	%	63 57	66 56	65 55
Power supply	Ph/V/Hz	1/208-230/60	1/208-230/60	3/208-230/60	3/208-230/60
Power input	kW	0.50	0.50	1.20	1.45
Sound pressure level	dB(A)	50	53	60	61
Dimension (WxDxH)	Outline Package	mm mm	832x1016x380 1087x1320x400	832x1016x380 1087x1320x400	1210x1215x452 1540x1550x470
Net weight	kg	57	57	110	110
Gross weight	kg	66.5	66.5	130	130
Loading quantity	40'GP 40'HQ	unit unit	85 104	85 104	37 44
Standard wired controller		Z4E35M	Z4E35M	Z4E35M	Z4E35M

Note:

\*1: This product only gets CB certification.

## Control System Lineup

Product series	ERV
Control system	
Wired controller	Z4E35M
Interface of the main board	BMS
Optoelectronic isolated converter	RS232-RS422485
Optoelectronic isolated signal multiplier	RS-422485

Note: ● means standard, ○ means optional.



# Energy Recovery Ventilation(ERV)

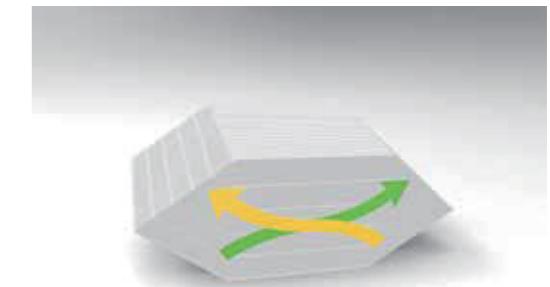


Gree Energy Recovery Ventilation System is designed especially for providing healthy and fresh indoor air, constant air volume and comfortable temperature and humidity with less power consumption. With F7-grade filter, it can effectively remove PM10, PM2.5 and other particles in the air;

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.

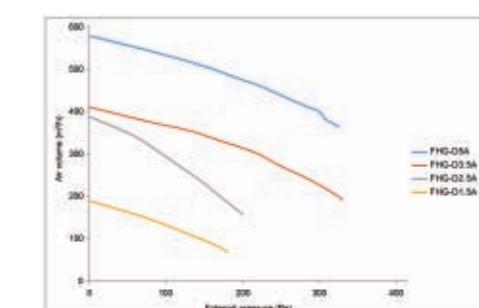
350 m <sup>3</sup> /h	High
300 m <sup>3</sup> /h	Medium high
250 m <sup>3</sup> /h	Medium
200 m <sup>3</sup> /h	Medium low
150 m <sup>3</sup> /h	Low

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

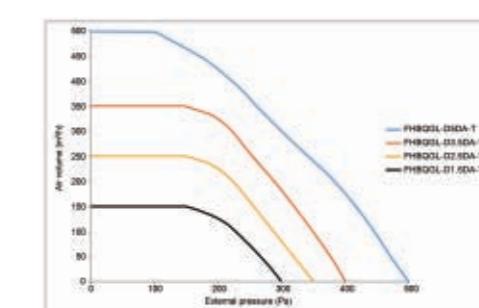


## Constant Fresh Air Volume

> 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.

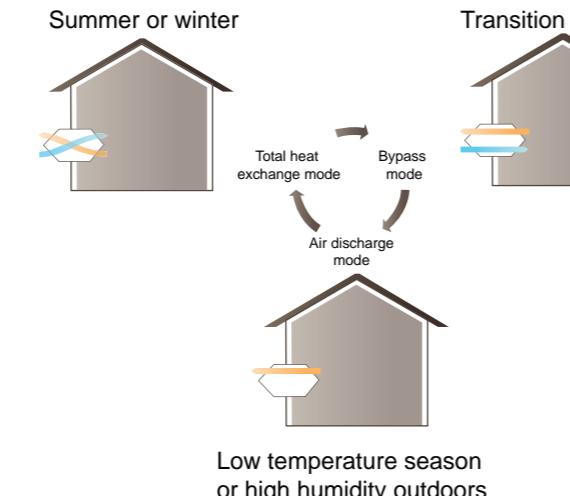


> The right diagram shows the air volume/static pressure curve of common AC motor. We can see that as the static pressure increases (filter gets more dirty), the volume of fresh air is attenuated correspondingly. As the operation goes on and on, fresh air volume may not be able to satisfy the design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



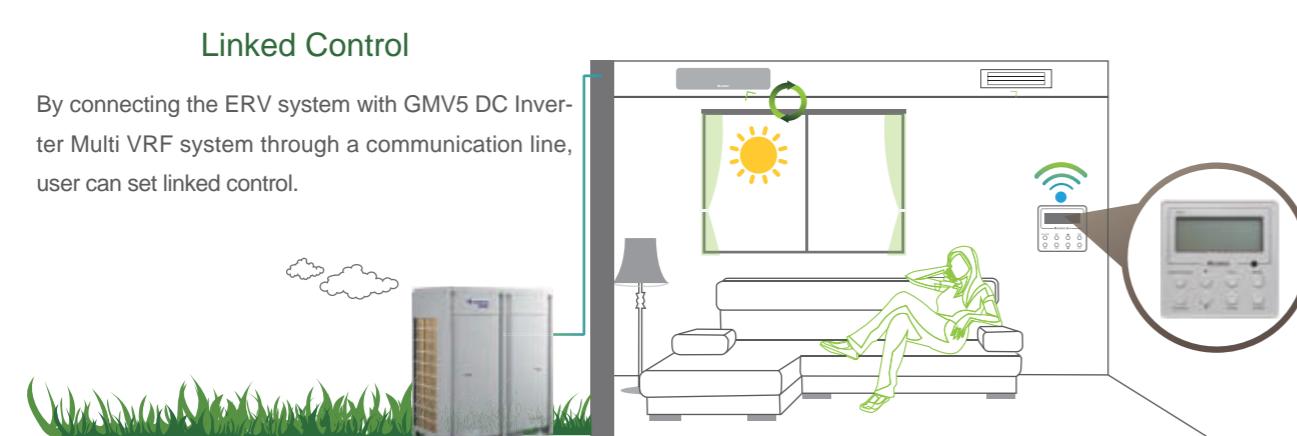
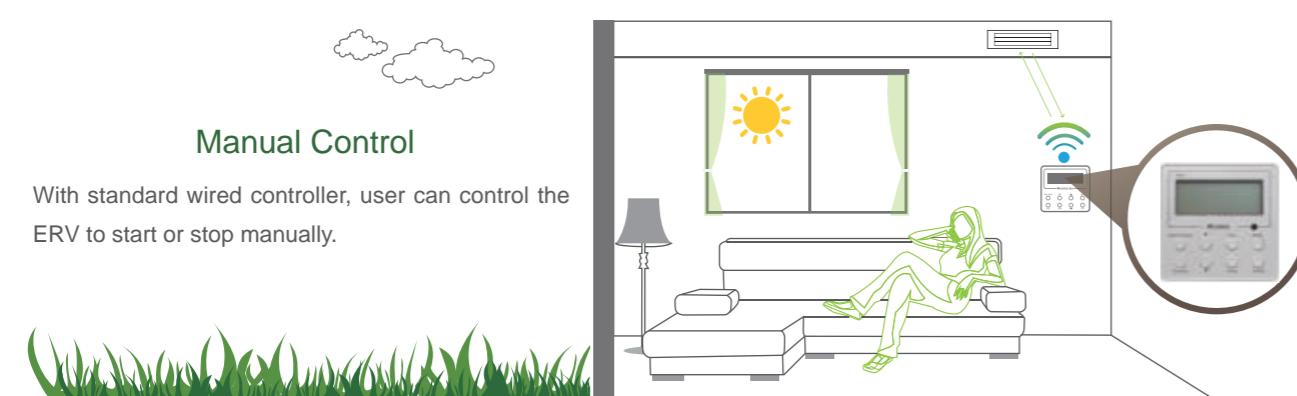
## Comfortable Temperature and Humidity

> 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.



## Auto Control

With the air quality detection box independently developed by Gree, user can set auto control.

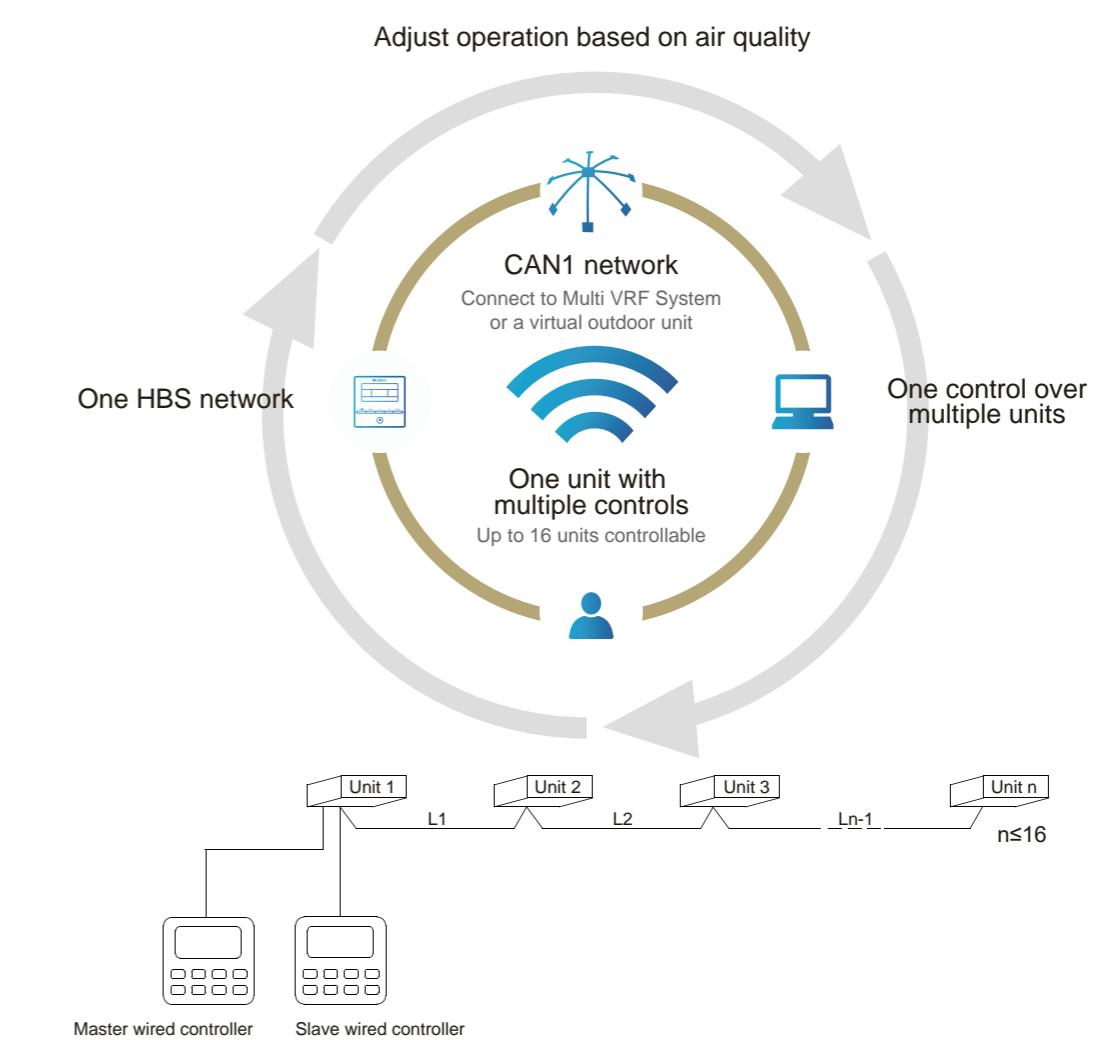
- When the air quality detection box detects that indoor air quality is bad, the ERV system will start up automatically and introduce fresh air into the room;
- When the air quality detection box detects that indoor air quality is good, the ERV system will be shut off automatically. You can enjoy fresh air at any time without manual operation.



Note on auto control function: when you use the air quality box, it can display indoor air quality grade, CO<sub>2</sub> and PM2.5 value, as well as the indoor temperature and humidity.

## "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.



## Control System Lineup

Product series		
Control system		ERV
Wired controller	XK112	
Centralized controller	CE53-24/F(C)	

Note: ● means standard, ○ means optional.

## Specifications

Model		FHBQGL-D1.5DA-S	FHBQGL-D2.5DA-S	FHBQGL-D3.5DA-S	FHBQGL-D5DA-S
Rated voltage	V	220-240	220-240	220-240	220-240
Rated frequency	Hz	50/60	50/60	50/60	50/60
Power input	kW	0.05	0.1	0.15	0.3
Current input	A	0.35	0.7	1	1.9
Indoor unit	Airflow volume		CFM	88	147
			m³/h	150	250
	ESP	Rated	Pa	100	100
	Thermal exchange efficiency		%	78	75
	Sound power level		dB(A)	39	44
	Dimension (WxDxH)	Outline	mm	1160x700x220	1160x700x220
	Package		mm	1468x873x285	1468x873x285
	Net Weight/Gross weight		kg	50/58.5	50/58.5
Ventiduct	Outer diameter		mm	160	160
Loading quantity	20'GP/40'GP/40'HQ		unit	82/172/195	82/172/195
	20'GP/40'GP/40'HQ			57/121/140	54/117/131

Model		FHBQGL-D1.5DA-T	FHBQGL-D2.5DA-T	FHBQGL-D3.5DA-T	FHBQGL-D5DA-T
Air flow volume	m³/h	150	250	350	500
ESP	Pa	100	100	100	100
Temperature exchange efficiency	%	80	75	76	73
Power supply	V/Ph/Hz	208-230/1/60 220-240/1/50	208-230/1/60 220-240/1/50	208-230/1/60 220-240/1/50	208-230/1/60 220-240/1/50
Power input	kW	0.050	0.105	0.155	0.250
Sound power level	dB(A)	43	50	55	57
Dimension (WxDxH)	Outline	mm	1160x700x220	1160x700x220	1200x785x240
	Package	mm	1468x873x285	1468x873x285	1528x973x305
Net weight/Gross weight	kg	50/58.5	50/58.5	60/70.5	71.5/82.5
Loading quantity	40GP/40HQ	unit	172/195	172/195	121/140
SEC class	-	A	B	-	-



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## ERV+DX COIL

**INVERTER** **R410A**

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



» High-efficiency HR module: They are built with heat exchange chips for efficient energy recovery on the air discharge side. When they are in use, other air conditioning equipment will consume less power.

» Constant air volume: Units adopt constant air volume control technology so that they can maintain constant air volume within a specific range of pipeline resistance.

» Free cooling: When outdoor temperature is lower than the set temperature, units can automatically introduce the fresh outdoor air to make the room cooler.

» Multiple air supply modes: Positive pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor positive pressure, which will help guarantee room cleanliness; Negative pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor negative pressure, which will help prevent leakage of indoor pollutants. Balanced air supply: The fresh air side and air discharge side can be set with the same air flow volume (default).

» Linked control: Units can be connected to other indoor units in the same CAN and HBS networks for linked control.

» Cooling and heating functions: With fan coils, they have cooling and heating functions like common air conditioners.

» Multiple operation modes: Total heat exchange mode: The fresh air side and air discharge side can have heat exchange for efficient energy recovery. By-pass mode: Ventilation without heat exchange. Air discharge mode: Only air discharge side is turned on for ventilation.

## 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(A)	55		59	
	Dimension (WxDxH)	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		set	20/44/44		16/32/32	
Standard wired controller				XE70-33/H			





# AIR TO WATER

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Versati III (Split Type)

Versati III (All in One)

Versati III (Monobloc Type)

Versati II

Versati II + (Split Type)

Integral Type Water Heater

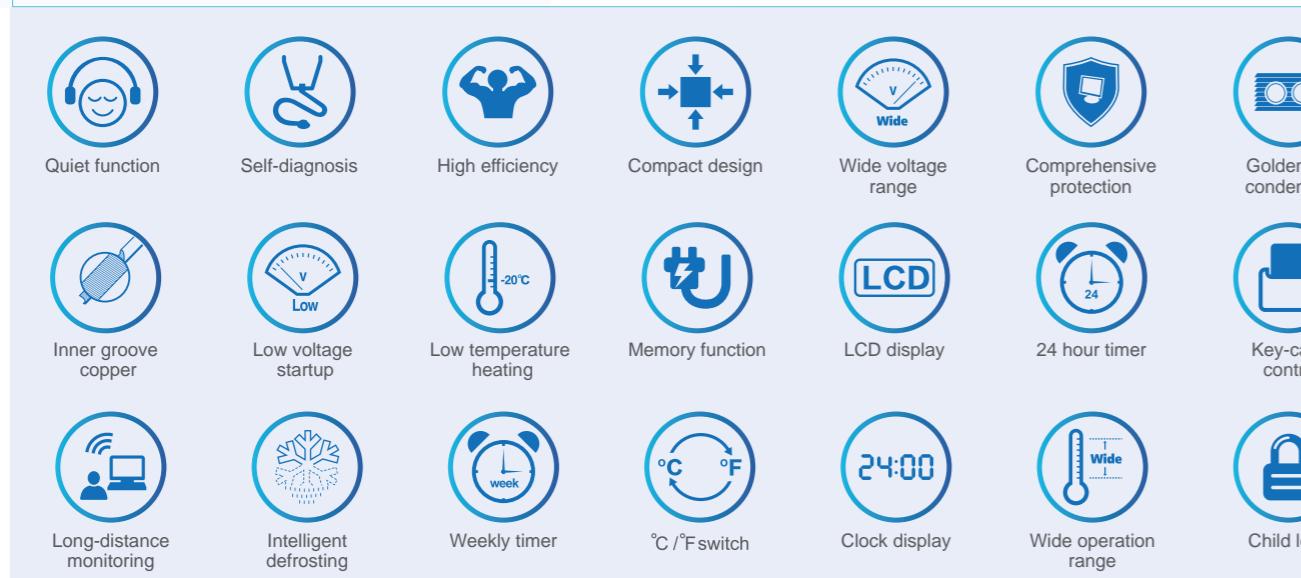
Split Type Water Heater

Direct & Circulating Air  
Source Heat Pump Water  
Heater

## Versati III (Split Type)

R 32

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, 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.

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> Heating <sup>*4</sup>	kW kW	3.8 4	5.8 6	7 8
Power input <sup>*1</sup>	Cooling <sup>*3</sup> Heating <sup>*4</sup>	kW kW	0.82 0.78	1.32 1.2	1.75 1.7
EER/COP <sup>*1</sup>	W/W	4.63/5.13	4.4/5.00	4.0/4.71	3.79/4.59
Capacity <sup>*2</sup>	Cooling <sup>*5</sup> Heating <sup>*6</sup>	kW kW	3.15 4	4.09 5.9	5.3 8
Power input <sup>*2</sup>	Cooling <sup>*5</sup> Heating <sup>*6</sup>	kW kW	0.92 1.02	1.28 1.51	1.73 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	1	1.6	1.6
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling Heating	dB(A) dB(A)	52 52	55 55	55 55
Connecting pipe	Gas Liquid	mm mm	12.7 6.35	12.7 6.35	12.7 6.35
Dimensions (WxDxH)	Outline Packaged	mm mm	975x396x702 1028x458x830	975x396x702 1028x458x830	982x427x787 1097x478x937
Net weight/Gross weight	kg	55/65	55/65	82/92	82/92
Loading quantity	40'GP 40'HQ	unit	114 171	96 96	96 96

Notes:

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.



## Versati III ( All in One)

INVERTER R32

Model		GRS-CQ4.0Pd/NhH-E(I)	GRS-CQ6.0Pd/NhH-E(I)	GRS-CQ8.0Pd/NhH-E(I)	GRS-CQ10Pd/NhH-E(I)
Power supply	V/Ph/Hz	230V ~50Hz	230V ~50Hz	230V ~50Hz	230V ~50Hz
Nominal input	W	100	100	100	100
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	-	Inverter	Inverter	Inverter
	Nr. of speed	-	10	10	10
	Power input	W	75	75	75
	Water flow limit	LPM	12	12	12
Electric heater	Operation	-	Automatic	Automatic	Automatic
	Steps	-	2	2	2
	Capacity	kW	3	3	6
	Combination	kW	1.5+1.5	1.5+1.5	3+3
Sound pressure level	Power input	V/Ph/Hz	230V ~50Hz	230V ~50Hz	230V ~50Hz
		dB(A)	29	29	29
Connecting pipe	Gas	mm	12.7	12.7	12.7
	Liquid	mm	6.35	6.35	6.35
Dimensions(WxDxH)	Outline	mm	860x460x318	860x460x318	860x460x318
	Packaged	mm	1133x568x390	1133x568x390	1133x568x390
Net weight/Gross weight	kg	62/71	62/71	62/71	62/71
Loading quantity	40'GP	unit	240	240	240
	40'HQ	unit	240	240	240

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.

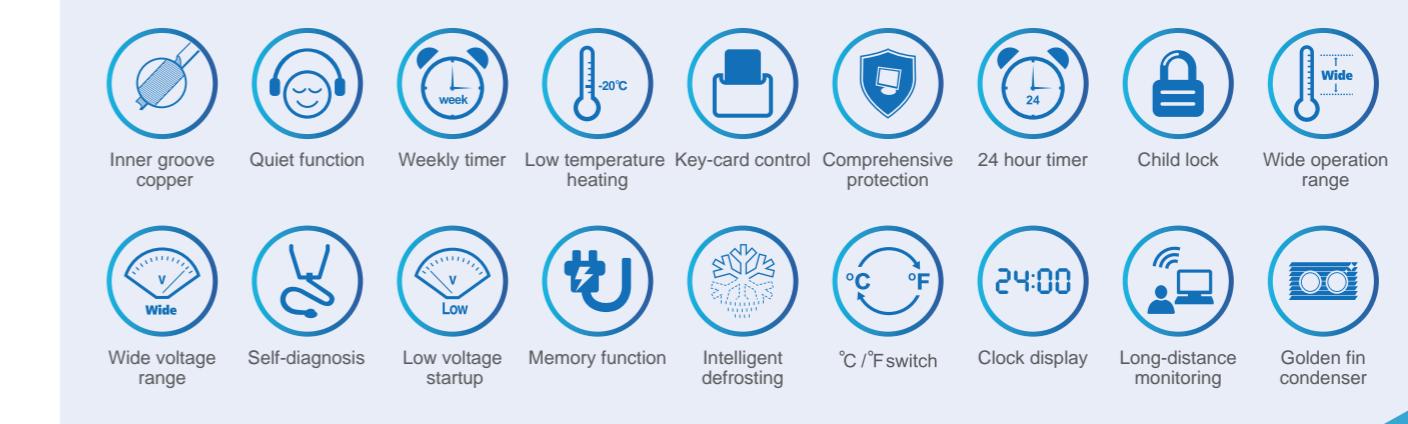
- » Heating conditions.  
Outdoor air temperature 7°C DB/6°C WB.  
Entering water temperature 30°C.  
Leaving water temperature 35°C.  
Standing piping length 5m.

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, 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.



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	3.8	5.8	7
	Heating* <sup>4</sup>	kW	4	6	8
Power input* <sup>1</sup>	Cooling* <sup>3</sup>	kW	0.82	1.32	1.75
	Heating* <sup>4</sup>	kW	0.78	1.2	1.7
EER/COP* <sup>1</sup>	W/W	4.63/5.13	4.4/5.00	4.0/4.71	3.79/4.59
Capacity* <sup>2</sup>	Cooling* <sup>5</sup>	kW	3.15	4.09	5.3
	Heating* <sup>6</sup>	kW	4	5.9	8
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	1	1.6	1.6
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	52	52	55
	Heating	dB(A)	52	52	55
Connecting pipe	Gas	inch(mm)	12.7	12.7	12.7
	Liquid	inch(mm)	6.35	6.35	6.35
Dimensions (WxDxH)	Outline	mm	975x396x702	975x396x702	982x427x787
	Packaged	mm	1028x458x830	1028x458x830	1097x478x937
Net weight/Gross weight	kg	55/65	55/65	82/92	82/92
Loading quantity	40'GP	unit	114	114	96
	40'HQ	unit	171	171	96

Notes:

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.

Model		GRS-CQ4.0PdG/NhH-E(I)	GRS-CQ6.0PdG/NhH-E(I)	GRS-CQ8.0PdG/NhH-E(I)	GRS-CQ10PdG/NhH-E(I)
Power supply	V/Ph/Hz	230V ~50Hz	230V ~50Hz	230V ~50Hz	230V ~50Hz
Nominal input	W	100	100	100	100
	°C	18	18	18	18
	°C	7	7	7	7
	°C	35	35	35	35
Leaving water temperature	°C	45	45	45	45
	L	185	185	185	185
	kW	3	3	3	3
	Type	Inverter	Inverter	Inverter	Inverter
Pump	Nr. of speed	-	10	10	10
	Power input	W	75	75	75
	Water flow limit	LPM	12	12	12
	Operation	-	Automatic	Automatic	Automatic
Electric heater	Steps	-	2	2	2
	Capacity	kW	3	3	6
	Combination	kW	1.5+1.5	1.5+1.5	3+3
	Power input	V/Ph/Hz	230V ~50Hz	230V ~50Hz	230V ~50Hz
Sound pressure level	dB(A)	29	29	29	29
	Gas	mm	12.7	12.7	12.7
	Liquid	mm	6.35	6.35	6.35
	inch	G1	G1	G1	G1
DHW pipe	Outline	mm	600x600x1756	600x600x1756	600x600x1756
	Packaged	mm	803x683x2000	803x683x2000	803x683x2000
Net weight/Gross weight	kg	210/233	210/233	210/233	210/233
Loading quantity	40'GP	unit	48	48	48
	40'HQ	unit	48	48	48

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.

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.



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## Versati III (Monobloc Type)

INVERTER R32

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, 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	-15~48
Heating	20~60	-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.

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	220-240V ~ 50Hz
Capacity <sup>*1</sup>	Cooling <sup>3</sup>	kW	3.8	5.8	6.8	8.8	11
	Heating <sup>4</sup>	kW	4	6	7.5	10	12
Power input <sup>*1</sup>	Cooling <sup>3</sup>	kW	0.82	1.32	1.58	1.96	2.56
	Heating <sup>4</sup>	kW	0.78	1.2	1.63	2.17	2.64
EER/COP <sup>*1</sup>	W/W	4.63/5.1	4.7/5.0	4.3/4.6	4.5/4.6	4.3/4.55	4.1/4.35
Capacity <sup>*2</sup>	Cooling <sup>5</sup>	kW	3	4	5	7.8	9.5
	Heating <sup>6</sup>	kW	4	6	7.5	10	12
Power input <sup>*2</sup>	Cooling <sup>5</sup>	kW	0.94	1.29	1.56	2.48	3.11
	Heating <sup>6</sup>	kW	0.98	1.56	2	2.7	3.33
EER/COP <sup>*2</sup>	W/W	3.2/4.0	3.10/3.80	3.1/3.75	3.15/3.7	3.05/3.6	2.9/3.55
Refrigerant charge volume	kg	0.87	0.87	0.87	2.2	2.2	2.2
Sanitary water temperature	°C	40~80	40~80	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	51	52	53	56	57
	Heating	dB(A)	50	50	51	54	55
Connecting pipe	Gas	inch(mm)	/	/	/	/	/
	Liquid	inch(mm)	/	/	/	/	/
Dimensions (WxDxH)	Outline	mm	1150x345x758	1150x345x758	1150x345x758	1200x460x878	1200x460x878
	Packaged	mm	1255x485x890	1255x485x890	1255x485x890	1290x586x1010	1290x586x1010
Net weight/Gross weight	kg	96/109	96/109	96/109	151/166	151/166	151/166
Loading quantity	40'GP	unit	84	84	84	58	58
	40'HQ	unit	84	84	84	58	58

Model		GRS-CQ16Pd/NhG-M	GRS-CQ10Pd/NhG-M	GRS-CQ12Pd/NhG-M	GRS-CQ14Pd/NhG-M	GRS-CQ16Pd/NhG-M
Power supply	V/Ph/Hz	220-240V ~ 50Hz	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	14.5	8.8	11	12.5
	Heating <sup>4</sup>	kW	15.5	10	12	14
Power input <sup>*1</sup>	Cooling <sup>3</sup>	kW	3.82	1.96	2.56	3.05
	Heating <sup>4</sup>	kW	3.6	2.17	2.64	3.22
EER/COP <sup>*1</sup>	W/W	3.8/4.3	4.5/4.6	4.3/4.55	4.1/4.35	3.8/4.3
Capacity <sup>*2</sup>	Cooling <sup>5</sup>	kW	13	7.8	9.5	12
	Heating <sup>6</sup>	kW	15.5	10	12	14
Power input <sup>*2</sup>	Cooling <sup>5</sup>	kW	4.73	2.48	3.11	4.14
	Heating <sup>6</sup>	kW	4.56	2.7	3.33	3.94
EER/COP <sup>*2</sup>	W/W	2.75/3.4	3.15/3.7	3.05/3.6	2.9/3.55	2.75/3.4
Refrigerant charge volume	kg	2.2	2.2	2.2	2.2	2.2
Sanitary water temperature	°C	40~80	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	59	56	56	57
	Heating	dB(A)	57	54	54	55
Connecting pipe	Gas	inch(mm)	/	/	/	/
	Liquid	inch(mm)	/	/	/	/
Dimensions (WxDxH)	Outline	mm	1200x460x878	1200x460x878	1200x460x878	1200x460x878
	Packaged	mm	1290x586x1010	1290x586x1010	1290x586x1010	1290x586x1010
Net weight/Gross weight	kg	151/166	151/166	151/166	151/166	151/166
Loading quantity	40'GP	unit	58	58	58	58
	40'HQ	unit	58	58	58	58

Notes:

1.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 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:

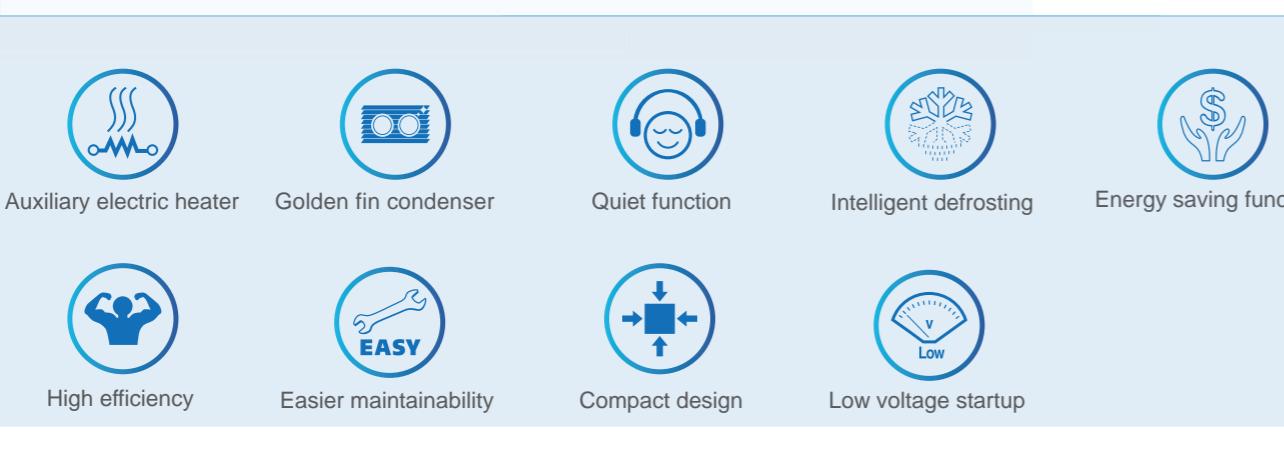
- » Cooling conditions.  
Outdoor air temperature 35°C DB/- WB.  
Entering water temperature 12°C.  
Leaving water temperature 7°C.

- » 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.

## Versati II

**INVERTER R410A**

Versati II water heater can perform cooling, heating, water heating, cooling+water heating, and heating+water heating. It can be connected to radiator, floor or fan coil for heat radiation.



》 This unit is very powerful, smart and user-friendly, featuring various functions including holiday mode, absence mode, quiet mode, quiet preset, clock timer, weekly timer, holiday exclusion, floor setting, environment dependency mode, etc. .

》 Cooling performance satisfies EU ERP energy efficiency, with a rating up to A++. Motor and water pump elements conform to the requirements set out by the EU Eco Directive.

》 It can perform cooling, heating, water heating, cooling+water heating, and heating+water heating, and can be connected to radiator, floor or fan coil for heat radiation.



Item	Water side	Heat source/User side
	Leaving water temperature(°C)	Dry bulb temperature (°C)
Cooling	7~25	10~48
Heating	25~55	-20~35
Water heating	40~80(Water tank temperature)	-20~45

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

## Outdoor Unit

Model		GRS-CQ8.0Pd/NaE-K(O)	GRS-CQ10Pd/NaE-K(O)	GRS-CQ12Pd/NaE-K(O)	GRS-CQ14Pd/NaE-K(O)
Power supply	V/Ph/Hz	220-240~50	220-240~50	220-240~50	220-240~50
Capacity <sup>*1</sup>	Cooling kW	7.8	8.2	12.5	13.5
	Heating kW	8	10	12	14
Power input <sup>*1</sup>	Cooling kW	2	2.1	3	3.4
	Heating kW	1.8	2.3	2.8	3.3
EER/COP <sup>*1</sup>	W/W	4.0/4.5	3.9/4.4	4.2/4.3	4.0/4.2
Capacity <sup>*2</sup>	Cooling kW	6.3	7.2	8.5	9
	Heating kW	7.6	9.5	11.5	12.5
Power input <sup>*2</sup>	Cooling kW	2.3	2.8	2.8	3
	Heating kW	2.2	2.9	3.4	3.8
EER/COP <sup>*2</sup>	W/W	2.7/3.4	2.6/3.3	3.1/3.4	3/3.3
Refrigerant charge volume	kg	2.3	2.3	3.6	3.6
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling dB(A)	56	56	58	58
	Heating dB(A)	56	56	58	58
Connecting pipe	Gas inch(mm)	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Liquid inch(mm)	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension	Outline mm	980x360x787	980x360x787	900x340x1350	900x340x1350
	Package mm	1097x478x940	1097x478x940	993x453x1500	993x453x1500
Net weight/Gross weight	kg	80/89	80/89	107/117	107/117
Loading quantity	40'GP set	96	96	50	50
	40'HQ set	96	96	50	50

Model		GRS-CQ16Pd/NaE-K(O)	GRS-CQ12Pd/NaE-M(O)	GRS-CQ14Pd/NaE-M(O)	GRS-CQ16Pd/NaE-M(O)
Power supply	V/Ph/Hz	220-240~50	380-415 3N~50	380-415 3N~50	380-415 3N~50
Capacity <sup>*1</sup>	Cooling kW	14.5	13.5	14.5	15
	Heating kW	15.5	12	14	15.5
Power input <sup>*1</sup>	Cooling kW	3.8	3.55	4.03	3.82
	Heating kW	3.75	2.86	3.41	4.23
EER/COP <sup>*1</sup>	W/W	3.2/4.1	3.8/4.2	3.6/4.1	3.55/4.05
Capacity <sup>*2</sup>	Cooling kW	9.7	10	10.5	11
	Heating kW	14.5	11.5	13	14
Power input <sup>*2</sup>	Cooling kW	3.3	3.33	3.62	3.86
	Heating kW	4.5	3.48	3.94	4.38
EER/COP <sup>*2</sup>	W/W	2.9/3.2	3.0/3.3	2.9/3.3	2.85/3.2
Refrigerant charge volume	kg	3.6	3.6	3.6	3.6
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling dB(A)	58	57	57	57
	Heating dB(A)	58	57	57	57
Connecting pipe	Gas inch(mm)	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Liquid inch(mm)	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension	Outline mm	900x340x1350	900x340x1350	900x340x1350	900x340x1350
	Package mm	993x453x1500	993x453x1500	993x453x1500	993x453x1500
Net weight/Gross weight	kg	107/117	114/124	114/124	114/124
Loading quantity	40'GP set	50	50	50	50
	40'HQ set	50	50	50	50

### Notes:

- 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.
- Capacities and power inputs are based on the following conditions:
  - Cooling conditions.
  - Indoor water temperature 23°C/18°C.
  - Outdoor air temperature 35°C DB/24°C WB.
  - Heating conditions.
  - Indoor water temperature 30°C/35°C.
  - Outdoor air temperature 7°C DB/6°C WB.
  - Standing piping length 5m.
- Capacities and power inputs are based on the following conditions:
  - Cooling conditions.
  - Indoor water temperature 12°C/7°C.
  - Outdoor air temperature 35°C DB/24°C WB.
  - Heating conditions.
  - Indoor water temperature 40°C/45°C.
  - Outdoor air temperature 7°C DB/6°C WB.
  - Standing piping length 5m.

## Indoor Hydro Unit

Model	Indoor unit	GRS-CQ8.0Pd/NaE-K(I)	GRS-CQ10Pd/NaE-K(I)	GRS-CQ12Pd/NaE-K(I)
Power supply	V/Ph/Hz	220-240-50	220-240-50	220-240-50
Nominal input	W	6100	6100	6100
Leaving water temperature	Cooling <sup>1</sup>	C 18	C 18	C 18
	Cooling <sup>2</sup>	C 7	C 7	C 7
	Heating <sup>3</sup>	C 35	C 35	C 35
	Heating <sup>4</sup>	C 45	C 45	C 45
Pump	Type	-	Water-cooled	
	Nr. of speed	-	Variable-speed	
	Power input	W	4-75	4-75
	Water flow limit	LPM		12
Electric heater	Operation	-	Automatic	
	Steps	-	2	2
	Capacity	kW	6	6
	Combination	kW	3+3	
	Power input	V/Ph/Hz	220-240-50	220-240-50
Sound pressure level	dB(A)	31	31	31
Connecting pipe	Gas	inch(mm)	Φ15.9	Φ15.9
	Liquid	inch(mm)	Φ9.52	Φ9.52
Dimension	Outline	mm	900x500x323	900x500x323
(WxDxH)	Package	mm	1083x603x395	1083x603x395
Net weight/Gross weight	kg	56/65	56/65	57/66
Loading quantity	40'GP	set	205	205
	40'HQ	set	246	246

## Water Tank

Model	SXTVD300LCJ2/A-K
Water tank volume	L 300
Power supply	V/Ph/Hz 230V~50Hz
Electric heater power	W 3000
Screw thread spec of pipe	
Cool water inlet	inch(mm) Φ3/4"Female BSP(19.05)
Hot water outlet	inch(mm) Φ3/4"Female BSP(19.05)
Dimension	
Outline	DiameterxH mm Φ620x1710
Package	WxDxH mm 870x738x1843
Net weight/Gross weight	kg 135/163
Loading quantity	set 38/57

Model	Indoor unit	GRS-CQ14Pd/NaE-K(I)	GRS-CQ16Pd/NaE-K(I)	GRS-CQ12Pd/NaE-M(I)	GRS-CQ14Pd/NaE-M(I)	GRS-CQ16Pd/NaE-M(I)
Power supply	V/Ph/Hz	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
Nominal input	W	6100	6100	6100	6100	6100
Leaving water temperature	Cooling <sup>1</sup>	C 18				
	Cooling <sup>2</sup>	C 7	C 7	C 7	C 7	C 7
	Heating <sup>3</sup>	C 35				
	Heating <sup>4</sup>	C 45				
Pump	Type	-	Water-cooled			
	Nr. of speed	-	Variable-speed			
	Power input	W	4-75	4-75	4-75	4-75
	Water flow limit	LPM		12		
Electric heater	Operation	-	Yes	Yes	Yes	Yes
	Steps	-	2	2	1	1
	Capacity	kW	6	6	6	6
	Combination	kW	3+3	3+3	6	6
	Power input	V/Ph/Hz	220-240-50	220-240-50	380V-415V 3N~50Hz	380V-415V 3N~50Hz
Sound pressure level	dB(A)	31	31	31	31	31
Connecting pipe	Gas	inch(mm)	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Liquid	inch(mm)	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension	Outline	mm	900x500x323	900x500x323	900x500x323	900x500x323
(WxDxH)	Package	mm	1083x603x395	1083x603x395	1083x603x395	1083x603x395
Net weight/Gross weight	kg	57/66	57/66	58/67	58/67	58/67
Loading quantity	40'GP	set	205	205	205	205
	40'HQ	set	246	246	246	246

Note: \*1 for floor cooling; \*2 for fan coil cooling; \*3 for floor heating; \*4 for fan coil heating.



## VERSATI II + (Split Type)

R410A

It is a kind of DC inverter multifunctional air to water heat pumps that could not only supply domestic hot water, but also realize cooling or heating for residential use.



- Floor heating debugging
- High efficiency
- Quiet function
- Self-diagnosis
- Wide voltage range
- Comprehensive protection
- Compact design

- » Twin rotary DC inverter compressor creates comfortable living circumstance and saves energy.
- » The electronic expansion valve guarantees that the system adjusts automatically according to the changes of the circumstance and water temperature.
- » Smart dual-temperature detection control technology.
- » The disinfection function at a high temperature up to 70°C can prevent the growth of bacteria and ensure sanitary water, creating a wholesome life for users.
- » Isolation of water and electricity ensures safe operation.
- » Dual-coil design makes it convenient to join solar panel or boiler.
- » Five-mode operation: heating, cooling, water heating, heating and water heating, cooling and water heating.
- » The unit will periodically increase or decrease water temperature in debugging process, to improve floor adaptability for temperature change.

Item	Water Side		Heat Source/User Side	
	Leaving Water Temperature(°C)		Dry bulb temperature (°C)	
Cooling	7~25		10~48	
Heating	25~60		-20~35	
Water Heating	40~80(Water Tank Temperature)		-20~45	

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

### Outdoor Unit

Model	GRS-CQ8.0Pd/NaD-K(O)	GRS-CQ10Pd/NaD-K(O)	GRS-CQ12Pd/NaD-M(O)	GRS-CQ14Pd/NaD-M(O)
Power supply	V/Ph/Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	380-415V 3N~ 50Hz
Capacity <sup>*1</sup>	Cooling kW Heating kW	8.2 8	9.7 9.2	13.5 12
Power input <sup>*1</sup>	Cooling kW Heating kW	1.86 1.85	2.46 2.19	3.46 2.67
EER/COP <sup>*1</sup>	W/W	4.41/4.32	3.94/4.20	3.90/4.49
Capacity <sup>*2</sup>	Cooling kW Heating kW	5.5 7.7	6.9 9	9.6 12
Power input <sup>*2</sup>	Cooling kW Heating kW	1.85 2.26	2.34 2.65	3.02 3.24
EER/COP <sup>*2</sup>	W/W	2.97/3.41	2.95/3.40	3.18/3.70
Refrigerant charge volume	kg	3.5	3.5	5.3
Sanitary water temperature	°C	40~80	40~80	40~80
Sound pressure level	Cooling dB(A) Heating dB(A)	53 54	53 54	57 57
Connecting pipe	Gas inch(mm) Liquid inch(mm)	Φ5/8(15.9) Φ3/8(9.52)	Φ5/8(15.9) Φ3/8(9.52)	Φ5/8(15.9) Φ3/8(9.52)
Dimension	Outline mm Package mm	980x360x787 1093x473x865	980x360x787 1093x473x865	900x340x1350 993x453x1500
Net weight/Gross weight	kg	85/87	85/87	126/136
Loading quantity	40'GP set 40'HQ set	96	96	50

#### Notes:

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

- » Cooling conditions.
- » Indoor Water Temperature 23°C/18°C.
- » Outdoor Air Temperature 35°CDB/24°CWB.
- » Heating conditions.
- » Indoor Water Temperature 30°C/35°C.
- » Outdoor Air Temperature 7°CDB/6°CWB.
- » Standing piping length 7.5m.

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

- » Cooling conditions.
- » Indoor Water Temperature 12°C/7°C.
- » Outdoor Air Temperature 35°CDB/24°CWB.
- » Heating conditions.
- » Indoor Water Temperature 40°C/45°C.
- » Outdoor Air Temperature 7°CDB/6°CWB.
- » Standing piping length 7.5m.



## Indoor Hydro Unit

Model	Indoor unit	GRS-CQ8.0Pd/NaD-K(I)	GRS-CQ10Pd/NaD-K(I)	GRS-CQ12Pd/NaD-M(I)	GRS-CQ14Pd/NaD-M(I)
Power supply	V/Ph/Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	380-415V 3N~ 50Hz	380-415V 3N~ 50Hz
Nominal input	W	6200	6200	6200	6200
Leaving water temperature	Cooling* <sup>1</sup>	18	18	18	18
	Cooling* <sup>2</sup>	7	7	7	7
	Heating* <sup>1</sup>	35	35	35	35
	Heating* <sup>2</sup>	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	105	105	105
	Water flow limit	LPM	12	12	12
Electric heater	Operation	- Automatic	Automatic	Automatic	Automatic
	Steps	- 2	2	1	1
	Capacity	kW	3	3	6
	Combination	kW	3+3	3+3	6
Sound pressure level	Power input	Ph/V/Hz	230/1/50	230/1/50	400/3/50
	dB(A)		31	31	31
	Connecting pipe	Gas inch(mm)	Φ5/8(15.9)	Φ5/8(15.9)	Φ5/8(15.9)
	Liquid inch(mm)		Φ3/8(9.52)	Φ3/8(9.52)	Φ3/8(9.52)
Dimension (WxDxH)	Outline	mm	922x500x323	922x500x323	922x500x323
	Package	mm	1083x603x395	1083x603x395	1083x603x395
Net weight/Gross weight	kg	56/65	56/65	58/67	58/67
Loading quantity	40'GP	-	205	205	205
40'HQ	-	246	246	246	246

## Water Tank

Model			SXTVD300LCJ2/A-K	
Water tank volume		L	300	
Power supply		V/Ph/Hz	230V~50Hz	
Electric heater power		W	3000	
Screw thread spec of pipe		Cool water inlet	inch(mm)	Φ3/4"Female BSP(19.05)
		Hot water outlet	inch(mm)	Φ3/4"Female BSP(19.05)
Dimension	Outline	DiameterxH	mm	Φ620x1710
	Package	WxDxH	mm	870x738x1843
Net weight/Gross weight		kg	135/163	
Loading quantity		set	38/57	

## Integral Type Water Heater

Energy Efficiency Class A  
R134a

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 residential use.



Controller ZF5201



### » 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 is convenient because of its no refrigeration system.

### » Easy operation

Water temperature can be set. Water supply can be on or off depending on water temperature and water consumption, so that hot water can be supplied at any time. 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 platenkurtosis 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, overcast and rainy days.



## Integral Heat Pump Water Heater

Model		GRS-1.5/TD150ANbA-K	GRS-1.5/TD200ANbA-K
Capacity <sup>1</sup>	kW	1.5	1.5
Power input <sup>1</sup>	kW	0.429	0.429
COP DHW <sup>2</sup>	W/W	2.47	2.24
Refrigerant	-	R134a	R134a
Refrigerant charge volume	kg	0.8	0.8
Refrigerant design pressure	Mpa	2.8	2.8
Tank design pressure	Mpa	0.8	0.8
Running ambient temp.	°C	0-45	0-45
Outwater temp.	°C	35-70	35-70
Sound power level(heating) <sup>3</sup>	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 0.59
Dimension (WxDxH)	outline Package	mm mm	621x561x1760 731x717x2110
Net weight/Gross weight	kg	92/112	102.5/122.5
Loading quantity	40'GP/40'HQ	set	48/48

Notes:

- (1) Value obtained with the following conditions: Outdoor temperature: 20°C DB/15°C WB; 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, (EU) No 814/2013.  
 (3) Value obtained as per EN 12102-2008.

## 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 plakyurtosis 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, overcast and 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*
Water Heating Energy Efficiency <sup>2</sup>	-	130%
Maximum Input Power	W	2000+1500W(Electric Heater)
Outlet Water Temperature	°C	Default: 55°C, 35°C-55°C
Power Supply	-	220V-240V ~50Hz
Insulation Level	-	I
Protection of Ingression	-	IPX4
Refrigerant	Name	R410A
Charge	kg	1.4
Outline Dimension	WxDxH	842x320x591
Package Dimension	WxDxH	948x363x660
Gross/Net Weight	kg	44.5/38.5
Sound Power Level <sup>3</sup>	dB(A)	63
Operating Range	°C	-25-45°C

Note: (1) Value obtained with the following conditions: Outdoor temperature: 20°C DB/15°C WB; 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, (EU) No 814/2013.

(3) Value obtained as per EN 12102-2008.

## Water Tank

Model		SXTD200LCJW/A-K
Capacity	L	185
Power Supply for Electric Heater	-	220V-240V~50Hz
Input Power for Electric Heater	W	1500
Outline Dimension (W x D x H)	mm	462x462x2000
Package Dimension (W x D x H)	mm	583x565x2108
Water Tank Gross/Net Weight	kg	83/72.5
Outer Size of Connection Pipe	mm	Φ6, Φ9.52

Note: The water tank of SXTD200LCJW/A-K is with enamel interior.

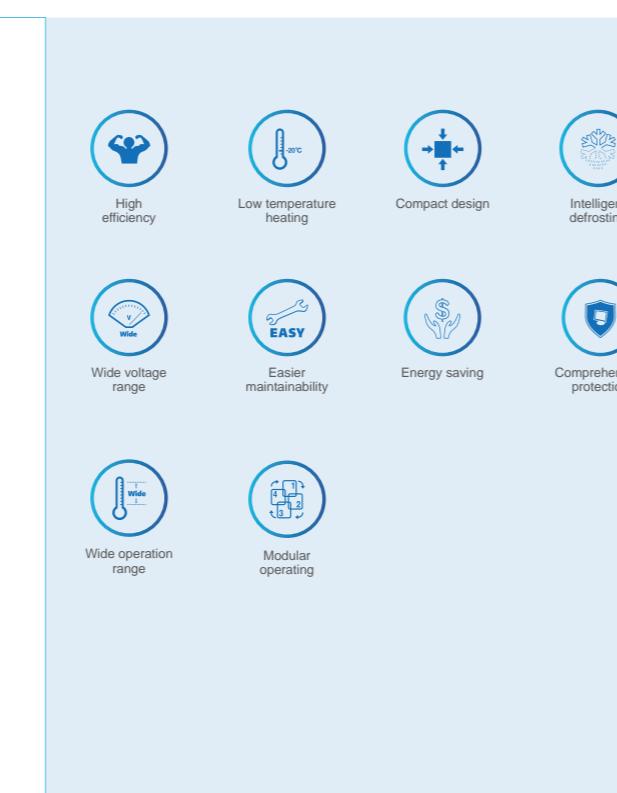
# Direct & Circulating Air Source Heat Pump Water Heater

R410A

It is a kind of heat pump water heater that could supply commercial hot water, which is applicable for operation in ambient temperature from -26°C to 46°C.



Wired controller Z26301K

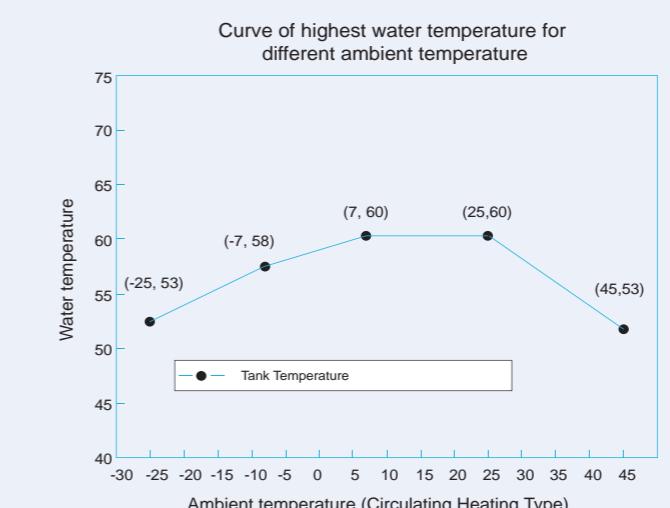


## Circulating Heating Type

Model	GRS-Cm28/NaA-M	GRS-Cm36/NaA-M	GRS-Cm53/NaA-M
Rated water heating capacity	kW	28	36
Rated water supply	l/h	602	775
COP	W/W	3.83	3.87
Tank water temperature range	°C	30~60	30~60
Power supply	Ph/V/Hz	3/380~415/50	3/380~415/50
Rated power input	Water heating	kW	7.3
Max. power input	Water heating	kW	10.1
Sound pressure level	dB(A)	67	67
Dimension(WxDxH)	Outline mm	930x800x1605	930x800x1605
	Package mm	1010x865x1775	1010x865x1775
Net weight/Gross weight	kg	243/260	260/277
Loading quantity	40'GP/40'HQ	26/26	26/26
	set	21/21	21/21

### Notes:

1. Testing conditions of above data: Ambient temperature 20°C DB/15°C WB; water tank temperature (start/end): 15°C/55°C; power supply: 3/380/50Hz;
2. Considering the system reliability and various water temperature demands for different ambient temperature, we have limited the highest water temperature. The curve is shown as below.
3. Set Cyclic temp. to 51°C means the starting temp. for cyclic temp. circularly is 51°C. When the unit is halted, tank water temperature is 56°C.



### » High-efficiency and energy-saving

Adopt heat pump technology, which can transfer the consumed electricity into three times of thermal energy for heating water, high-efficiency and energy-saving. The operation cost is 1/4 of that for electric water heater and 1/3 of that for gas water heater.

### » Safe and reliable

Electricity is only used as the energy for driving medium, while the energy used for heating water is absorbed from the air by medium. Therefore, the heating method is indeed water and electricity separation, safe, stable and reliable.

### » Convenient for installation and convenient for maintenance

The unit can be installed on roof, yard, basement and so on. This unit is with powerful self-diagnosis function, convenient and easy for maintenance.

### » All-day operation and wide application range

This heat pump water heater takes sensible heat and latent heat in air as the low-temperature thermal source, which can provide hot water continuously 24 hours a year and all the year around.

### » Intelligent control

Microcomputer control. Chinese interface for displaying the operation status of the unit. Multiple module network control can control maximum 16 indoor units; parameters for each unit can be set freely. Timer ON and timer OFF control function for each day; perfect protection functions for ensuring reliable operation.



# SCROLL CHILLER

Inverter Mini Chiller

Modular Air-cooled  
Scroll Chiller

Inverter Modular Air-cooled  
Chiller (Heat Pump)

DL Series Water-cooled  
Packaged Unit

## Inverter Mini Chiller

INVERTER R410A

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



- » Compressor inverter control regulates water temperature precisely.
- » Integral installation is convenient and cost-saving.
- » Precise system pressure control improves the anti-freezing function of the system.
- » Two-stage compression technology is adopted to greatly improve the system's performance.



Item	Water side (water temperature)			Air side (outdoor temperature)		
	Nominal operating condition		Operating range		Nominal operating condition	Operating range
	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	DB(°C)	WB(°C)
Cooling	12	7	7~25	2~8	35	24
Heating	40	45	25~60	2~8	7	6
						-20~35

Model	Heat pump		HLR8Pd/Na-K	HLR10Pd/Na-K	HLR12Pd/Na-M	HLR14Pd/Na-M
Capacity	Cooling	kW	6.20	7.50	9.50	11.00
	Heating	kW	8.00	10.00	12.00	14.00
EER/COP		W/W	3.1/3.6	3.1/3.4	3.2/3.7	3.1/3.4
Power supply		V/Ph/Hz	220-240V ~ 50Hz		380-415V 3N~ 50Hz	
Power input	Cooling	kW	2.00	2.40	2.97	3.55
	Heating	kW	2.25	2.90	3.24	4.12
Compressor	Type	-	Rotary	Rotary	Rotary	Rotary
	Quantity	-	1	1	1	1
Refrigerant charge volume	kg	3.5	3.5	4.0	4.0	
	l/s	0.30	0.36	0.45	0.53	
	GPM	4.70	5.68	7.20	8.33	
Build-in chilled water pump	Pump power input	kW	0.14	0.14	0.14	0.14
	Delivery lift	m	11	11	11	11
Build-in expansion vessel volume	L	10	10	10	10	10
Chilled water outlet/inlet screw thread spec	inch	1	1	1	1	1
Sound pressure level	dB(A)	53	53	54	54	
Dimension(W×D×H)	Outline	mm	1390×412×890	1390×412×890	1390×367×1430	1390×367×1430
	Package	mm	1463×438×1035	1463×438×1035	1429×421×1585	1429×421×1585
Net weight/Gross weight	kg	140/155	140/155	194/210	194/210	
Loading quantity	40'GP/40'HQ	set	80/80	80/80	43/43	43/43

Model	Heat Pump		HLR22SNa-M*	HLR25SNa-M*	HLR35SNa-M*	HLR45SNa-M*
Capacity	Cooling	kW	21.5	22.8	31	42
	Heating	kW	25	25	37.5	49
EER/COP		W/W	2.50/2.91	2.59/2.81	2.61/3.00	2.30/2.80
Power supply		V/Ph/Hz		380-415V-3 Ph-50 Hz		
Power input	Cooling	kW	8.6	8.8	11.9	18.3
	Heating	kW	8.6	8.9	12.5	17.5
Compressor	Type	-	Constant Speed Scroll			
	Quantity	-	2	2	2	2
Refrigerant charge volume	kg	3.6x2	4.8x2	6.5x2	7.3x2	
	m³/h	3.7	3.9	5.3	7.2	
Water flow rate	l/s	1	1.1	1.5	2	
	GPM	16.3	17.2	23.4	31.7	
Build-in chilled water pump	Pump power input	kW	0.75	0.75	1.5	1.5
	Delivery lift	m	22	24	25	27
Build-in expansion vessel volume	L	8	8	8	8	
Sound pressure level	db(A)	66	66	68	68	
Dimension(W×D×H)	Outline	mm	1460×530×1850	1460×530×1850	1750×800×1760	1750×800×1760
	Package	mm	1540×710×2100	1540×710×2100	1910×960×1970	1910×960×1970
Net weight/Gross weight	kg	380/387	380/392	680/690	755/765	
Loading quantity	40'GP/40'HQ	set	23/23	23/23	12/12	12/12

\*Note: This model is not fit for EU.



## Modular Air-cooled Scroll Chiller

R410A

### D Series

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



24 hour timer

- » Running condition real-time display.
- » Low start-up current thanks to power delay control design.
- » Use U-type heat exchange tube to improve the heat-exchange efficiency of the complete unit;
- » Special equalizing plate design of shell and tube: the distribution of refrigerant is more even for improving the heat-exchanging efficiency of the complete unit.
- » Main module: any unit can be set as the main module via a wired controller.
- » Up to 16 units (60/71kW) or 8 units (120/145kW) can be integrated freely to get a max. capacity of 1160kW thanks to modular design.
- » Auto anti-freezing function under heating mode when the unit is switched off.

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	2.5~6	35	—	15~45
Heating	40	45	40~50	2.5~6	7	6	-15~24

Model	Heat pump	LSQWRF65M/NaD-M	LSQWRF80M/NaD-M	LSQWRF130M/NaD-M	LSQWRF160M/NaD-M	LSQWRF249M/NaD-M	LSQWRF280M/NaD-M	
Capacity	Cooling/Heating	kW 60/65	71/79.5	120/130	145/170	249/275	280/325	
	RT	17.06/18.48	20.19/22.61	34.12/36.97	41.23/48.34	70.81/78.20	79.62/92.42	
Capacity steps	%	0-50%-100%		0-25%-50%-75%-100%				
EER/COP	W/W	2.84/3.09	2.76/2.94	2.84/2.93	2.74/3.04	2.95/3.25	2.85/3.10	
Power supply	V-Ph-Hz	380-415V~3N-50Hz						
Power input	Cooling	kW 21.1	25.7	42.3	53	84.4	98.2	
	Heating	kW 21	27	44.4	56	84.6	104.8	
Compressor	Type	—	Constant Speed Scroll					
	Starting mode	—	Direct Starting					
	Quantity	—	2	2	4	4	4	
	Type	—	Dry Expansion Evaporator					
Water side heat exchanger	Water flow volume	l/s 2.86	3.39	5.73	6.92	11.89	13.39	
	GPM	45	54	91	110	189	212	
	Pressure drop	kPa 15	20	30	35	75.00	85.00	
	ft.WG	4.92	6.56	9.84	11.48	24.60	27.88	
	Connection pipe	—	DN65	DN80			DN100	
Air side heat exchanger	Type	—	Aluminum Fin-copper Tube					
	Fan type and quantity	—	Axial-flow/2	Axial-flow/2	Axial-flow/4	Axial-flow/4	Axial-flow/8	
	Total fan air flow	l/s 2x0.375x10 <sup>4</sup>	2x0.417x10 <sup>4</sup>	4x0.375x10 <sup>4</sup>	4x0.417x10 <sup>4</sup>	8x0.390x10 <sup>4</sup>	8x0.436x10 <sup>4</sup>	
	CFM	2x0.795x10 <sup>4</sup>	2x0.882x10 <sup>4</sup>	4x0.795x10 <sup>4</sup>	4x0.882x10 <sup>4</sup>	8x0.824x10 <sup>4</sup>	8x0.924x10 <sup>4</sup>	
	Total fan motor power	kW 2x0.65	2x0.95	4x0.65	4x0.95	8x0.65	8x0.75	
Sound pressure level	Sound pressure level	dB(A) 70	71	72	74	67	69	
Dimension	Outline(WxDxH)	mm 2040x1000x2230	2040x1000x2230	2226x1650x2230	2226x1650x2230	3980x2260x2450	3980x2260x2450	
	Package(WxDxH)	mm 2120x1080x2230	2120x1080x2230	2306x1730x2230	2306x1730x2230	4040x2260x2450	4040x2260x2450	
Net/Gross/Operating weight	kg	740/745/814	792/797/871	1315/1320/1447	1504/1509/1654	2985/2995/3284	3278/3288/3606	
Loading quantity	40'GP/40'HQ	set 11/11	11/11	6/6	6/6	2/2	2/2	

Notes: This product model is under development. Gree reserves the right to modify the specifications without prior notice.

Please confirm the final specifications with our sales representatives

## Modular Air-cooled Scroll Chiller

R410A

### E Series

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



Model	Heat pump	LSQWF65M/NaE-M	LSQWF80M/NaE-M	LSQWF130M/NaE-M	LSQWF160M/NaE-M
Capacity	Cooling/Heating	kW RT	65 18.48	82 23.32	132 37.54
Capacity steps	%	0、50、100	0、50、100	0、50、100	0、25、50、75、100
EER	W/W	3.20	3.19	3.20	3.00
Power supply	V-Ph-Hz	400V~3N~50Hz	400V~3N~50Hz	400V~3N~50Hz	400V~3N~50Hz
Power input	Cooling	kW	20.3	25.7	41.2
Compressor	Type	—	Constant Speed Scroll		
	Starting mode	—	Direct Startup		
	Quantity	—	2	2	4
	Type	—	Dry Expansion Evaporator		
Water side heat exchanger	Water flow volume	m³/h GPM	11.20 49	14.10 62	22.70 100
	Pressure drop	kPa ft.WG	45 14.76	60 19.68	60 19.68
	Connection pipe	—	Flange Connection		
Air side heat exchanger	Type	—	Aluminum Fin-copper Tube		
	Fan type and quantity	—	Axial-flow		
	Total fan airflow	m³/h CFM	2x1.2x10⁴ 2x0.7056x10⁴	2x1.4x10⁴ 2x0.8239x10⁴	4x1.2x10⁴ 4x0.7056x10⁴
	Total fan motor power	kW	2x0.65	2x0.75	4x0.65
Sound pressure level	dB(A)	66	67	70	70
Dimension	Outline(WxDxH)	mm	2138x1025x2243	2138x1025x2243	2306x1980x2320
	Package(WxDxH)	mm	2198x1085x2243	2198x1085x2243	2366x2040x2320
Net/Gross/Operating weight	kg	730/735	770/775	1280/1285	1540/1545
Loading quantity	40'GP/40'HQ	set	11/11	11/11	5/5

- » New appearance design;
- » Ambient operation temperature is 0~46°C and temperature range of water outlet is 5~20°C;
- » Up to 16 units can be modularized in parallel;
- » High efficiency shell and tube;
- » Low noise operation.

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



## Inverter Modular Air-cooled Chiller(Heat Pump) R410A

### A Series

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



Model	Heat pump	LSQWRF35VM/NaA-M	LSQWRF60VM/NaA-M	LSQWRF65VM/NaA-M
Capacity	Cooling/Heating	kW RT	32/36 9.10/10.24	60/65 17.06/18.48
Capacity steps	%	0~100	0~100	0~100
EER/COP	W/W	2.58/3.33	2.74/3.22	2.62/3.20
Power supply	Ph/V/Hz	380-415V~3N~50Hz	380-415V~3N~50Hz	380-415V~3N~50Hz
Power input	Cooling Heating	kW 12.40 10.8	21.9 20.2	24.8 21.9
Compressor	Type Starting mode	— —	Inverter Rotary Inverter Starting	
	Quantity	— 1	2	2
	Type	—	Dry Expansion Evaporator	
Water side heat exchanger	Water flow volume	l/s GPM	1.53 24	2.87 46
	Pressure drop	kPa ft.WG	75 24.6	55 18.04
	Connection pipe	—	G1 1/2 External Thread Connection	G2 External Thread Connection
Air side heat exchanger	Type Fan type and quantity	— —	Aluminum Fin-copper Tube Axial-flow/2	
	Total fan airflow	l/s CFM	2x0.347x10 <sup>4</sup> 2x0.736x10 <sup>4</sup>	2x0.333x10 <sup>4</sup> 2x0.707x10 <sup>4</sup>
	Total fan motor power	kW	0.75	0.75
Sound pressure level	dB(A)	62	68	68
Dimension	Outline(WxDxH) Package(WxDxH)	mm 1340x845x1605 1420x920x1775	2200x965x1675 2267x1030x1867	2200x965x1675 2267x1030x1867
Net/Gross/Operating weight	kg	379/391/862	689/725/758	689/725/758
Loading quantity	40'GP/40'HQ	set	16/16	11/11

- » High-efficiency and energy-saving, with all DC inverter compressor and fan;
- » Quiet and wide operational range;
- » Easy installation, modularized combination, intelligent control;
- » With water pump switch function for prolonging service life of water pump;
- » Long-distance one-key ON/OFF control.



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



## Inverter Modular Air-cooled Chiller (Heat Pump) ₹32

### A Series

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



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

》 Super quiet and wide operation range;

》 Convenient installation, modular combination and smart control;

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

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



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

Model	Heat pump	LSQWRF35VM/NhA-M		LSQWRF60VM/NhA-M
Capacity	Cooling/Heating	kW	32/35	60/65
	RT		9.10/9.95	17.06/18.48
Capacity steps		%	0~100	0~100
EER/COP		W/W	2.74/3.3	2.88/3.27
Power supply		V/Ph/Hz	380~415V 3N~ 50Hz	380~415V 3N~ 50Hz
Power input	Cooling	kW	11.7	20.8
	Heating	kW	10.6	19.9
Compressor	Type	-	Inverter Rotary	Inverter Rotary
	Starting mode	-	Inverter Starting	Inverter Starting
	Quantity	-	1	2
Water side heat exchanger	Type	-	Dry Expansion Evaporator	Dry Expansion Evaporator
	I/s		1.53	2.87
	GPM		24	46
	kPa		80	55
Air side heat exchanger	ft.WG		26.24	18.04
	Connection pipe	-	G1 1/2 External Thread Connection	G2 External Thread Connection
	Type	-	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
Sound pressure level	Fan type and quantity	-	Axial-flow/2	Axial-flow/2
	I/s		2×0.175×10 <sup>4</sup>	2×0.333×10 <sup>4</sup>
	CFM		2×0.371×10 <sup>4</sup>	2×0.707×10 <sup>4</sup>
Dimension	Total fan motor power	kW	0.75	0.75
	Net weight/Gross weight	dB(A)	62	68
Net weight/Gross weight	Outline(WxDxH)	mm	1340×845×1605	2200×965×1675
	Package(WxDxH)	mm	1420×920×1775	2267×1030×1867
>Loading quantity	40'GP/40'HQ	kg	405/422	686/722
		unit	16/16	11/11

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.



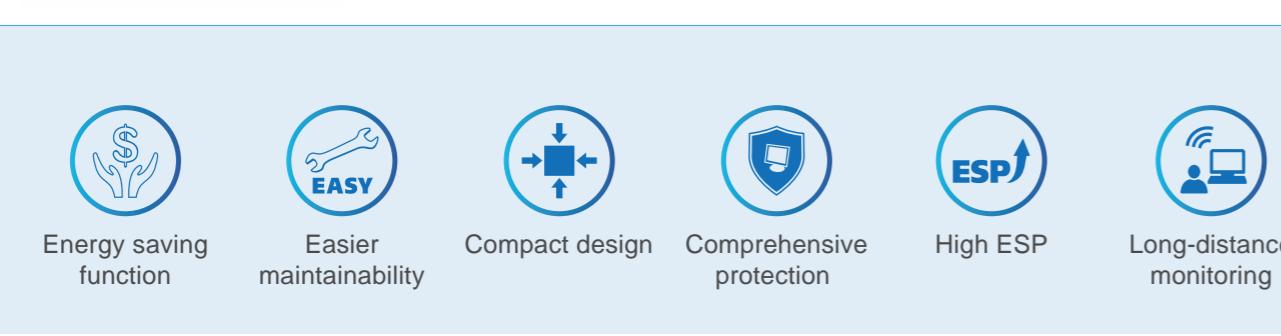
## DL Series Water-cooled Packaged Unit

R410A

Gree DL Series Water-cooled Packaged Unit is designed to supply air directly or supply air through air duct to adjust indoor ambient temperature. It has been greatly improved in various aspects such as reliability, practicability, convenient installation and transportation, and operation interface, etc. It can be widely used in workshops, shopping malls, supermarkets, hotels, office buildings, etc. The DL Series Water-cooled Packaged Unit is favored by users because of its compact structure and high energy efficiency.



Display Panel Z3D3003J



### 》 Energy-saving and high-efficiency

Energy efficiency of the series of units can reach Grade I and above.

》 Flexible structure, easy installation——adopts side-by-side structure for easily opening and closing the door and easy maintenance; the whole appearance is decent and good-looking.

### 》 Intelligent control

BMS long-distance control management.

### 》 Low operating noise

The unit adopts high-efficiency and low-noise scroll compressor with low-noise centrifugal fan, which has excellent air supply effect and sound insulation system for quiet operation.

### 》 Eco-friendly

It adopts R410A eco-friendly refrigerant.

Voltage Range	Min. V	Max. V	Condenser				Air Temp of the Evaporating Coil				Default		
			Cooling Water				Refrigerant	DB Temp °C		WB Temp °C		Min. Mpa	Max. Mpa
			Leaving Water Temp °C		MPa			Min.	Max.	Min.	Max.		
342	440	18	42	0.14	1.03	4.2		15	35	13	24	0.45	4.2

Model		L49S/NaE-M	L98S/NaE-M	L116S/NaE-M	L130S/NaE-M	
Cooling capacity	kW	49	98	116	130	
Air flow	m³/h	8000	16000	19000	22000	
External static pressure	Pa	75	115	140	140	
Motor power	kW	2.2	4.0	5.5	5.5	
Non-standard static pressure	Pa	50-200	100-350	140-400	140-450	
Control temperature range	°C	16-30	16-30	16-30	16-30	
Power supply	V/Ph/Hz	380-400/3P/50				
Total cooling power	kW	12.0	24.3	28.2	31.6	
		Shell-and-tube				
Condenser	Mode	-				
	Water volume	m³/h	10.6	21.1	25.0	
	Water resistance	kPa	35	44	45	
	Size	inch	2	2	2-1/2	
Evaporator	Mode	-				
	Pitch of fins	mm	1.6	1.6	1.8	
Indoor fan	Mode	-				
	Drive mode	-				
Filter	-					
Controller	-					
Drain pipe	Condensate pipe	inch	G3/4			
Outline dimension	Width	mm	1700	1950	1950	2300
	Depth	mm	710	1060	1060	1200
	Height	mm	1950	1950	1950	2000
Net weight	kg	540	870	950	1110	

Model		L145S/NaE-M	L160S/NaE-M	L196S/NaE-M	L35S/NaE-U	L55S/NaE-U	L70S/NaE-U
Cooling capacity	kW	145	160	196	32	52	67
Air flow	m³/h	23000	26000	32000	6000	8400	11000
External static pressure	Pa	140	190	250	75	75	150
Motor power	kW	5.5	7.5	11.0	1.5	2.2	3.0
Non-standard static pressure	Pa	140-450	190-450	190-500	50-200	50-200	150-300
Control temperature range	°C	16-30			16-30		
Power supply	V/Ph/Hz	380-400/3P/50				460/3P/60	
Total cooling power	kW	35.5	39.0	48.4	8.0	13.2	16.2
Condenser	Mode	-					
	Water volume	m³/h	31.2	34.4	42.1	6.5	11.2
	Water resistance	kPa	72.6	55	60	35	40
	Size	inch	2-1/2	2-1/2	3	1-1/2	2
Evaporator	Mode	-					
	Pitch of fins	mm	Finned Tube				Finned Tube
Indoor fan	Mode	-					
	Drive mode	-					
Filter	-						
Controller	-						
Drain pipe	Condensate pipe	inch	G3/4				G3/4
Outline dimension	Width	mm	2300	2300	2650	1250	1700
	Depth	mm	1200	1200	1220	710	710
	Height	mm	2000	2000	2150	1950	2000
Net weight	kg	1120	1130	1445	415	510	650



# SCREW CHILLER

High-efficiency Heat Pump  
Air-cooled Screw Chiller

High-efficiency Modular  
Air-cooled Screw Chiller

High Energy Efficiency  
Air-cooled Screw Chiller

High-efficiency  
Water-cooled Screw Chiller

Permanent Magnetic  
Synchronous Inverter Screw  
Chiller

## High-efficiency Heat Pump Air-cooled Screw Chiller R134A

Gree High-efficiency Air-cooled Screw Chiller adopts Gree brand air-cooled heat pump specialized compressor, flooded type shell-and-tube design and a totally enclosed structure. Featuring high efficiency, high reliability and low noise, this air conditioning equipment can provide cool water in summer and hot water in winter. It can be combined with fan coil unit, floor ceiling unit, packaged unit or other kinds of terminals.



- » Highly efficient and energy saving;
- » Gree's efficient air-cooled heat pump specialized compressor;
- » Heat pump flooded type shell-and-tube design;
- » V-shaped structure for fins, efficient heat exchange design;
- » Seamless connectivity on site, cooling capacity can be enlarged infinitely;
- » Totally enclosed structure, low noise and low vibration design, safe and comfortable.



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
Heating	40	45	40~50	2.5~8	7	6	-15~24

Model	Heat pump		LMPA30JD4E/Nb-M	LMPB30JD3E/Nb-M	LMPA40JE2E/Nb-M	LMPB40JE1E/Nb-M
Capacity	Cooling	kW	315	340	400	445
		TR	90	97	114	127
	Heating	kW	320	335	410	430
	Heating	TR	91	95	117	122
Capacity steps		%	25%,50%~100%			
EER	W/W		3.21	3.21	3.23	3.22
COP	W/W		3.23	3.22	3.25	3.21
Power supply	V/Ph/Hz		380V 3N~ 50Hz			
Power input	Cooling	kW	98	106	124	138
	Heating	kW	99	104	126	134
Compressor	Type	-	Semi-hermetic Screw Compressor			
	Starting mode	-	Star Delta Start			
	Quantity	-	1			
Water side heat exchanger	Type	-	Flooded Evaporator			
	Water flow volume	m³/h	55	60.2	72.2	80.8
		GPM	243	265	318	356
	Pressure drop	kPa	≤35	≤35	≤45	≤45
Air side heat exchanger	Connection pipe	ft.WG	≤11.7	≤11.7	≤15.1	≤15.1
	Type	-	Aluminum Fin-copper Tube			
	Total fan air flow	m³/h	20000x6	21500x6	20000x8	21500x8
Dimension		CFM	11772x6	12654x6	11772x8	12654x8
	Total fan motor power	kW	1.5x6	1.8x6	1.5x8	1.8x8
Net/Gross/Operating Weight	Outline(WxDxH)	mm	3670x2250x2550	3670x2250x2550	4890x2250x2550	4890x2250x2550
	Package(WxDxH)	mm	3820x2330x2550	3820x2330x2550	5040x2330x2550	5040x2330x2550
Loading quantity	kg	4570/4610/4661	4600/4640/4692	5435/5475/5544	5500/5540/5610	
	40'GP/40'HQ	set	0/2	0/2	0/2	0/2

Model	Heat pump		LMPA50LE8E/Nb-M	LMPB50LE7E/Nb-M	LMPA33LF6E/Nb-M	LMPB33LF5E/Nb-M
Capacity	Cooling	kW	505	550	640	690
		TR	144	156	182	196
	Heating	kW	520	545	645	685
	Heating	TR	148	155	183	195
Capacity steps		%	25%,50%~100%			
EER	W/W		3.22	3.25	3.20	3.21
COP	W/W		3.25	3.22	3.26	3.25
Power supply	V/Ph/Hz		380V 3N~ 50Hz			
Power input	Cooling	kW	157	169	200	215
	Heating	kW	160	169	198	211
Compressor	Type	-	Semi-hermetic Screw Compressor			
	Starting mode	-	Star Delta Start			
	Quantity	-	1			
Water side heat exchanger	Type	-	Flooded Evaporator			
	Water flow volume	m³/h	89.4	99.8	111.8	120.4
		GPM	394	440	493	531
	Pressure drop	kPa	≤45	≤45	≤55	≤55
Air side heat exchanger	Connection pipe	ft.WG	≤15.1	≤15.1	≤18.4	≤18.4
	Type	-	Aluminum Fin-copper Tube			
	Total fan air flow	m³/h	20000x10	21500x10	20000x8	21500x8
Dimension		CFM	11772x10	12654x10	11772x8	12654x8
	Total fan motor power	kW	1.5x10	1.8x10	1.5x12	1.8x12
Net/Gross/Operating Weight	Outline(WxDxH)	mm	6110x2250x2550	6110x2250x2550	7340x2250x2550	7340x2250x2550
	Package(WxDxH)	mm	6260x2330x2550	6260x2330x2550	7490x2330x2550	7490x2330x2550
Loading quantity	40'GP/40'HQ	kg	6455/6495/6584	6590/6630/6722	8550/8590/8721	8410/8450/8578
		set	0/1	0/1	0/1	0/1

Note: The parameters are estimated, please refer to the value on the nameplate.



Model	Heat pump		LMPB43LG4E/Nb-M	LMPB43LG3E/Nb-M	LMPA44LF2E/Nb-M	LMPB44LF1E/Nb-M	LMPB54NG2E/Nb-M	
Capacity	Cooling	kW	730	790	825	900	1000	
		TR	208	225	235	256	284	
	Heating	kW	755	785	815	890	980	
		TR	215	223	232	253	279	
Capacity steps		%	12.5%,25%-100%					
EER		W/W	3.24	3.22	3.24	3.23	3.25	
COP		W/W	3.25	3.23	3.26	3.22	3.23	
Power supply		V/Ph/Hz	380V 3N~ 50Hz					
Power input	Cooling	kW	225	245	255	279	308	
	Heating	kW	232	243	250	276	303	
Compressor	Type	-	Semi-hermetic Screw Compressor					
	Starting mode	-	Star Delta Start					
	Quantity	-	2					
Water side heat exchanger	Type	-	Flooded Evaporator					
	Water flow volume	m³/h	129	141	147.9	163.4	180.6	
		GPM	569	622	652	720	796	
	Pressure drop	kPa	≤55	≤55	≤65	≤60	≤70	
		ft.WG	≤18.4	≤18.4	≤21.7	≤20.1	≤23.4	
Air side heat exchanger	Connection pipe	-	DN150	DN150	DN150	DN150	DN200	
	Type	-	Aluminum Fin-copper Tube					
	Total fan air flow	m³/h	20000x14	21500x14	20000x16	21500x16	21500x18	
		CFM	20000x14	12654x14	11772x16	12654x16	12654x18	
Dimension	Total fan motor power	kW	1.5x14	1.8x14	1.5x16	1.8x16	1.8x18	
	Outline(WxDxH)	mm	8560x2250x2550	8560x2250x2550	9780x2250x2550	9780x2250x2550	11000x2250x2550	
Net/Gross/Operating Weight	Package(WxDxH)	mm	8710x2330x2550	8710x2330x2550	9930x2330x2550	9930x2330x2550	11150x2330x2550	
	kg	9900/9940/10098	10075/10115/10277	10910/10950/11128	11110/11150/11332	12380/12420/12628		
Loading quantity	40'GP/40'HQ	set	0/1	0/1	0/1	0/1	0/1	

Model	Heat pump		LMPB50LE750LE7E/ Nb-M	LMPB33LF550LE7E/ Nb-M	LMPB33LF533LF5E/ Nb-M	LMPB33LF543LG3E/ Nb-M	LMPB43LG343LG3E/ Nb-M	
Capacity	Cooling	kW	1120	1240	1380	1480	1580	
		TR	318	353	392	421	449	
	Heating	kW	1075	1230	1370	1470	1570	
		TR	306	350	390	418	446	
Capacity steps		%	12.5%,25%-100%	8.3%,16.7%-100%	6.3%,12.5%-100%			
EER		W/W	3.24	3.23	3.21	3.22	3.22	
COP		W/W	3.22	3.24	3.25	3.24	3.23	
Power supply		V/Ph/Hz	380V 3N~ 50Hz					
Power input	Cooling	kW	346	384	430	460	490	
	Heating	kW	334	380	422	454	486	
Compressor	Type	-	Semi-hermetic Screw Compressor					
	Starting mode	-	Star Delta Start					
	Quantity	-	2	3	4	4	4	
Water side heat exchanger	Type	-	Flooded Evaporator					
	Water flow volume	m³/h	199.5	220.2	240.8	261.4	283.8	
		GPM	880	971	1062	1153	1251	
	Pressure drop	kPa	≤55	≤55	≤60	≤60	≤60	
		ft.WG	≤18.4	≤18.4	≤20.1	≤20.1	≤20.1	
Air side heat exchanger	Connection pipe	-	2xDN125	DN150+DN125	2xDN150	2xDN150	2xDN150	
	Type	-	Aluminum Fin-copper Tube					
	Total fan air flow	m³/h	21500x20	21500x22	21500x24	21500x26	21500x28	
		CFM	12654x20	12654x22	12654x24	12654x26	12654x28	
Dimension	Total fan motor power	kW	1.8x20	1.8x22	1.8x24	1.8x26	1.8x28	
	Outline(WxDxH)	mm	12230x2250x2550	13450x2250x2550	14670x2250x2550	15890x2250x2550	17120x2250x2550	
Net/Gross/Operating Weight	Package(WxDxH)	mm	12380x2330x2550	13600x2330x2550	14820x2330x2550	16040x2330x2550	17270x2330x2550	
	kg	13160/13200/13423	15000/15040/15300	16820/16860/17156	18485/18525/18855	20150/20190/20553		
Loading quantity	40'GP/40'HQ	set	0/0	0/0	0/0	0/0	0/0	

Note: The parameters are estimated, please refer to the value on the nameplate.

## 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.



Display panel  
Z2F3Q

- Golden fin condenser
- Inner groove copper
- Comprehensive protection
- Self-diagnosis
- Memory function
- 24 hour timer
- Long-distance monitoring
- High efficiency
- Modular structure

- » Thanks to V type fin structure, unit features small refrigerant pressure loss and high efficiency.
- » With flooded type shell-and-tube design, evaporating temperature is increased, hence improving the heat exchanging efficiency and energy efficiency.
- » Unit adopts low noise fan blades and specialized compressor noise reduction device, therefore sound level falls to 5dB(A) lower than the 2nd generation.
- » Due to the totally-enclosed design, its appearance is harmonious and nice-looking.



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



Model	Cooling		LMEA30JD3E/Nb-M	LMEB30JD2E/Nb-M	LMEA40LE5E/Nb-M	LMEB40LE4E/Nb-M
Capacity	Cooling	kW	320	350	420	470
		TR	91.0	99.5	119.4	133.6
Capacity steps	%	25%,50%-100%	25%,50%-100%	25%,50%-100%	25%,50%-100%	
EER	W/W	3.20	3.24	3.23	3.22	
Power supply	V/Ph/Hz	380V 3N~50Hz	380V 3N~50Hz	380V 3N~50Hz	380V 3N~50Hz	
Power input	Cooling	kW	100	108	130	146
Compressor	Type	-	Semi-hermetic Screw			
	Starting mode	-	Star Delta Start			
	Quantity	-	1	1	1	1
Water side heat exchanger	Type	-	Flooded Evaporator			
	Water flow volume	m³/h	55.0	60.2	72.2	80.8
		GPM	243	265	319	356
	Pressure drop	kPa	≤35	≤35	≤45	≤45
		ft.WG	≤11.7	≤11.7	≤15.1	≤15.1
Air side heat exchanger	Connection pipe	-	DN100	DN100	DN125	DN125
	Type	-	Aluminum Fin-Copper Tube			
	Total fan air flow	m³/h	20000×6	20000×6	20000×8	20000×8
		CFM	11772×6	11772×6	11772×8	11772×8
Dimension	Total fan motor power	kW	1.5×6	1.5×6	1.5×8	1.5×8
	Outline(WxDxH)	mm	3670×2250×2550	3670×2250×2550	4890×2250×2550	4890×2250×2550
	Package(WxDxH)	mm	3750×2330×2550	3750×2330×2550	4970×2330×2550	4970×2330×2550
	Net/Gross/Operating Weight	kg	4130/4170/4213	4310/4350/4396	5210/5250/5314	5515/5555/5625
Loading quantity	40'GP/40'HQ	set	0/2	0/2	0/2	0/2

Model	Cooling		LMEB43LF7E/Nb-M	LMEB43LF5E/Nb-M	LMEA44NF4E/Nb-M	LMEB44NF2E/Nb-M
Capacity	Cooling	kW	750	820	860	940
		TR	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%
EER	W/W	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	
Power input	Cooling	kW	235	255	265	290
Compressor	Type	-	Semi-hermetic Screw			
	Starting mode	-	Star Delta Start			
	Quantity	-	2	2	2	2
Water side heat exchanger	Type	-	Flooded Evaporator			
	Water flow volume	m³/h	129.0	141.0	147.9	161.7
		GPM	569	622	652	713
	Pressure drop	kPa	≤55	≤55	≤65	≤60
		ft.WG	≤18.4	≤18.4	≤21.7	≤20.1
Air side heat exchanger	Connection pipe	-	DN150	DN150	DN150	DN150
	Type	-	Aluminum Fin-Copper Tube			
	Total fan air flow	m³/h	20000×14	20000×14	20000×16	20000×16
		CFM	11772×14	11772×14	11772×16	11772×16
Dimension	Total fan motor power	kW	1.5×14	1.5×14	1.5×16	1.5×16
	Outline(WxDxH)	mm	8560×2250×2550	8560×2250×2550	9780×2250×2550	9780×2250×2550
	Package(WxDxH)	mm	8640×2330×2550	8640×2330×2550	9860×2330×2550	9860×2330×2550
	Net/Gross/Operating Weight	kg	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

Model	Cooling		LMEA50LE3E/Nb-M	LMEB50LE2E/Nb-M	LMEA33LF8E/Nb-M	LMEB33LF6E/Nb-M
Capacity	Cooling	kW	520	580	650	700
		TR	147.9	164.9	184.8	199.1
Capacity steps	%	25%,50%-100%	25%,50%-100%	12.5%,25%-100%	12.5%,25%-100%	
EER	W/W	3.21	3.22	3.25	3.24	
Power supply	V/Ph/Hz	380V 3N~50Hz	380V 3N~50Hz	380V 3N~50Hz	380V 3N~50Hz	
Power input	Cooling	kW	162	180	200	216
Compressor	Type	-	Semi-hermetic Screw			
	Starting mode	-	Star Delta Start			
	Quantity	-	1	1	2	2
Water side heat exchanger	Type	-	Flooded Evaporator			
	Water flow volume	m³/h	89.4	99.8	111.8	120.4
		GPM	394	440	493	531
	Pressure drop	kPa	≤45	≤45	≤55	≤55
		ft.WG	≤15.1	≤15.1	≤18.4	≤18.4
Air side heat exchanger	Connection pipe	-	DN125	DN125	DN150	DN150
	Type	-	Aluminum Fin-Copper Tube			
	Total fan air flow	m³/h	20000×10	20000×10	20000×12	20000×12
		CFM	11772×10	11772×10	11772×12	11772×12
Dimension	Total fan motor power	kW	1.5×10	1.5×10	1.5×12	1.5×12
	Outline(WxDxH)	mm	6110×2250×2550	6110×2250×2550	7340×2250×2550	7340×2250×2550
	Package(WxDxH)	mm	6190×2330×2550	6190×2330×2550	7420×2330×2550	7420×2330×2550
	Net/Gross/Operating Weight	kg	5980/6020/6100	6240/6280/6365	7920/7960/8078	8120/8160/8282
Loading quantity	40'GP/40'HQ	set	0/1	0/1	0/1	0/1

Model	Cooling		LMEB54NG3E/Nb-M	LMEB54NGZE/Nb-M	LMEB33LF850LE3E/Nb-M	LMEB33LF650LE2E/Nb-M
Capacity	Cooling	kW	950	1050	1160	1280
		TR	270.1	298.6	329.9	364.0
Capacity steps	%	12.5%,25%-100%	12.5%,25%-100%	8.3%,16.7%-100%	8.3%,16.7%-100%	
EER	W/W	3.22	3.23	3.22	3.20	
Power supply	V/Ph/Hz	380V 3N~50Hz	380V 3N~50Hz	380V 3N~50Hz	380V 3N~50Hz	
Power input	Cooling	kW	295	325	360	400
Compressor	Type	-	Semi-hermetic Screw			
	Starting mode	-	Star Delta Start			
	Quantity	-	2	2	3	3
Water side heat exchanger	Type	-	Flooded Evaporator			
	Water flow volume	m³/h	163.40	180.60	199.50	220.20
		GPM	720.00	796.00	880.00	971.00
	Pressure drop	kPa	≤60	≤70	≤55	≤55
		ft.WG	≤20.1	≤23.4	≤18.4	≤18.4
Air side heat exchanger	Connection pipe	-	DN150	DN150	DN150+DN125	DN150+DN125
	Type	-				

## High Energy Efficiency Air-cooled Screw Chiller

R134A

Model	Cooling		LMEB33LF833LF8E /Nb·M	LMEB33LF633LF6E /Nb·M	LMEB33LF643LF5E /Nb·M	LMEB43LF743LF7E /Nb·M	LMEB43LF543LF5E /Nb·M
Capacity	Cooling	kW	1320	1400	1500	1520	1650
		TR	375.4	398.1	426.5	426.5	469.2
Capacity steps		%	6.25%,12.5%~100%	6.25%,12.5%~100%	6.25%,12.5%~100%	6.25%,12.5%~100%	6.25%,12.5%~100%
EER		W/W	3.22	3.22	3.23	3.23	3.20
Power supply		V/Ph/Hz	380V 3N~50Hz				
Power input	Cooling	kW	410	435	465	470	515
Compressor	Type	-	Semi-hermetic Screw				
	Starting mode	-	Star Delta Start				
Water side heat exchanger	Quantity	-	4	4	4	4	4
	Type	-	Flooded Evaporator				
	Water flow volume	m³/h	227.0	240.8	258.0	261.4	283.8
	Pressure drop	GPM	1001	1062	1138	1153	1251
	Connection pipe	kPa	≤60	≤60	≤60	≤60	≤60
Air side heat exchanger	Type	ft.WG	≤20.1	≤20.1	≤20.1	≤20.1	≤20.1
	Total fan air flow	m³/h	20000×24	20000×24	20000×26	20000×28	20000×28
	Total fan motor power	kW	1.5×24	1.5×24	1.5×26	1.5×28	1.5×28
Dimension	Outline(WxDxH)	mm	14670×2250×2550	14670×2250×2550	15890×2250×2550	17120×2250×2550	17120×2250×2550
	Package(WxDxH)	mm	14750×2330×2550	14750×2330×2550	15970×2330×2550	17200×2330×2550	17200×2330×2550
Net/Gross/Operating Weight	kg	14880/14960/15178	15840/15920/16157	17140/17220/17483	16950/17030/17289	18470/18550/18839	
Loading quantity	40'GP/40'HQ	set	0/0	0/0	0/0	0/0	0/0

Note: The above models have got AHRI certification. These are estimated parameters, please refer to the nameplate.

Gree High Energy Efficiency Air-cooled Screw Chiller adopts the dedicated air-cooled screw compressor of Gree brand, flooded shell and tube design and a fully closed structure. It has the characteristic of high energy efficiency, high reliability and low noise, providing cold water for the user in summer. It can be used in all kinds of large centralized air conditioning systems consisting of terminal air handling units such as fan coil units, horizontal and vertical mounted units and combined type air conditioners.



Display panel  
Z2F3Q



- » Highly efficient and energy saving;
- » Gree's efficient air-cooled heat pump specialized compressor;
- » Heat pump flooded type shell-and-tube design;
- » V-shaped structure for fins, efficient heat exchange design;
- » Seamless connectivity on site, cooling capacity can be enlarged infinitely;
- » Totally enclosed structure, low noise and low vibration design, safe and comfortable.



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)
Cooling	12	7	5~15	2.5~8	35	—



## High-efficiency Water-cooled Screw Chiller

R134A

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

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

Model	Cooling only		LSBLGF860MH /NbA-M*	LSBLGF950MH /NbA-M*	LSBLGF1050MH /NbA-M*	LSBLGF1160MH /NbA-M*	LSBLGF1320MH /NbA-M*	LSBLGF1520MH /NbA-M*	
Capacity	Cooling	kW	860	950	1050	1160	1320	1520	
		TR	244.5	270.1	298.6	329.9	375.4	432.2	
Capacity steps		%	12.5%,25%~100%	12.5%,25%~100%	12.5%,25%~100%	8.3%,16.7%~100%	6.25%,12.5%~100%	6.25%,12.5%~100%	
EER		W/W	3.31	3.39	3.28	3.31	3.34	3.38	
Power supply		V/Ph/Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	380V 3N~ 50Hz	
Compressor	Cooling	kW	260	280	320	350	395	450	
	Type	-	Semi-hermetic Screw	Semi-hermetic Screw	Semi-hermetic screw	Semi-hermetic Screw	Semi-hermetic Screw	Semi-hermetic Screw	
	Starting mode	-	Star Delta Start	Star Delta Start	Star Delta Start	Star Delta Start	Star Delta Start	Star Delta Start	
	Quantity	-	2	2	2	3	4	4	
Water side heat exchanger	Type	-	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	
	Water flow volume	m³/h	147.9	163.4	180.6	199.5	227.0	261.4	
		GPM	652	720	796	880	1001	1153	
	Pressure drop	kPa	≤65	≤60	≤70	≤55	≤60	≤60	
Air side heat exchanger	Pressure drop	ft.WG	≤21.7	≤20.1	≤23.4	≤18.4	≤20.1	≤20.1	
	Connection pipe	-	DN150	DN150	DN150	DN150+DN125	2xDN150	2xDN150	
	Type	-	Aluminum Fin-copper Tube						
	Total fan air flow	m³/h	20000×16	20000×18	21500×18	20000×22	20000×24	20000×28	
Dimension	Total fan motor power	kW	1.5×16	1.5×18	1.8×18	1.5×22	1.5×24	1.5×28	
	Outline(WxDxH)	mm	9780×2250×2550	11000×2250×2550	11000×2250×2550	13450×2250×2550	14670×2250×2550	17120×2250×2550	
	Package(WxDxH)	mm	9860×2330×2550	11080×2330×2550	11080×2330×2550	13530×2330×2550	14750×2330×2550	17200×2330×2550	
	Net/Gross/Operating weight	kg	9130/9170/9313	10280/10320/10486	10510/10590/10720	13370/13450/13637	14880/14960/15178	16950/17030/17289	
Loading quantity	40'GP/40'HQ	unit	0/1	0/1	0/1	0/0	0/0	0/0	

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

### LHE Series

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



High efficiency



Compact design



Energy saving function



Easier maintainability

- » Semi-closed dual screw compressor for high efficiency;
- » Low pressure loss design;
- » Efficient vertical oil separator: with a tight structure, cyclone separation, inertial impaction, natural setting and adsorption separation, oil and gas is separated thoroughly. Oil separation efficiency is up to 99.89%.



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



Model	LHE _Nb		353CE5AE2	353CE4AE1E	533CE3CE3	553CE2CE2	553CE1CE1E	643EE7EE			
Cooling capacity	kW		261.6	294.7	341.3	367.9	425.8	455.3			
	RT		74.4	83.8	97.0	104.6	121.1	129.4			
Capacity adjustment range	%				25%-100%						
EER	W/W		5.89	5.94	6.01	6.05	6.06	6.02			
IPLV	W/W		6.94	7.04	7.11	7.16	7.11	7.04			
Power supply	V/Ph/Hz				380V 3~ 50Hz						
Power input	kW		44.4	49.6	56.8	60.8	70.3	75.6			
RLA	A		78.4	87.6	100.4	107.4	124.2	133.6			
Compressor	Type	-			Semi-closed permanent magnetic synchronous inverter screw compressor						
	Starting mode	-			Y— △ /Soft start						
	Quantity	-	1	1	1	1	1	1			
Refrigerant charge volume	kg		85	100	105	110	115	130			
Refrigeration oil	Type	-			CPI-Solest-170						
	Charge volume	L	20	20	20	23	23	23			
Evaporator	Type	-			Flooded shell and tube evaporator						
	Fouling factor	m·°C/kW	0.018	0.018	0.018	0.018	0.018	0.018			
	Water flow rate	m³/h	41	46	53	58	125	71			
		GPM	180	203	235	253	549	313			
	Pressure drop	kPa	36.6	37.8	32.5	35.6	32.1	33.7			
		ft.H₂O	12.0	12.4	10.7	11.7	10.5	11.1			
	Connection pipe	mm	DN100	DN100	DN100	DN100	DN100	DN100			
Condenser	Type	-			Horizontal shell and tube condenser						
	Fouling factor	m·°C/kW	0.044	0.044	0.044	0.044	0.044	0.044			
	Water flow volume	m³/h	51	57	66	71	83	88			
		GPM	224	252	292	314	363	389			
	Pressure drop	kPa	41.9	44.7	42.2	42.3	46.1	40.9			
		ft.H₂O	13.7	14.7	13.8	13.9	15.1	13.4			
	Connection pipe	mm	DN100	DN100	DN125	DN125	DN125	DN125			
Sound pressure level(Max.)	dB(A)		81	81.2	82	82.5	82.8	83			
Dimension	Outline(Wx Dx H)	mm	3170x1188x1850	3170x1188x1850	3175x1365x1959	3175x1365x1959	3175x1365x1959	3175x1365x1959	3240x1465x2050		
	Package(Wx Dx H)	mm	3400x1350x1900	3400x1350x1900	3400x1550x2050	3400x1550x2050	3400x1550x2050	3400x1550x2050	3400x1600x2250		
Net/Gross/Operating weight	kg		2300/2400/2450	2330/2430/2450	2730/2850/2900	2780/2880/2950	2800/2900/2950	3350/3450/3550			
Loading quantity 40'GP/40'HQ	set		1	1	1	1	1	1			

Model	LHE_/_Nb	653EE6EE6	653EE5EE5E	822EE4EE4	832EE3EE3	832EE2EE2E	862EE1EE1		
Cooling capacity	kW	484.6	544.7	593.7	663	698.0	744.9		
	RT	137.8	154.8	168.8	188.5	198.5	211.8		
Capacity adjustment range	%			25%-100%					
EER	W/W	6.05	6.03	6.02	6.02	6.02	6.03		
IPLV	W/W	7.17	7.02	7.06	7.05	7.10	7.11		
Power supply	V/Ph/Hz			380V 3~50Hz					
Power input	kW	80.1	90.3	98.6	110.1	116.0	123.6		
RLA	A	141.5	159.5	174.2	194.5	204.8	218.4		
Compressor	Type	-	Semi-closed permanent magnetic synchronous inverter screw compressor						
	Starting mode	-	Y—△ /Soft start						
	Quantity	-	1	1	1	1	1		
Refrigerant charge volume	kg	140	150	180	190	180	180		
Refrigeration oil	Type	-	CPI-Solest-170						
	Charge volume	L	23	23	28	28	28		
Evaporator	Type	-	Flooded shell and tube evaporator						
	Fouling factor	m°C/kW	0.018	0.018	0.018	0.018	0.018		
	Water flow rate	m³/h	76	85	93	104	109		
		GPM	334	375	409	456	481		
	Pressure drop	kPa	36.5	40.7	36.2	39.6	36.4		
		ft.H₂O	12.0	13.3	11.9	13.0	11.9		
	Connection pipe	mm	DN125	DN125	DN150	DN150	DN150		
Condenser	Type	-	Horizontal shell and tube condenser						
	Fouling factor	m°C/kW	0.044	0.044	0.044	0.044	0.044		
	Water flow volume	m³/h	94	106	115	129	135		
		GPM	414	465	507	566	596		
	Pressure drop	kPa	43.1	45.3	41.8	44.2	43.1		
		ft.H₂O	14.1	14.9	13.7	14.5	14.1		
	Connection pipe	mm	DN125	DN125	DN150	DN150	DN150		
Sound pressure level(Max.)	dB(A)	83.5	83.8	85	86	86.8	87		
Dimension	Outline(WxDxH)	mm	3240x1465x2040	3240x1465x2040	3240x1508x2100	3240x1508x2100	3240x1508x2100		
	Package(WxDxH)	mm	3400x1600x2200	3400x1600x2200	3400x1650x2250	3400x1650x2250	3400x1650x2250		
Net/Gross/Operating weight	kg	3370/3470/3550	3400/3500/3600	3830/3930/4050	3880/3980/4100	3930/4030/4150	3980/4080/4200		
Loading quantity	40'GP/40'HQ	set	1	1	1	1	1		

Model LHE-/Nb		932EE9EE9E	942HE3GE3	952HE2GE2	952HE1GE1E	533GF2EF2-2	553GF2EF2-2	
Cooling capacity	kW	842.0	911.8	971.7	1052.0	697.5	744.1	
	RT	239.4	259.2	276.5	299.1	198.3	211.5	
Capacity adjustment range	%	25%-100%			12.5%-100%			
EER	W/W	5.78	5.79	5.83	5.90	6.02	6.03	
IPLV	W/W	7.72	7.65	7.50	7.56	7.10	7.14	
Power supply	V/Ph/Hz	380V 3~ 50Hz						
Power input	kW	145.8	157.4	166.8	178.4	115.9	123.5	
RLA	A	257.6	278.1	294.2	315.2	204.8	218.2	
Compressor	Type	-	Semi-closed permanent magnetic synchronous inverter screw compressor					
	Starting mode	-	Y— △ /Soft start					
Quantity	-	1	1	1	1	2	2	
Refrigerant charge volume	kg	240	260	260	280	200	220	
Refrigeration oil	Type	-	CPI-Solest-170					
	Charge volume	L	35	35	35	40	46	
Evaporator	Type	-	Flooded shell and tube evaporator					
	Fouling factor	m°C/kW	0.018	0.018	0.018	0.018	0.018	0.018
	Water flow rate	m³/h	132	143	152	164	109	116
		GPM	580	628	670	724	480	512
	Pressure drop	kPa	36.7	29.5	29.2	29.5	36.1	40.5
		ft.H₂O	12.0	9.7	9.6	9.7	11.8	13.3
Condenser	Connection pipe	mm	DN150	DN150	DN150	DN150	DN150	DN150
	Type	-	Horizontal shell and tube condenser					
	Fouling factor	m°C/kW	0.044	0.044	0.044	0.044	0.044	0.044
	Water flow volume	m³/h	164	178	189	205	135	144
		GPM	723	783	834	901	596	635
	Pressure drop	kPa	41.0	32.9	32.5	32.6	41.1	46.0
Sound pressure level(Max.)		ft.H₂O	13.4	10.8	10.7	10.7	13.5	15.1
	Connection pipe	mm	DN150	DN200	DN200	DN200	DN150	DN150
Sound pressure level(Max.)	dB(A)	88	88.5	88.8	89	82.3	82.8	
Dimension	Outline(WxDxH)	mm	3260x1740x2370	3390x1830x2370	3390x1830x2370	3390x1830x2370	3485x1530x2185	3485x1530x2185
	Package(WxDxH)	mm	3450x1850x2550	3450x1850x2550	3450x1850x2550	3450x1850x2550	3600x1700x2300	3600x1700x2300
Net/Gross/Operating weight	kg	4800/4950/5100	5400/5550/5700	5500/5650/5750	5600/5750/5950	5250/5450/5500	5330/5530/5600	
Loading quantity 40°GP/40°HQ	set	1	1	1	1	1	1	

Model LHE_Nb		553GF1EF1E-2	643GH3GH6-2	653GH2GH5-2	653GH1GH4E-2	822HJ6GJ6-2	832HJ5GJ5-2	
Cooling capacity	kW	842.0	911.1	969.6	1090.0	1188.0	1287.0	
	RT	239.4	259.0	275.7	309.9	337.8	365.9	
Capacity adjustment range		%	12.5%-100%					
EER		W/W	6.10	6.03	6.05	6.16	6.11	6.11
IPLV		W/W	7.20	7.04	7.16	7.19	7.19	7.20
Power supply		V/Ph/Hz	380V 3~ 50Hz					
Power input		kW	138.1	151.2	160.2	176.9	194.3	210.8
RLA		A	244.0	267.1	282.9	312.5	343.3	372.4
Compressor	Type	-	Semi-closed permanent magnetic synchronous inverter screw compressor					
	Starting mode	-	Y— △ /Soft start					
	Quantity	-	2	2	2	2	2	2
Refrigerant charge volume		kg	240	270	280	310	360	380
Refrigeration oil	Type	-	CPI-Solest-170					
	Charge volume	L	46	46	46	46	56	56
Evaporator	Type	-	Flooded shell and tube evaporator					
	Fouling factor	m°C/kW	0.018	0.018	0.018	0.018	0.018	0.018
	Water flow rate	m³/h	132	142	152	170	186	201
		GPM	580	627	668	750	818	886
	Pressure drop	kPa	45.3	50.1	49.1	53.6	74.8	74.2
	ft.H₂O		14.9	16.4	16.1	17.6	24.5	24.3
	Connection pipe	mm	DN150	DN150	DN150	DN150	DN200	DN200
Condenser	Type	-	Horizontal shell and tube condenser					
	Fouling factor	m°C/kW	0.044	0.044	0.044	0.044	0.044	0.044
	Water flow volume	m³/h	163	177	188	211	229	248
		GPM	718	778	827	928	1009	1093
	Pressure drop	kPa	48.1	60	59.3	63	85	85.7
	ft.H₂O		15.8	19.7	19.5	20.7	27.9	28.1
	Connection pipe	mm	DN150	DN200	DN200	DN200	DN200	DN200
Sound pressure level(Max.)		dB(A)	83	83.3	83.8	84	85.3	86.3
Dimension	Outline(WxDxH)	mm	3485x1530x2185	4020x1600x2200	4020x1600x2200	4020x1600x2200	4550x1800x2200	4550x1800x2200
	Package(WxDxH)	mm	3600x1700x2300	4150x1750x2300	4150x1750x2300	4150x1750x2300	4650x1850x2400	4650x1850x2400
Net/Gross/Operating weight		kg	5380/5580/5700	6350/6550/6700	6380/6580/6750	6420/6620/6800	7790/8040/8250	7850/8100/8300
Loading quantity	40'GP/40'HQ	set	1	1	1	1	1	1

Note: These models are not for EU.

## Permanent Magnetic Synchronous Inverter Screw Chiller

Model LHE /Nb	832HJ4GJ4E-2	842HJ4GJ4E-2	932KK3JK3-2	932KK4JK4-2	942KK2JK2-2	952KK1JK1E-2	952LK1JK5E-2		
Cooling capacity	kW	1386.0	1467.0	1583.0	1682.0	1832.0	1982.0	2102	
	RT	394.1	416.8	450.1	478.2	520.9	563.5	597.4	
Capacity adjustment range	%	12.5%-100%							
EER	W/W	6.12	6.15	5.78	5.80	5.82	5.85	5.91	
IPLV	W/W	7.15	7.14	7.72	7.68	7.69	7.63	7.54	
Power supply	V/Ph/Hz	380V 3~ 50Hz							
Power input	kW	226.5	238.5	273.7	289.9	314.6	338.9	355.6	
RLA	A	400.2	421.4	483.0	511.8	556.0	559.1	629.0	
Compressor	Type	Semi-closed permanent magnetic synchronous inverter screw compressor							
	Starting mode	Y—△ /Soft start							
Quantity	-	2	2	2	2	2	2		
Refrigerant charge volume	kg	420	420	550	550	580	600	600	
Refrigeration oil	Type	CPI-Solest-170							
	Charge volume	L	56	56	70	70	70	70	
Evaporator	Type	Flooded shell and tube evaporator							
	Fouling factor	m°C/kW	0.018	0.018	0.018	0.018	0.018	0.018	
	Water flow rate	m³/h	217	229	248	263	286	310	329
		GPM	954	1010	1090	1158	1261	1365	1447
	Pressure drop	kPa	72.8	80.5	54.2	53.7	56.8	54.1	52.2
		ft.H <sub>2</sub> O	23.9	26.4	17.8	17.6	18.6	17.7	17.1
	Connection pipe	mm	DN200	DN200	DN250	DN250	DN250	DN250	
Condenser	Type	Horizontal shell and tube condenser							
	Fouling factor	m°C/kW	0.044	0.044	0.044	0.044	0.044	0.044	
	Water flow rate	m³/h	267	283	309	328	357	386	409
		GPM	1177	1245	1360	1444	1572	1699	1799
	Pressure drop	kPa	84.4	93	35.3	35.4	37.5	36.2	37.2
		ft.H <sub>2</sub> O	27.7	30.5	11.6	11.6	12.3	11.9	12.2
	Connection pipe	mm	DN200	DN200	DN250	DN250	DN250	DN250	
	Sound pressure level(Max.)	dB(A)	87	87.3	88.3	88.8	89	89.3	89.5
Dimension	Outline(W×D×H)	mm	4550×1800×2200	4550×1800×2200	4600×1770×2490	4600×1770×2490	4720×1900×2530	4720×1900×2530	4720×1900×2530
	Package(W×D×H)	mm	4550×1800×2200	4550×1800×2200	4650×1900×2650	4650×1900×2650	4750×2000×2700	4750×2000×2700	4750×2000×2700
Net/Gross/Operating weight	kg	7900/8150/8400	7950/8200/8450	9450/9760/10050	9600/9910/10200	9700/10010/10250	9750/10060/10400	9800/10110/10500	
Loading quantity 40'GP/40'HQ	set	1	1	1	1	1	1	1	

Note: These models are not for EU.

### LHVE Series

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



High efficiency



Compact design



Energy saving function



Easier maintainability



Wide voltage range



All DC inverter technology

- » Synergy control method of speed and volume;
- » Bilateral drive and efficient GRZ-type curve;
- » Efficient permanent magnetic synchronous inverter motor;
- » Full DC electronic control system.



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



Model		LHVE432GE8GE8/Nb-M	LHVE432GE7GE7/Nb-M	LHVE432GE6GE6/Nb-M	LHVE532GE5GE5/Nb-M	LHVE532GE4GE4/Nb-M
Cooling capacity	kW	348.3	421.4	470.7	522.5	574.7
	RT	99.1	119.9	133.9	148.6	163.5
Capacity adjustment range	%	10%-100%				
EER	W/W	5.94	5.93	5.88	5.88	5.88
IPLV	W/W	9.93	10.08	10.10	9.96	10.04
Power supply	V/Ph/Hz	380V 3~ 50Hz/60Hz; 400-415V 3~ 50Hz/60Hz				
Power input	kW	58.6	71.0	80.0	88.9	97.7
Compressor	Type	-	Semi-closed permanent magnetic synchronous inverter screw compressor			
	Starting mode	-	Inverter startup			
	Quantity	-	1	1	1	1
Refrigerant charge volume	kg	140	140	140	180	180
Refrigeration oil	Type	-	CPI-Solest-170			
	Charge volume	L	20	20	20	23
Evaporator	Type	-	Mixed falling film evaporator			
	Fouling factor	m·°C/kW	0.0176	0.0176	0.0176	0.0176
	Water flow rate	m³/h	54	65	73	81
		GPM	238	286	321	357
	Pressure drop	kPa	38.3	38.4	39.2	40.0
Condenser		ft.H₂O	12.6	12.6	12.9	13.1
	Connection pipe	mm	DN125	DN125	DN125	DN125
	Type	-	Horizontal shell and tube condenser			
	Fouling factor	m·°C/kW	0.044	0.044	0.044	0.044
Dimension	Water flow volume	m³/h	68	82	92	102
		GPM	299	361	405	449
	Pressure drop	kPa	45.6	45.6	45.7	44.8
Net/Gross/Operating weight	Connection pipe	ft.H₂O	15.0	15.0	15.0	14.7
	Sound pressure level(Max.)	mm	DN150	DN150	DN150	DN150
Loading quantity	Outline(WxDxH)	dB(A)	80.0	82.0	84.0	82.0
	Package(WxDxH)	mm	3320×1560×1980	3320×1560×1980	3320×1560×1980	3320×1570×1980
Net/Gross/Operating weight	Net/Gross/Operating weight	kg	3500/3650/3710	3550/3700/3770	3600/3750/3820	3680/3830/3900
	Loading quantity	set	1	1	1	1

Model		LHVE832HE3JE3/Nb-M	LHVE832HE2JE2/Nb-M	LHVE532LJ4LJ4-2/Nb-M	LHVE532LJ3LJ3-2/Nb-M	LHVE532LJ2LJ2-2/Nb-M	
Cooling capacity	kW	931.2	991.6	1045.0	1149.0	1271.0	
	RT	264.8	282.0	297.2	326.8	361.5	
Capacity adjustment range	%	10%-100%		5%-100%			
EER	W/W	5.63	5.62	6.21	6.17	6.11	
IPLV	W/W	9.70	9.71	10.58	10.61	10.61	
Power supply	V/Ph/Hz	380V 3~ 50Hz/60Hz; 400-415V 3~ 50Hz/60Hz					
Power input	kW	165.4	176.5	168.3	186.2	207.9	
Compressor	Type	-	Semi-closed permanent magnetic synchronous inverter screw compressor				
	Starting mode	-	Inverter startup				
	Quantity	-	1	1	2	2	
Refrigerant charge volume	kg	250	280	360	360	400	
Refrigeration oil	Type	-	CPI-Solest-170				
	Charge volume	L	28	28	46	46	
Evaporator	Type	-	Mixed falling film evaporator				
	Fouling factor	m·°C/kW	0.0176	0.0176	0.0176	0.0176	
	Water flow rate	m³/h	144	154	162	178	
		GPM	634	678	713	784	
	Pressure drop	kPa	40.0	34.3	37.9	39.6	
Condenser	Connection pipe	ft.H₂O	13.1	11.3	12.4	13.0	
	Type	mm	DN150	DN150	DN200	DN200	
	Fouling factor	m·°C/kW	0.044	0.044	0.044	0.044	
	Water flow volume	m³/h	182	194	202	222	
Net/Gross/Operating weight	Pressure drop	GPM	801	854	889	997	
	Connection pipe	kPa	42.8	43.7	43.0	46.3	
	Sound pressure level(Max.)	ft.H₂O	14.0	14.3	14.1	15.2	
Dimension	Outline(WxDxH)	dB(A)	83.0	84.0	84.0	85.0	
	Package(WxDxH)	mm	3400×1860×2040	3400×1860×2040	4600×1920×2090	4600×1920×2090	
Net/Gross/Operating weight	Net/Gross/Operating weight	kg	5100/5300/5400	5150/5350/5460	7850/8100/8320	7900/8150/8370	
	Loading quantity	set	1	1	1	1	

Model		LHVE532GE3GE3/Nb-M	LHVE732HE7JE7/Nb-M	LHVE732HE6JE6/Nb-M	LHVE732HE5JE5/Nb-M	LHVE832HE4JE4/Nb-M
Cooling capacity	kW	644.4	696.6	757.6	817.7	870.9
	RT	183.3	198.1	215.5	232.6	247.7
Capacity adjustment range	%	10%-100%				
EER	W/W	5.86	5.86	5.84	5.82	5.65
IPLV	W/W	10.08	10.00	10.03	10.04	9.68
Power supply	V/Ph/Hz	380V 3~ 50Hz/60Hz; 400-415V 3~ 50Hz/60Hz				
Power input	kW	110.1	118.9	129.8	140.6	154.2
Compressor	Type	-	Semi-closed permanent magnetic synchronous inverter screw compressor			
	Starting mode	-	Inverter startup			
	Quantity	-	1	1	1	1
Refrigerant charge volume	kg	200	220	220	250	250
Refrigeration oil	Type	-	CPI-Solest-170			
	Charge volume	L	23	23	23	28
Evaporator	Type	-	Mixed falling film evaporator			
	Fouling factor	m·°C/kW	0.0176	0.0176	0.0176	0.0176
	Water flow rate	m³/h	100	108	117	127
		GPM	440	476	515	559
	Pressure drop	kPa	40.9	40.8	40.8	35.1
Condenser	ft.H₂O	13.4	13.4	13.4	11.5	12.3
	Connection pipe	mm	DN125	DN150	DN150	DN150
	Type	-	Horizontal shell and tube condenser			
	Fouling factor	m·°C/kW	0.044	0.044	0.044	0.044
Net/Gross/Operating weight	Water flow volume	m³/h	126	136	148	159
		GPM	555	599	652	700
Dimension	Pressure drop	kPa	44.9	44.0	41.6	43.3
	Connection pipe	ft.H₂O	14.7	14.4	13.6	14.2
	Sound pressure level(Max.)	dB(A)	84.0	82.0	83.0	84.0
	Outline(WxDxH)	mm	3320×1570×1980	3400×1700×2010	3400×1700×2010	3400×1700×2010
Net/Gross/Operating weight	Package(WxDxH)	mm	3400×1650×2100	3400×1700×2100	3400×1700×2100	3450×1900×2150
	Net/Gross/Operating weight	kg	3750/3900/3980	4350/4500/4660	4400/4550/4660	4450/4600/4720
Loading quantity	40'GP/40'HQ	set	1	1	1	1



# CENTRIFUGAL CHILLER

CE Series Fixed-speed  
Centrifugal Chiller

CVE Series Permanent  
Magnet Synchronous Inverter  
Centrifugal Chiller

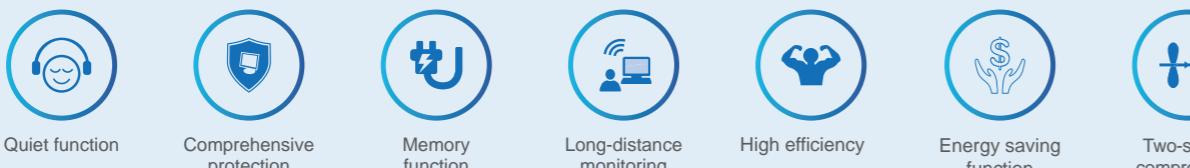
CCE Series Magnetic  
Bearing Inverter Centrifugal  
Chiller



## CE Series Fixed-speed Centrifugal Chiller

R134A

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



» Two-stage compressor air makeup technology and economizer are adopted to improve efficiency by 5~6% compared with one-stage cooling circulation system. Rotation speed of compressor is reduced, operation reliability is improved and lifespan is prolonged. Meanwhile, surge margin is wide and operation range is wide.

» Variable-area diffuser is adopted to effectively improve surge margin and system operation range, and reduce noise and vibration.

» With integrated startup cabinet and wire connection in the factory, user only needs to provide power cord, so wire connection during installation is simplified and floor area of startup cabinet is reduced.

» Semi-enclosed motor and helical refrigerant ejecting cooling technology is adopted to not only reduce the risk of refrigerant and lubricant leakage, but also prevent heat dissipation in machine room, reducing the cooling device cost and operation cost.

» New heat exchanger specially designed for centrifugal chiller contributes to even distribution of refrigerant, rational temperature field and heat exchange rate improvement; meanwhile, the heat exchanger adopts high-efficiency heat exchange tube for reducing heat transfer resistance and improving the system's cooling capacity and energy efficiency ratio.

» User-friendly touch screen is adopted for convenient operation.

» High-performance digital signal processing and intelligent control technology is adopted.

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

## Notes:

- 1.Above model selection is applicable to the condition in which leaving chilled water temperature is 6.67°C and entering cooling water temperature is 29.44°C.
- 2.CE610UN4SN4-2-G-CE621UN1SN1-2-G adopt independent dual-system structure.
- 3.Above water flow is indicated according to ARI 550/590-2018; IPLV is the test value obtained based on the working condition specified in ARI 550/590-2018.
- 4.Fouling coefficients of chilled water and cooling water are 0.018 m<sup>2</sup>·C/kW and 0.044 m<sup>2</sup>·C/kW respectively.
- 5.For special working condition, please contact Gree's local sales agent.
- 6.Standard unit's water side bearing pressure is 1.0MPa; 1.6MPa is an available option.
- 7.The unit's performance parameters may be changed without prior notice due to product improvement. For the specific parameters, please refer to product nameplate.

Model	CE310LG2HG2	CE311LG1HG1	CE320MH4HH2	CE321MH3HH1	CE330MH2JH2	CE331MHJH1
Cooling capacity	kW	1231	1406	1582	1758	1934
	RT	350	400	450	500	550
EER	W/W	6.10	6.09	6.38	6.42	6.54
IPLV	W/W	6.64	6.63	6.69	6.97	6.91
Power supply	V/Ph/ Hz				380/3/50	
Power input	kW	201.7	230.9	248.0	273.8	295.7
RLA	A	344.4	394.2	423.4	467.5	504.8
Compressor	Type	-			Centrifugal	
Starting mode	-				Y-△	
Quantity	-	1	1	1	1	1
Refrigerant charge volume	kg	425	450	550	575	600
Refrigeration oil	Type	-			No.68 synthetic fatty oil	
Charge volume	L	50	50	50	50	50
Evaporator	Type	-			Flooded	
Fouling factor	m <sup>2</sup> ·°C/ kW	0.018	0.018	0.018	0.018	0.018
Water flow volume	L/s	53.05	60.62	68.2	75.78	83.36
	GPM	840.9	961.0	1081.0	1201.0	1321.0
	kPa	72.1	72.6	74.3	74.3	74.4
	ft.WG	23.6	23.8	24.4	24.4	24.4
Condenser	Connection pipe	mm	DN200	DN200	DN250	DN250
Type	-				Shell and Tube	
Fouling factor	m <sup>2</sup> ·°C/ kW	0.044	0.044	0.044	0.044	0.044
Water flow volume	L/s	66.28	75.77	84.69	94.02	103.20
	GPM	1051.0	1201.0	1343.0	1490.0	1635.0
	kPa	58.6	57.9	65.0	70.0	67.7
	ft.WG	19.2	19.0	21.3	23.0	21.9
Sound pressure level(Max.)	dB(A)	82	82	82	82	82
Dimension (WxDxH)	Outline	mm	3850x1810x2220	3850x1810x2220	4300x1850x2310	4300x1850x2310
	Package	mm	3950x1950x2570	3950x1950x2570	4450x1900x2670	4450x1900x2670
Net/Gross/Operating weight	kg	6750/7675/7450	7000/7950/7750	7300/8350/8200	7500/8575/8400	7850/8950/8800
Loading quantity	40'GP/40'HQ	set	1	1	1	1

Model	CE410PIEKIE	CE411PIDKID	CE420PICKIC	CE421PIBKIB	CE510PIAKIA	CE511QJCMJD
Cooling capacity	kW	2285	2461	2637	2813	2989
	RT	650	700	750	800	850
EER	W/W	6.39	6.29	6.35	6.38	6.52
IPLV	W/W	6.83	7.02	6.95	7.11	7.08
Power supply	V/Ph/ Hz				380/3/50	
Power input	kW	357.7	391.3	415.3	440.9	471.4
RLA	A	610.6	668.0	708.9	752.6	804.7
Compressor	Type	-			Centrifugal	
Starting mode	-				Y-△	
Quantity	-	1	1	1	1	1
Refrigerant charge volume	kg	650	850	850	900	900
Refrigeration oil	Type	-			No.68 synthetic fatty oil	
Charge volume	L	60	60	60	60	80
Evaporator	Type	-			Flooded	
Fouling factor	m <sup>2</sup> ·°C/ kW	0.018	0.018	0.018	0.018	0.018
Water flow volume	L/s	98.51	106.10	113.70	121.20	128.80
	GPM	1562.0	1682.0	1802.0	1922.0	2041.7
	kPa	66.2	66.3	66.0	66.0	65.9
	ft.WG	21.7	21.7	21.6	21.6	23.3
Condenser	Connection pipe	mm	DN250	DN250	DN250	DN300
Type	-				Shell and Tube	
Fouling factor	m <sup>2</sup> ·°C/ kW	0.044	0.044	0.044	0.044	0.044
Water flow volume	L/s	122.30	132.00	141.20	150.60	160.10
	GPM	1938.0	2092.5	2238.3	2387.3	2537.9
	kPa	62.2	62.5	62.4	60.0	62.2
	ft.WG	20.4	20.5	20.5	19.7	20.4
Sound pressure level(Max.)	dB(A)	83	83	83	83	84
Dimension (WxDxH)	Outline	mm	4550x2010x2390	4550x2010x2390	4550x2010x2390	4550x2010x2390
	Package	mm	4700x2100x2600	4700x2100x2600	4700x2100x2600	4700x2100x2600
Net/Gross/Operating weight	kg	9600/10100/10700	9850/10350/11150	10100/10600/11400	10350/10850/11550	10800/12050/12150
Loading quantity	40'GP/40'HQ	set	1	1	1	1



CAC

Model	CE512QJBMC	CE520QQAMJ	CE521RJAMJA	CE522RJAMJA	CE610SKNQKN	CE611SKMQKM	
Cooling capacity	kW	3340	3516	3692	3868	4219	
	RT	950	1000	1050	1100	1200	
EER	W/W	6.54	6.55	6.60	6.60	6.39	
IPLV	W/W	7.12	6.93	7.07	7.19	6.95	
Power supply	V/Ph/Hz	380/3/50					
Power input	kW	510.7	536.8	559.4	586.0	660.3	
RLA	A	871.9	916.4	954.9	1000.0	1127.0	
Compressor	Type	-	Centrifugal				
Starting mode	-	Y-△			soft starting		
Quantity	-	1	1	1	1	1	
Refrigerant charge volume	kg	1050	1050	1150	1150	1500	
Refrigeration oil	Type	-	No.68 synthetic fatty oil				
Charge volume	L	80	80	80	80	100	
Type	-	Flooded					
Evaporator	Fouling factor	m²·°C/kW	0.018	0.018	0.018	0.018	
Water flow volume	L/s	144.0	151.6	159.1	166.7	181.9	
	GPM	2282.0	2403.0	2523.0	2643.0	2883.0	
Pressure drop	kPa	70.9	71.0	65.4	71.0	56.0	
	ft.WG	23.3	23.3	21.5	23.3	18.4	
Connection pipe	mm	DN300	DN300	DN300	DN300	DN350	
Condenser	Type	-	Shell and Tube				
Fouling factor	m²·°C/kW	0.044	0.044	0.044	0.044	0.044	
Water flow volume	L/s	178.2	187.5	196.7	206.1	225.8	
	GPM	2825.0	2973.0	3118.0	3267.0	3579.4	
Pressure drop	kPa	69.9	69.9	64.4	69.8	47.9	
	ft.WG	22.9	22.9	21.1	22.9	15.7	
Connection pipe	mm	DN300	DN300	DN300	DN350	DN350	
Sound pressure level(Max.)	dB(A)	84	84	84	84	85	
Dimension (WxDxH)	Outline	4980x2210x2610	4980x2210x2610	4980x2310x2710	4980x2310x2710	5250x2530x2880	
	Package	5300x2300x2850	5300x2300x2850	5300x2600x2950	5300x2600x2950	5600x2900x3100	
Net/Gross/Operating weight	kg	12250/12750/13850	12500/13000/14100	13156/13700/14950	13429/14000/15200	16600/17100/18950	
Loading quantity	40'GP/40'HQ	set	1	1	1	1	

Model	CE620SKLQKL	CE621TKRKN-G	CE630TKMRKM-G	CE631TKRLK-G	CE710TLNRLL-G	CE711TLMSLP-G	
Cooling capacity	kW	4922	5274	5626	5977	6329	
	RT	1400	1500	1600	1700	1800	
EER	W/W	6.38	6.55	6.62	6.50	6.66	
IPLV	W/W	6.95	7.14	7.08	7.24	7.12	
Power supply	V/Ph/Hz	380/3/50					
Power input	kW	771.5	805.2	849.8	898.8	950.3	
RLA	A	1317	52.2	55.1	58.3	61.6	
Compressor	Type	-	Centrifugal				
Starting mode	-	soft starting	Direct starting				
Quantity	-	1	1	1	1	1	
Refrigerant charge volume	kg	1500	1600	1650	1700	2000	
Refrigeration oil	Type	-	No.68 synthetic fatty oil				
Charge volume	L	100	100	100	100	120	
Type	-	Flooded					
Evaporator	Fouling factor	m²·°C/kW	0.018	0.018	0.018	0.018	
Water flow volume	L/s	212.20	227.30	242.50	257.60	272.80	
	GPM	3364.0	3604.0	3844.0	4084.0	4325.0	
Pressure drop	kPa	56.9	52.6	52.3	52.9	63.8	
	ft.WG	18.7	17.3	17.2	17.4	20.9	
Connection pipe	mm	DN350	DN350	DN350	DN400	DN400	
Condenser	Type	-	Shell and Tube				
Fouling factor	m²·°C/kW	0.044	0.044	0.044	0.044	0.044	
Water flow volume	L/s	263.50	281.30	299.60	319.10	338.10	
	GPM	4177.0	4459.2	4749.3	5058.4	5359.6	
Pressure drop	kPa	47.8	46.7	46.0	46.4	64.5	
	ft.WG	15.7	15.3	15.1	15.2	21.2	
Connection pipe	mm	DN350	DN400	DN400	DN450	DN450	
Sound pressure level(Max.)	dB(A)	85	85	85	86	86	
Dimension (WxDxH)	Outline	5250x2530x2880	5400x2750x3000	5400x2750x3000	5400x2750x3000	5800x2750x3100	
	Package	5600x2900x3100	5700x3150x3200	5700x3150x3200	5700x3150x3200	6200x3000x3350	
Net/Gross/Operating weight	kg	17400/17900/19750	18600/21250/21250	19000/21500/21700	19500/22050/22250	20500/28000/23550	
Loading quantity	40'GP/40'HQ	set	1	1	1	1	

Model	CE720TLLRLO-G	CE721ULNSLN-G	CE730ULMSLM-G	CE731ULLSLL-G	CE810WSOUSO-G	CE810WSNJSN-G	
Cooling capacity	kW	7032	7384	7735	8087	8438	
	RT	2000	2100	2200	2300	2400	
EER	W/W	6.66	6.68	6.70	6.71	6.68	
IPLV	W/W	7.13	7.27	7.17	7.30	7.30	
Power supply	V/Ph/Hz	380/3/50					
Power input	kW	1056.0	1105.0	1155.0	1205.0	1263.0	
RLA	A	68.5	71.7	74.9	78.2	81.9	
Compressor	Type	-	Centrifugal				
Starting mode	-	Direct starting					
Quantity	-	1	1	1	1	1	
Refrigerant charge volume	kg	2050	2100	2200	2300	2400	
Refrigeration oil	Type	-	No.68 synthetic fatty oil				
Charge volume	L	120	120	120	120	140	
Type	-	Flooded					
Evaporator	Fouling factor	m²·°C/kW	0.018	0.018	0.018	0.018	
Water flow volume	L/s	303.1	318.3	333.4	348.6	363.7	
	GPM	4805	5045	5286	5526	5766	
Pressure drop	kPa	63.5	61.1	60.9	61.1	69.4	
	ft.WG	20.8	20.0	20.0	20.0	22.8	
Connection pipe	mm	DN400	DN400	DN400	DN400	DN500	
Condenser	Type	-	Shell and Tube				
Fouling factor	m²·°C/kW	0.044	0.044	0.044	0.044	0.044	
Water flow volume	L/s	375.7	392.8	411.4	430.0	448.9	
	GPM	5956	6227	6521	6816	7116	
Pressure drop	kPa	63.6	60.8	60.4	60.3	64.2	
	ft.WG	20.9	19.9	19.8	21.1	20.3	
Connection pipe	mm	DN450	DN450	DN450	DN450	DN500	
Sound pressure level(Max.)	dB(A)	86	86	86	92	92	
Dimension (WxDxH)	Outline	5800x2750x3100	5800x3000x3300	5800x3000x3300	6400x3370x3750	6400x3370x3750	
	Package	6200x3000x3350	6100x3550x3550	6100x3550x355			

# CVE Series Permanent Magnet Synchronous Inverter Centrifugal Chiller



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



- As it adopts high-efficiency motor direct-driven two-stage impellers with simpler structure and more reliable operation, the size and weight of compressor is only 40% of the conventional compressor with the same cooling capacity.
- It adopts high-efficiecy permanent magnet synchronous inverter motor, whose power is over 400kW and rotation speed is over 18000rp. Meanwhile, the helical refrigerant ejecting cooling technology is adopted to ensure high-efficiency operation of the motor.
- The design of impeller and diffuser is optimized for achieving high-efficiency operation of compressor in various loads.
- It adopts 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 compressor air makeup 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.



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

Model		CVE210HG4GG4D	CVE210HG4GG4	CVE210HG3GG3D	CVE210HG3GG3	CVE220HG2GG2D	CVE220HG2GG2
Cooling capacity	kW	879	879	967	967	1055	1055
	RT	250	250	275	275	300	300
EER	W/W	6.17	6.17	6.09	6.09	6.46	6.46
	IPLV	W/W	10.06	10.06	10.31	10.31	10.37
Power supply	V/Ph/Hz			380/3/50			
	Power input	kW	142.5	142.5	158.8	158.8	163.3
RLA	A	230.3	218.6	256.6	243.7	263.9	250.6
Compressor	Type	-		Centrifugal			
Starting mode	-			Variable frequency start			
Quantity	-	1	1	1	1	1	1
Refrigerant charge volume	kg	250	350	250	375	300	350
Refrigeration oil	Type	-		No.68 synthetic fatty oil			
	Charge volume	L	25	25	25	25	25
Evaporator	Type	-	Falling film	Flooded	Falling film	Flooded	Falling film
Fouling factor	m <sup>2</sup> ·°C/kW	0.018	0.018	0.018	0.018	0.018	0.018
Water flow volume	L/s	37.89	37.89	41.68	41.68	45.47	45.47
GPM	600.6	600.6	660.7	660.7	720.8	720.8	
kPa	65.4	65.4	65.8	65.8	65.4	65.4	
ft.WG	21.5	21.5	21.6	21.6	21.5	21.5	
Connection pipe	mm	DN200	DN200	DN200	DN200	DN200	DN200
Condenser	Type	-		Shell and tube			
Fouling factor	m <sup>2</sup> ·°C/kW	0.044	0.044	0.044	0.044	0.044	0.044
Water flow volume	L/s	47.27	47.27	52.09	52.09	56.37	56.37
GPM	749.3	749.3	825.7	825.7	893.6	893.6	
kPa	55.9	55.9	56.4	56.4	56.6	56.6	
ft.WG	18.3	18.3	18.5	18.5	18.6	18.6	
Connection pipe	mm	DN200	DN200	DN200	DN200	DN200	DN200
Sound pressure level(Max.)	dB(A)	80	80	80	80	80	80
Dimension (WxDxH)	Outline	3770x1590x1910	3770x1590x1910	3770x1590x1910	3770x1590x1910	3770x1590x1910	3770x1590x1910
Package	mm	3900x1750x2200	3900x1750x2050	3900x1750x2200	3900x1750x2050	3900x1750x2200	3900x1750x2050
Net/Gross/Operating weight	kg	5150/6000/5600	5150/5650/5700	5240/6100/5700	5240/5740/5800	5500/6375/6000	5500/6000/6050
Loading quantity	40'GP/40'HQ	set	1	1	1	1	1

Model		CVE220HG1GG1D	CVE220HG1GG1	CVE310LG1HG1D	CVE310LG1HG1	CVE320MH4HH2D	CVE320MH4HH2
Cooling capacity	kW	1231	1231	1406	1406	1582	1582
	RT	350	350	400	400	450	450
EER	W/W	6.36	6.36	6.47	6.47	6.59	6.59
	IPLV	10.77	10.77	10.95	10.95	10.69	10.69
Power supply	V/Ph/Hz			380/3/50			
	Power input	kW	193.5	193.5	217.4	217.4	240.1
RLA	A	312.7	296.9	351.3	333.6	388.1	368.5
Compressor	Type	-		Centrifugal			
Starting mode	-			Variable frequency start			
Quantity	-	1	1	1	1	1	1
Refrigerant charge volume	kg	300	450	350	450	375	600
Refrigeration oil	Type	-		No.68 synthetic fatty oil			
	Charge volume	L	25	25	40	40	40
Evaporator	Type	-	Falling film	Flooded	Falling film	Flooded	Falling film
Fouling factor	m <sup>2</sup> ·°C/kW	0.018	0.018	0.018	0.018	0.018	0.018
Water flow volume	L/s	53.05	53.05	60.62	60.62	68.2	68.2
GPM	841.0	841.0	961.0	961.0	1081.1	1081.1	
kPa	72.6	72.6	72.6	72.6	74.3	74.3	
ft.WG	23.8	23.8	23.8	23.8	24.4	24.4	
Connection pipe	mm	DN200	DN200	DN200	DN200	DN250	DN250
Condenser	Type	-		Shell and tube			
Fouling factor	m <sup>2</sup> ·°C/kW	0.044	0.044	0.044	0.044	0.044	0.044
Water flow volume	L/s	65.90	65.90	75.14	75.14	84.32	84.32
GPM	1044.6	1045.0	1191.1	1191.0	1336.6	1337.0	
kPa	58.0	58.0	57.1	57.1	64.5	64.5	
ft.WG	19.0	19.0	18.7	18.7	21.2	21.2	
Connection pipe	mm	DN200	DN200	DN200	DN200	DN250	DN250
Sound pressure level(Max.)	dB(A)	80	80	82	82	82	82
Dimension (WxDxH)	Outline	3770x1590x1910	3770x1590x1910	3850x1810x2220	3850x1810x2220	4300x1850x2150	4300x1850x2150
Package	mm	3900x1750x2200	3900x1750x2050	3950x1950x2500	3950x1950x2500	4450x1950x2350	4500x2000x2500
Net/Gross/Operating weight	kg	5700/6575/6200	5700/6200/6350	6100/7025/6750	6100/7025/6400	6800/7300/7500	6800/7880/7700
Loading quantity	40'GP/40'HQ	set	1	1	1	1	1



Model	CVE320MH3HH1D	CVE320MH3HH1	CVE410MH2JH2D	CVE410MH2JH2	CVE410MH1JH1D	CVE410MH1JH1
Cooling capacity	kW	1758	1758	1934	1934	2110
	RT	500	500	550	550	600
EER	W/W	6.48	6.48	6.67	6.67	6.58
	IPLV	10.95	10.95	10.87	10.87	11.12
Power supply	V/Ph/ Hz			380/3/50		
Power input	kW	271.3	271.3	289.9	289.9	320.6
RLA	A	438.5	416.4	468.6	444.9	518.2
Compressor	Type	-		Centrifugal		
Starting mode	-			Variable frequency start		
	Quantity	-	1	1	1	1
Refrigerant charge volume	kg	385	575	425	650	450
Refrigeration oil	Type	-		No.68 synthetic fatty oil		
Charge volume	L	40	40	40	40	40
Evaporator	Type	-	Falling film	Flooded	Falling film	Flooded
	Fouling factor	m <sup>2</sup> ·°C/ kW	0.018	0.018	0.018	0.018
Water flow volume	L/s	75.78	75.78	83.36	83.36	90.93
	GPM	1201.3	1201.0	1321.4	1321.0	1441.4
Pressure drop	kPa	74.3	74.3	76.0	76.0	74.4
	ft.WG	24.4	24.4	24.9	24.9	24.4
Connection pipe	mm	DN250	DN250	DN250	DN250	DN250
Condenser	Type	-		Shell and tube		
	Fouling factor	m <sup>2</sup> ·°C/ kW	0.044	0.044	0.044	0.044
Water flow volume	L/s	93.90	93.90	102.90	102.90	112.50
	GPM	1488.5	1489.0	1631.2	1631.0	1783.4
Pressure drop	kPa	69.9	69.9	67.4	67.4	66.9
	ft.WG	22.9	22.9	22.1	22.1	21.9
Connection pipe	mm	DN250	DN250	DN250	DN250	DN250
Sound pressure level(Max.)	dB(A)	82	82	84	84	84
Dimension (WxDxH)	Outline	4300x1850x2150	4300x1850x2150	4250x1910x2210	4250x1910x2210	4250x1910x2210
	Package	4450x1950x2500	4500x2000x2500	4400x2100x2600	4400x2100x2600	4400x2100x2600
Net/Gross/Operating weight	kg	6880/7930/7600	6880/7960/7750	7710/8810/8450	7710/8810/8700	7820/8770/8600
Loading quantity	40'GP/40'HQ	set	1	1	1	1

Model	CVE510PIEKED	CVE510PIEKIE	CVE510PIDKIDD	CVE510PIDKID	CVE520PICKICD	CVE520PICKIC
Cooling capacity	kW	2285	2285	2461	2461	2637
	RT	650	650	700	700	750
EER	W/W	6.66	6.66	6.57	6.57	6.74
	IPLV	10.94	10.94	11.13	11.13	10.91
Power supply	V/Ph/ Hz			380/3/50		
Power input	kW	343.2	343.2	374.6	374.6	391.3
RLA	A	554.6	526.6	605.5	574.9	632.4
Compressor	Type	-		Centrifugal		
Starting mode	-			Variable frequency start		
	Quantity	-	1	1	1	1
Refrigerant charge volume	kg	600	800	600	850	625
Refrigeration oil	Type	-		No.68 synthetic fatty oil		
Charge volume	L	40	40	40	40	40
Evaporator	Type	-	Falling film	Flooded	Falling film	Flooded
	Fouling factor	m <sup>2</sup> ·°C/ kW	0.018	0.018	0.018	0.018
Water flow volume	L/s	98.51	98.51	106.10	106.10	113.70
	GPM	1561.6	1562.0	1681.9	1682.0	1802.4
Pressure drop	kPa	72.9	72.9	71.5	71.5	73.3
	ft.WG	23.9	23.9	23.5	23.5	24.0
Connection pipe	mm	DN250	DN250	DN250	DN250	DN250
Condenser	Type	-		Shell and tube		
	Fouling factor	m <sup>2</sup> ·°C/ kW	0.044	0.044	0.044	0.044
Water flow volume	L/s	121.60	121.60	131.20	131.20	140.10
	GPM	1927.6	1928.0	2079.8	2080.0	2220.9
Pressure drop	kPa	56.7	56.7	56.8	56.8	55.9
	ft.WG	18.6	18.6	18.6	18.6	18.3
Connection pipe	mm	DN250	DN250	DN250	DN250	DN250
Sound pressure level(Max.)	dB(A)	84	84	84	84	84
Dimension (WxDxH)	Outline	4550x2010x2300	4550x2010x2300	4550x2010x2300	4550x2010x2300	4550x2010x2300
	Package	4700x2100x2500	4700x2100x2500	4700x2100x2500	4700x2100x2500	4700x2100x2500
Net/Gross/Operating weight	kg	8860/9360/9850	8860/9360/10050	8963/9470/10000	8970/9470/10250	9270/9800/10550
Loading quantity	40'GP/40'HQ	set	1	1	1	1

Model	CVE520PIBKIBD	CVE520PIBKIB	CVE520PIAKIAD	CVE520PIAKIA	CVE520QJCMJDD	CVE610QJCMJD
Cooling capacity	kW	2813	2813	2989	2989	3164
	RT	800	800	850	850	900
EER	W/W	6.72	6.72	6.63	6.63	6.56
	IPLV	11.11	11.11	11.24	11.24	11.3
Power supply	V/Ph/ Hz			380/3/50		
Power input	kW	418.6	418.6	450.8	450.8	482.4
RLA	A	676.5	642.4	728.6	691.8	779.7
Compressor	Type	-		Centrifugal		
Starting mode	-			Variable frequency start		
	Quantity	-	1	1	1	1
Refrigerant charge volume	kg	650	900	650	900	725
Refrigeration oil	Type	-		No.68 synthetic fatty oil		
Charge volume	L	40	40	40	40	40
Evaporator	Type	-	Falling film	Flooded	Falling film	Flooded
	Fouling factor	m <sup>2</sup> ·°C/ kW	0.018	0.018	0.018	0.018
Water flow volume	L/s	121.20	121.20	128.80	128.80	136.40
	GPM	1921.3	1921.3	2041.7	2042.0	2162.0
Pressure drop	kPa	71.4	71.4	72.6	72.6	74.4
	ft.WG	23.4	23.4	23.8	23.8	24.4
Connection pipe	mm	DN250	DN250	DN250	DN250	DN300
Condenser	Type	-		Shell and tube		
	Fouling factor	m <sup>2</sup> ·°C/ kW	0.044	0.044	0.044	0.044
Water flow volume	L/s	149.50	149.50	159.20	159.20	168.70
	GPM	2369.9	2370.0	2523.6	2523.6	2674.2
Pressure drop	kPa	56.9	56.9	57.6	57.6	66.0
	ft.WG	18.7	18.7	18.9	18.9	21.5
Connection pipe	mm	DN250	DN250	DN250	DN250	DN300
Sound pressure level(Max.)	dB(A)	84	84	84	84	85
	Dimension (WxDxH)	mm	4550x2010x2300	4550x2010x2300	4550x2010x2300	4980x2210x2500
Net/Gross/Operating weight	kg	9390/9900/10450	9390/9900/10700	9480/10000/10550	9480/10000/10800	10495/11220/11750
	Loading quantity	40'GP/40'HQ	set	1	1	

Notes:  
 1. Above model selection is applicable to the condition in which leaving chilled water temperature is 6.67°C and entering cooling water temperature is 29.44°C.  
 2. Standard unit's water side bearing pressure is 1.0MPa; 1.6MPa is an available option.  
 3. Fouling coefficients of chilled water and cooling water are 0.018 m<sup>2</sup>·°C/kW and 0.044 m<sup>2</sup>·°C/kW respectively.  
 4. Above water flow is indicated according to ARI 550/590-2018; IPLV is the test value obtained based on the working condition specified in ARI 550/590-2015.  
 5. For compressor using inverter starter, starting current < rated current; power factor is 0.99; cooling capacity: 250-1400RT. The diode inverter startup cabinet (type code : D) is the standard part for the unit, while the four-quadrant inverter startup cabinet (type code: null) is the optional one.  
 6. The unit's performance parameters may be changed without prior notice due to product improvement. For the specific parameters, please refer to product nameplate.

## CCE Series Magnetic Bearing Inverter Centrifugal Chiller



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



Display Panel  
CM27-GZ12/A1(M)



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

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

Model		CCE210FE5EE5D	CCE210FE5EE5	CCE220FE4EE4D	CCE220FE4EE4	CCE220FE3EE3D	
Cooling capacity	kW	352	352	457	457	527	
	RT	100	100	130	130	150	
EER	W/W	5.69	5.69	5.87	5.87	5.76	
	IPLV	9.65	9.65	9.41	9.41	9.76	
Power supply	V/Ph/Hz	380/3/50					
	Power input	61.8	61.8	77.9	77.9	91.6	
RLA	A	99.9	94.8	125.9	119.5	148.0	
Compressor	Type	-	Centrifugal				
	Starting mode	-	Variable frequency start				
	Quantity	-	1	1	1	1	1
Refrigerant charge volume	kg	170	170	200	200	200	
	Type	-	Falling film				
Evaporator	Fouling factor	m <sup>2</sup> ·°C/kW	0.018	0.018	0.018	0.018	0.018
	Water flow volume	L/s	15.16	15.16	19.70	19.70	22.73
		GPM	240.3	240.3	312.3	312.3	360.3
	Pressure drop	kPa	34.9	34.9	38.2	38.2	38.5
		ft.WG	11.4	11.4	12.5	12.5	12.6
Condenser	Connection pipe	mm	DN150	DN150	DN150	DN150	DN150
	Type	-	Shell and tube				
	Fouling factor	m <sup>2</sup> ·°C/kW	0.044	0.044	0.044	0.044	0.044
	Water flow volume	L/s	19.13	19.13	24.75	24.75	28.64
		GPM	303.2	303.2	392.3	392.3	454.0
Condenser	Pressure drop	kPa	35.7	35.7	40.4	40.4	40.3
		ft.WG	11.7	11.7	13.3	13.3	13.2
	Connection pipe	mm	DN150	DN150	DN150	DN150	DN150
	Sound pressure level(Max.)	dB(A)	78	78	78	78	78
	Dimension (WxDxH)	mm	3350x1140x1900	3350x1140x1900	3350x1140x1900	3350x1140x1900	3350x1140x1900
Net/Gross/Operating weight	Outline	mm	3500x1300x2150	3500x1300x2150	3500x1300x2150	3500x1300x2150	3500x1300x2150
	Package	mm	3500x3250/3000	3500x3250/3000	3329/3900/3650	3329/3900/3650	3500/4100/3850
Loading quantity	40'GP/40'HQ	set	1	1	1	1	1

Model		CCE220FE3EE3	CCE230FE2EE2D	CCE230FE2EE2	CCE231GE2FE2D	CCE231GE2FE2	
Cooling capacity	kW	527	633	633	703	703	
	RT	150	180	180	200	200	
EER	W/W	5.76	6.07	6.07	5.96	5.96	
	IPLV	8.36	9.62	9.62	9.86	9.86	
Power supply	V/Ph/Hz	380/3/50					
	Power input	91.6	104.3	104.3	118.0	118.0	
RLA	A	140.5	168.5	160.0	190.7	181.1	
Compressor	Type	-	Centrifugal				
	Starting mode	-	Variable frequency start				
	Quantity	-	1	1	1	1	1
Refrigerant charge volume	kg	200	220	220	220	220	
	Type	-	Falling film				
Evaporator	Fouling factor	m <sup>2</sup> ·°C/kW	0.018	0.018	0.018	0.018	0.018
	Water flow volume	L/s	22.73	27.28	27.28	30.31	30.31
		GPM	360.3	432.4	432.4	480.5	480.5
	Pressure drop	kPa	38.5	40.4	40.4	42.7	42.7
		ft.WG	12.6	13.3	13.3	14.0	14.0
Condenser	Connection pipe	mm	DN150	DN150	DN150	DN150	DN150
	Type	-	Shell and tube				
	Fouling factor	m <sup>2</sup> ·°C/kW	0.044	0.044	0.044	0.044	0.044
	Water flow volume	L/s	28.64	34.11	34.11	38.00	38.00
		GPM	454.0	540.7	540.7	602.4	602.4
Condenser	Pressure drop	kPa	40.3	39.4	39.4	39.7	39.7
		ft.WG	13.2	12.9	12.9	13.0	13.0
	Connection pipe	mm	DN150	DN150	DN150	DN150	DN150
	Sound pressure level(Max.)	dB(A)	78	78	78	78	78
	Dimension (WxDxH)	mm	3350x1140x1900	3350x1140x1900	3350x1140x1900	3350x1180x1900	3350x1180x1900
Net/Gross/Operating weight	Outline	mm	3500x1300x2150	3500x1300x2150	3500x1300x2150	3500x1300x2150	3500x1300x2150
	Package	mm	3500/4100/3850	3700/4200/4050	3700/4200/4050	3888/4300/4250	3888/4300/4250
Loading quantity	40'GP/40'HQ	set	1	1	1	1	1



Model		CCE240GE1FE1D	CCE240GE1FE1	CCE310HG4GG4D	CCE310HG4GG4	CCE311HG3GG3D
Cooling capacity	kW	791	791	879	879	967
	RT	225	225	250	250	275
EER	W/W	5.94	5.94	6.07	6.07	6.13
IPLV	W/W	9.83	9.83	9.58	9.58	9.55
Power supply	V/Ph/Hz	380/3/50				
Power input	kW	133.2	133.2	144.8	143.4	157.7
RLA	A	215.3	204.4	234.1	222.2	254.9
Compressor	Type	-	Centrifugal			
	Starting mode	-	Variable frequency start			
	Quantity	-	1	1	1	1
Refrigerant charge volume	kg	250	250	250	250	275
Evaporator	Type	-	Falling film			
	Fouling factor	m <sup>2</sup> ·°C/kW	0.018	0.018	0.018	0.018
	Water flow volume	L/s	34.10	34.10	37.89	37.89
	GPM	540.6	540.6	600.6	600.6	660.7
	Pressure drop	kPa	40.8	40.8	61.4	61.4
	ft.WG	13.4	13.4	20.1	20.1	20.4
Condenser	Connection pipe	mm	DN150	DN150	DN200	DN200
	Type	-	Shell and tube			
	Fouling factor	m <sup>2</sup> ·°C/kW	0.044	0.044	0.044	0.044
	Water flow volume	L/s	42.77	42.77	47.38	47.38
	GPM	678.0	678.0	751.1	751.1	824.9
	Pressure drop	kPa	40.1	40.1	53.8	53.8
Sound pressure level(Max.)	ft.WG	13.2	13.2	17.6	17.6	17.6
	Connection pipe	mm	DN150	DN150	DN200	DN200
	dB(A)	78	78	79	79	79
	Dimension (WxDxH)	mm	3350×1180×1900	3350×1180×1900	3770×1590×1950	3770×1590×1950
	Outline	mm	3500×1300×2150	3500×1300×2150	3850×2000×2400	3850×2000×2400
	Package	kg	4505/5100/4900	4505/5100/4900	4833/5750/5250	4941/5850/5400
Net/Gross/Operating weight	kg	4505/5100/4900	4505/5100/4900	4833/5750/5250	4941/5850/5400	
Loading quantity	40'GP/40'HQ	set	1	1	1	1

Model		CCE311HG3GG3	CCE311HG2GG2D	CCE311HG2GG2	CCE320HG1GG1D	CCE320HG1GG1
Cooling capacity	kW	966.9	1055	1055	1231	1231
	RT	275	300	300	350	350
EER	W/W	6.13	6.04	6.04	6.67	6.67
IPLV	W/W	9.55	9.76	9.76	10.12	10.12
Power supply	V/Ph/Hz	380/3/50				
Power input	kW	157.7	174.6	172.9	197.2	197.2
RLA	A	242.1	282.3	268.0	318.8	302.7
Compressor	Type	-	Centrifugal			
	Starting mode	-	Variable frequency start			
	Quantity	-	1	1	1	1
Refrigerant charge volume	kg	275	275	275	300	300
Evaporator	Type	-	Falling film			
	Fouling factor	m <sup>2</sup> ·°C/kW	0.018	0.018	0.018	0.018
	Water flow volume	L/s	41.68	45.47	45.47	53.05
	GPM	660.7	720.8	720.8	841.0	841.0
	Pressure drop	kPa	62.3	61.8	61.8	60.7
	ft.WG	20.4	20.3	20.3	19.9	19.9
Condenser	Connection pipe	mm	DN200	DN200	DN200	DN200
	Type	-	Shell and tube			
	Fouling factor	m <sup>2</sup> ·°C/kW	0.044	0.044	0.044	0.044
	Water flow volume	L/s	52.04	56.89	56.89	66.07
	GPM	824.9	901.8	901.8	1047.3	1047.3
	Pressure drop	kPa	53.7	53.9	53.9	53.6
Sound pressure level(Max.)	ft.WG	17.6	17.7	17.7	17.6	17.6
	Connection pipe	mm	DN200	DN200	DN200	DN200
	dB(A)	79	79	79	79	79
	Dimension (WxDxH)	mm	3770×1590×1950	3770×1590×1950	3770×1590×1950	3770×1590×1950
	Outline	mm	3850×2000×2400	3850×2000×2400	3850×2000×2400	3850×2000×2400
	Package	kg	4941/5850/5400	5008/5900/5450	5008/5900/5450	5146/6050/5600
Net/Gross/Operating weight	kg	4941/5850/5400	5008/5900/5450	5008/5900/5450	5146/6050/5600	
Loading quantity	40'GP/40'HQ	set	1	1	1	1

Model		CCE410MH4HH2	CCE420MH3HH1	CCE420MH1HH1	CCE510MH2JH2	CCE510MH1JH1
Cooling capacity	kW	1406	1582	1758	1934	2110
	RT	400	450	500	550	600
EER	W/W	6.29	6.37	6.26	6.44	6.36
IPLV	W/W	10.63	10.49	10.74	10.51	10.75
Power supply	V/Ph/Hz	380/3/50				
Power input	kW	223.6	248.4	280.8	300.3	331.7
RLA	A	343.1	381.2	431	460.8	509.1
Compressor	Type	-	Centrifugal			
	Starting mode	-	Variable frequency start			
	Quantity	-	1	1	1	1
Refrigerant charge volume	kg	350	400	400	450	450
Evaporator	Type	-	Falling film			
	Fouling factor	m <sup>2</sup> ·°C/kW	0.018	0.018	0.018	0.018
	Water flow volume	L/s	60.62	68.2	75.78	83.36
	GPM	961.0	1081.1	1201.3	1321.4	1441.4
	Pressure drop	kPa	60.2	61.6	49.5	63.8
	ft.WG	19.7	20.2	16.2	20.9	22.3
Condenser	Connection pipe	mm	DN250	DN250	DN250	DN250
	Type	-	Shell and tube			
	Fouling factor	m <sup>2</sup> ·°C/kW	0.044	0.044	0.044	0.044
	Water flow volume	L/s	57.43	84.71	94.34	103.4
	GPM	910.4	1342.8	1495.5	1639.1	1791.3
	Pressure drop	kPa	59.6	61.3	73.9	61.8
Sound pressure level(Max.)	ft.WG	19.5	20.1	24.2	20.3	20.8
	Connection pipe	mm	DN250	DN250	DN250	DN250
	dB(A)	80	80	80	82	82
	Dimension (WxDxH)	mm	4300×1850×2190	4300×1850×2190	4300×1850×2190	4200×1910×2220
	Outline	mm	4500×2100×2700	4500×2100×2700	4500×2100×2700	4500×2200×2750
	Package	kg	6335/7550/6950	6410/7550/7100	6400/7550/7100	7604/8650/8350
Net/Gross/Operating weight	kg	6335/7550/6950	6410/7550/7100	6400/7550/7100	7604/8650/8350	7720/8750/84



# TERMINAL

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Fan Coil Unit

-Concealed Ceiling Type

-Cassette Type

-Floor Ceiling Type

-Vertical Mounted Type

-Wall Mounted Type

Air Curtain

## 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.



- Inner groove copper
- Washable filter
- Quiet function
- Multi fan speed
- Compact design

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



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

### 2 Rows, 12Pa

Model	FP-34WA/GHL-K	FP-51WA/GHL-K	FP-68WA/GHL-K	FP-85WA/GHL-K	FP-102WA/GHL-K	FP-136WA/GHL-K	FP-170WA/GHL-K	FP-204WA/GHL-K
Air flow volume(H/M/L)	m³/h 370/260/180	570/400/280	720/504/353	870/610/426	1020/788/525	1360/1095/730	1600/1210/764	1900/1330/931
CFM	218/153/106	335/235/165	424/297/208	512/359/251	600/464/309	800/644/235	941/659/450	1118/783/548
ESP	Pa 0	0	0	0	0	0	0	0
Capacity	kW 1.75/2.2	2.9/3.4	3.4/4.2	4.3/4.7	4.9/6	6.7/8	7.0/9	10/11.9
Power system	V/Ph/Hz 220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Input	W 35	54	66	84	101	150	154	198
Water system	I/s 0.08	0.14	0.16	0.21	0.23	0.32	0.33	0.48
Water flow volume	kPa 15	30	23	25	35	40	36	40
Pressure drop(cooling)	Ft.WG 4.92	9.84	7.54	8.20	11.48	13.12	11.81	13.12
Sound pressure level	dB(A) 37	38	40.5	44	46	46	47	50.5
Dimension (WxDxH)	mm 680x520x235	800x520x235	900x520x235	1000x520x235	1080x520x235	1380x520x235	1520x520x235	1620x520x235
Outline	mm 773x603x325	890x603x325	990x603x325	1090x603x325	1170x603x325	1470x603x325	1605x603x325	1710x603x325
Package	kg 14.5/19.2	17/21.9	18.9/24	20.8/26.2	21.9/27.5	31.5/37.5	34.1/41.6	38/44.5
Net weight/Gross weight	kg 14.5/19.2	17/21.9	18.9/24	20.8/26.2	21.9/27.5	31.5/37.5	34.1/41.6	38/44.5
Connection pipe	Water inlet & outlet (inner groove) inch(mm) 3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensed water drain (outer groove)	inch(mm) 3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Loading quantity	40'GP/40'HQ set	318/424	273/364	255/340	225/300	210/280	168/224	135/204
Optional	Wired remote control	-	Z54352A1/WK-010PM/WK-011PM/WK-010PN/WK-011PN/WK-010PR/WK-010PS/WK-010PV/WK-010PW					

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

### 2 Rows, 30Pa

Model	FP-34WAH/GHL-K	FP-51WAH/GHL-K	FP-68WAH/GHL-K	FP-85WAH/GHL-K	FP-102WAH/GHL-K	FP-136WAH/GHL-K	FP-170WAH/GHL-K	FP-204WAH/GHL-K
Air flow volume(H/M/L)	m³/h 450/315/220	590/413/225	750/525/367	930/651/455	1100/770/539	1400/980/686	1700/1190/833	2000/1400/980
CFM	265/185/129	347/243/168	440/309/216	547/383/268	647/453/317	824/577/404	1000/700/490	1176/824/577
ESP	Pa 0	0	0	0	0	0	0	0
Capacity	kW 2.2/2.4	3.2/3.7	4.1/4.8	4.8/5.5	5.9/6.6	7.6/8.9	8.8/10.2	10.4/12.1
Power system	V/Ph/Hz 220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Input	W 35	58	66	78	102	161	150	192
Water system	I/s 0.10	0.15	0.20	0.23	0.28	0.36	0.42	0.50
Water flow volume	kPa 20	21	22	30	35	40	33	40
Pressure drop(cooling)	Ft.WG 6.56	6.89	7.22	9.84	11.48	13.12	10.82	13.12
Sound pressure level	dB(A) 37	39	40.5	44	48	47	48	50.5
Dimension (WxDxH)	mm 680x520x235	800x520x235	900x520x235	1000x520x235	1080x520x235	1380x520x235	1520x520x235	1620x520x235
Outline	mm 773x603x325	890x603x325	990x603x325	1090x603x325	1170x603x325	1470x603x325	1605x603x325	1710x603x325
Package	kg 14.5/19.2	17.4/22.3	19.3/24.4	21.3/26.7	22.7/28.3	30.9/36.9	34.5/42	38/44.5
Net weight/Gross weight	kg 14.5/19.2	17.4/22.3	19.3/24.4	21.3/26.7	22.7/28.3	30.9/36.9	34.5/42	38/44.5
Connection pipe	Water inlet & outlet (inner groove) inch(mm) 3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensed water drain (outer groove)	inch(mm) 3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Loading quantity	40'GP/40'HQ set	318/424	273/364	255/340	225/300	210/280	168/224	135/204
Optional	Wired remote control	-	Z54352A1/WK-010PM/WK-011PM/WK-010PN/WK-011PN/WK-010PR/WK-010PS/WK-010PV/WK-010PW					

### 3 Rows, 12Pa

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 370/260/180	570/400/280	720/504/353	870/610/426	1020/788/525	1360/1095/730	1600/1120/784	1900/1330/931
CFM	218/153/106	335/235/165	424/297/208	512/359/251	600/464/309	800/644/235	941/659/450	1118/783/548
ESP	Pa 0	0	0	0	0	0	0	0
Capacity	kW 2.1/2.4	3.2/3.7	4.1/4.8	4.8/5.5	5.9/6.6	7.6/8.9	8.8/10.2	10.4/12.1
Power system	V/Ph/Hz 220-240V ~ 50Hz	220-240V ~ 50Hz						
Input	W 35	58	66	78	102	161	150	192
Water system	I/s 0.10	0.15	0.20	0.23	0.28	0.36	0.42	0.50
Water flow volume	kPa 20	21	22	30	35	40	33	40
Pressure drop(cooling)	Ft.WG 6.56	6.89	7.22	9.84	11.48	13.12	10.82	13.12
Sound pressure level	dB(A) 37	39	40.5	44	48	49	49	52
Dimension (WxDxH)	mm 680x520x235	800x520x235	900x520x235	1000x520x235	1080x520x235	1380x520x235	1520x520x235	1620x520x235
Outline	mm 773x603x325	890x603x325	990x603x325	1090x603x325	1170x603x325	1470x6		

CAC

## 3 Rows, 50Pa

Model		FP-51WAUS/G(T)-K	FP-68WAUS/G(T)-K	FP-85WAUS/G(T)-K	FP-102WAUS/G(T)-K	FP-136WAUS/G(T)-K	FP-170WAUS/G(T)-K	FP-204WAUS/G(T)-K	FP-238WAUS/G(T)-K
Air flow volume(H/M/L)	m³/h	510/394/264	680/495/340	850/638/425	1020/788/525	1360/1095/730	1700/1275/850	2040/1575/1050	2380/1850/1250
ESP	CFM	300/231/155	400/291/170	500/375/250	600/464/309	800/644/429	1000/750/500	1200/926/618	1400/1088/735
Capacity	Cooling/Heating	kW	3.15/5.3	4.2/6.93	5/8.05	6.3/10.1	8.2/13.2	9.8/15.8	11.25/18.6
Power system	Type	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	Water flow volume	W	66	83	97	114	174	210	250
Water system	Pressure drop	l/s	0.16	0.21	0.24	0.28	0.39	0.47	0.54
Ft.WG	Sound pressure level	kPa	21	22	30	35	40	33	50
Dimension (WxDxH)	Outline	mm	800x460x235	900x490x235	1000x490x235	1190x490x235	1520x490x235	1620x490x235	1770x490x235
(WxDxH)	Package	mm	905x555x255	1005x555x255	1105x555x255	1295x555x255	1625x555x255	1725x555x255	1875x555x255
Net weight/Gross weight	kg	14.2/16.9	16.2/19.4	17.4/21.0	18.8/22.7	27.6/33.6	30.3/35.8	32.8/38.3	40.0/47.0
Connection pipe	Water inlet & outlet(inner groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensed water drain(outer groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Loading quantity	40'GP/40'HQ	unit	501/436	455/390	386/344	352/288	257/229	256/228	247/205
Optional controller	Wired remote	-	Z54352A1/WK-010PM/WK-011PM/WK-010PN/WK-011PN/WK-010PR/WK-010PS/WK-010PV/WK-010PW						

## 4 Rows, 30Pa

Model		FP-34WAHF/BHL-K	FP-51WAHF/BHL-K	FP-68WAHF/BHL-K	FP-85WAHF/BHL-K	FP-102WAHF/BHL-K	FP-136WAHF/BHL-K	FP-170WAHF/BHL-K	FP-204WAHF/BHL-K
Air flow volume(H/M/L)	m³/h	430/323/215	640/480/320	740/555/370	910/683/455	1040/780/520	1600/1200/800	1980/1485/990	2100/1575/1050
ESP	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
Capacity	Cooling/Heating	Pa	0	0	0	0	0	0	0
Power system	Type	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	Water flow volume	W	45	66	71	90	113	169	216
Water system	Pressure drop	l/s	0.12	0.18	0.22	0.26	0.30	0.40	0.49
Ft.WG	Sound pressure level	kPa	8	15	24	35	56	17	32
Dimension (WxDxH)	Outline	mm	881x510x245	1011x510x245	1131x510x245	1211x510x245	1371x510x245	1761x510x245	1921x510x245
(WxDxH)	Package	mm	903x278x625	1033x278x625	1153x278x625	1233x278x625	1390x278x625	1783x278x625	1943x278x625
Net weight/Gross weight	kg	19/22.5	22.5/27	25/29.5	27/31.5	30.5/35	43.5/48.5	47/53	47/53
Connection pipe	Water inlet & outlet(inner groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensed water drain(outer groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Loading quantity	40'GP/40'HQ	set	321/428	270/360	252/336	271/317	198/264	156/208	144/192
Optional controller	Wired remote	-	Z54352A1/WK-010PM/WK-011PM/WK-010PN/WK-011PN/WK-010PR/WK-010PS/WK-010PV/WK-010PW						
									Luxury wired controller:WK-010PA-K/LCD controller:WK-110PA0

Note: Parameters are obtained based on the test standard of Eurovent and under 0Pa static pressure with circle bellows &amp; filter.

## 4 Rows, 50Pa

Model		FP-51WAUS/G(T)-K	FP-68WAUS/G(T)-K	FP-85WAUS/G(T)-K	FP-102WAUS/G(T)-K	FP-136WAUS/G(T)-K	FP-170WAUS/G(T)-K	FP-204WAUS/G(T)-K	FP-238WAUS/G(T)-K
Air flow volume(H/M/L)	m³/h	510/394/264	680/495/340	850/638/425	1020/788/525	1360/1095/730	1700/1275/850	2040/1575/1050	2380/1850/1250
ESP	CFM	300/231/155	400/291/170	500/375/250	600/464/309	800/644/429	1000/750/500	1200/926/618	1400/1088/735
Capacity	Cooling/Heating	kW	3.15/5.3	4.2/6.93	5/8.05	6.3/10.1	8.2/13.2	9.8/15.8	11.25/18.6
Power system	Type	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	Water flow volume	W	40	49	61	80	101	125	173
Water system	Pressure drop	l/s	0.16	0.21	0.24	0.28	0.39	0.47	0.54
Ft.WG	Sound pressure level	kPa	21	22	30	35	40	50	50
Dimension (WxDxH)	Outline	mm	800x460x235	900x490x235	1000x490x235	1190x490x235	1520x490x235	1620x490x235	1770x490x235
(WxDxH)	Package	mm	905x555x255	1005x555x255	1105x555x255	1295x555x255	1625x555x255	1725x555x255	1875x555x255
Net weight/Gross weight	kg	14.2/16.9	16.2/19.4	17.4/21.0	18.8/22.7	27.6/33.6	30.3/35.8	32.8/38.3	40.0/47.0
Connection pipe	Water inlet & outlet(inner groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensed water drain(outer groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Loading quantity	40'GP/40'HQ	unit	501/436	455/390	386/344	352/288	257/229	256/228	247/205
Optional controller	Wired remote	-	Z54352A1/WK-010PM/WK-011PM/WK-010PN/WK-011PN/WK-010PR/WK-010PS/WK-010PV/WK-010PW						
									Luxury wired controller:WK-010PA-K/LCD controller:WK-110PA0

## 3+1 Rows, 30Pa

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
ESP	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
Capacity	Cooling/Heating								

## Fan Coil Unit

Model		FPE-51WAUF/G(T)-K	FPE-68WAUF/G(T)-K	FPE-85WAUF/G(T)-K	FPE-102WAUF/G(T)-K	FPE-136WAUF/G(T)-K	FPE-170WAUF/G(T)-K	FPE-204WAUF/G(T)-K	FPE-238WAUF/G(T)-K
Air flow volume(H/M/L)	m³/h	540/470/320	680/520/380	850/750/460	1020/820/520	1360/1100/800	1700/1400/900	2040/1700/1100	2380/2050/1150
ESP	Pa	50	50	50	50	50	50	50	50
Capacity	Cooling/Heating	kW	3.35/5.54	4.3/7.05	5.4/8.9	6.35/10.6	9.0/14.5	10.1/16.3	12.5/20.4
Power system	Type	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	W	44	54	65	80	107	133	173	300
Water system	Water flow volume	l/s	0.14	0.18	0.23	0.27	0.38	0.43	0.67
Pressure drop	kPa	12	20	33	23	30	20	41	50
Sound pressure level	Ft.WG	3.94	6.56	10.82	7.54	9.84	6.56	13.45	16.40
Dimension (WxDxH)	Outline	mm	800×460×235	900×490×235	1000×490×235	1190×490×235	1520×490×235	1620×490×235	1770×490×235
	Package	mm	905×555×255	1005×555×255	1105×555×255	1295×555×255	1625×555×255	1725×555×255	1875×555×255
Net weight/Gross weight	kg	18/22	20.5/24	22/27	24.5/28	35/42	38.5/43	41/46	46.5/54.5
Connection pipe	Water inlet & outlet(inner groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	Condensed water drain(outer groove)	inch(mm)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Loading quantity	40'GP/40'HQ	unit	501/436	455/390	386/344	352/288	257/229	256/228	247/205
Optional controller	Wired remote	-	Z54352A1/WK-010PM/WK-011PM/WK-010PN/WK-011PN/WK-010PR/WK-010PS/WK-010PV/WK-010PW						

### 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.



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

Model		FP-51XD/A-K	FP-68XD/A-K	FP-85XD/B-T	FP-102XD/B-T	
Air flow volume(H/M/L)	m³/h	510/400/300	660/560/460	800/650/550	1020/950/900	
Capacity	Cooling/Heating	kW	2.75/3.4	3.4/3.8	4.5/5.6	
Power system	Type	V/Ph/Hz	220-240V~ 50Hz			
Input	W	73	78	75	110	
Water system	Water flow volume	l/s	0.13	0.18	0.21	
	Power System	kPa	30	38	24	
	Ft.WG	9.8	12.5	7.9	11.8	
Sound pressure level	dB(A)	46	46	39	49	
Body	Dimension (WxDxH)	mm	592×592×240	592×592×240	840×840×190	
	Outline Package	mm	778×738×300	778×738×300	963×963×272	
	Net weight/Gross weight	kg	20/24	20/24	25/33	
Panel	Dimension (WxDxH)	mm	670×670×60	670×670×60	950×950×85	
	Outline Package	mm	673×673×85	778×733×300	1033×1038×133	
	Net weight/Gross weight	kg	3.5/5	3.5/5	7/11	
Connction pipe	Water inlet & outlet	inch	G3/4	G3/4	G3/4	
	Condensed water drain	mm	25	25	25	
Loading quantity	40'GP/40'HQ	set	315/360	315/360	131/147	
Standard	Wireless remote controller	-	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	



## Fan Coil Unit

Model		FP-125XD/B-T	FP-140XD/B-T	FP-160XD/B-T	FP-180XD/B-T
Air flow volume(H/M/L)	m³/h	1180/1000/900	1400/1250/1150	1550/1400/1300	1800/1450/1350
	CFM	694/588/529	824/735/676	912/824/765	1059/853/794
Capacity	Cooling/Heating	kW	6.0/7.8	8.0/9.0	8.7/10.0
Power system	Type	V/Ph/Hz	220-240V~ 50Hz		
Input	W	82	143	152	160
	l/s	0.29	0.38	0.42	0.45
Water system	kPa	24	30	30	34
	Ft.WG	7.9	9.8	9.8	11.2
Sound pressure level	dB(A)	43	50	51	50
Body	Dimension (WxDxH)	mm	840x840x240	840x840x240	840x840x240
	Outline Package	mm	963x963x325	963x963x325	963x963x409
Net weight/Gross weight	kg	27/34	27/34	27/34	32/41
Panel	Dimension (WxDxH)	mm	950x950x85	950x950x85	950x950x85
	Outline Package	mm	1033x1038x133	1033x1038x133	1033x1038x133
Net weight/Gross weight	kg	7/11	7/11	7/11	7/11
Connnection pipe	Water inlet & outlet	inch	G3/4	G3/4	G3/4
Condensed water drain	mm	25	25	25	25
Loading quantity	40'GP/40'HQ	set	117/133	117/133	117/133
Standard	Wireless remote controller	-	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)

Model		FP-68XDT/B-K	FP-85XDT/B-K	FP-125XDT/B-K	FP-180XDT/B-K
Air flow volume(H/M/L)	m³/h	680/618/571	850/764/697	1250/1108/1014	1800/1525/1421
	CFM	400/364/336	500/450/410	736/652/597	1059/897/836
Capacity	Cooling/Heating	kW	3.5/6	4.1/6.8	6.0/9.5
Power system	Type	V/Ph/Hz	220-240V~ 50Hz		
Input	W	82	82	135	191
	l/s	0.21	0.24	0.29	0.44
Water system	kPa	34	57	43	40
	Power System	Ft.WG	11.2	18.7	14.1
Sound pressure level	dB(A)	39	40	43	50
Body	Dimension (WxDxH)	mm	840x840x190	840x840x190	840x840x240
	Outline Package	mm	963x963x272	963x963x272	963x963x409
Net weight/Gross weight	kg	25/33	25/33	27/34	32/41
Panel	Dimension (WxDxH)	mm	950x950x85	950x950x85	950x950x85
	Outline Package	mm	1033x1038x133	1033x1038x133	1033x1038x133
Net weight/Gross weight	kg	7/11	7/11	7/11	7/11
Connnection pipe	Water inlet & outlet	inch	G3/4	G3/4	G3/4
Condensed water drain	mm	25	25	25	25
Loading quantity	40'GP/40'HQ	set	131/147	131/147	121/134
Standard	Wireless remote controller	-	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)

### 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	Nominal test condition (temperature)			
	DB(°C)	DB(°C)	DB(°C)	DB(°C)
Cooling	27	19	7	12
Heating	20	—	45	40

Model		FP-34ZD-K	FP-51ZD-K	FP-68ZD-K	FP-85ZD-K	FP-102ZD-K	FP-136ZD-K	FP-170ZD-K	FP-204ZD-K
Air flow volume(H/M/L)	m³/h	400/292/250	510/395/264	680/450/430	720/615/410	1020/765/510	1100/880/550	1800/1276/850	2040/1575/1051
Capacity	Cooling/Heating	kW	2.0/5.0	2.8/7.2	3.6/8.5	4.2/9.5	5.4/11.5	6.35/13.7	8.9/19.0
Power system	Type	V/Ph/Hz	220-240V~ 50Hz						
Input	W	36	58	72	80	86	78	150	200
	l/s	0.125	0.14	0.16	0.2	0.27	0.32	0.4	0.44
Water system	kPa	16.5	5	10	20	36	38	52	55
	Ft.WG	5.4	1.6	3.3	6.6	11.8	12.5	17.1	18
Sound pressure level	dB(A)	37	38	45	47	49	48	50	55
Dimension(WxDxH)	Outline	mm	840x695x238	840x695x238	840x695x238	840x695x238	1300x600x188	1300x600x188	1590x695x238
	Package	mm	960x830x330	960x830x330	960x830x330	960x830x330	1414x724x248	1414x724x248	1714x830x330
Net weight/Gross weight	kg	26/33	26/33	27/34	27/34	31.5/36.5	32.5/37.5	48.5/57	48.5/57
Connnection pipe	Water inlet & outlet	inch	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Condensed water drain	mm	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6
Loading quantity	40'GP/40'HQ	set	224/267	224/267	224/267	224/267	220/224	220/224	111/117
Standard	Wireless remote controller	-	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)



## Fan Coil Unit

### Vertical Mounted Type\*



- » 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 different installation locations.
- » User can freely select fan coil temperature controller, which can be flexibly installed.
- » Unique electric box sub-assy structure design: motor and capacitor are separated, external capacitor for easy maintenance and replacement; the capacitor is plug-in type for easily removing and maintaining.

### Wall Mounted Type



- » Optimized air duct design to greatly improve the fan efficiency and lower the operation noise.
- » Reasonable airflow for even temperature and humidity distribution.
- » The unit is with air valve for more reliable operation.

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

Model		FP-22LM/D-K	FP-34LM/D-K	FP-51LM/D-K	FP-68LM/D-K	FP-85LM/D-K	FP-102LM/D-K	FP-119LM/D-K
Air flow volume(H/M/L)	m³/h	300/250/200	400/350/300	580/500/420	680/530/380	760/600/400	1000/740/510	1100/860/610
	CFM	177/147/118	235/205/176	300/294/247	400/311/223	447/353/235	588/435/300	647/506/358
Capacity	Cooling/Heating	kW	1.4/2.0	1.9/2.3	2.8/3.4	3.2/3.8	4.25/5.2	5.0/5.9
Power system	Type	V/Ph/Hz	220-240V~ 50Hz					
	Input	W	35	46	56	66	68	110
	Water flow volume	l/s	0.07	0.09	0.14	0.16	0.21	0.25
Water system	kPa	10	15	18	21	27	18	20
	Power System	Ft.WG	3.3	4.9	5.9	6.9	8.9	5.9
Sound pressure level	dB(A)	36	38	39	42	45	48	50
Dimension(WxDxH)	Outline	mm	895x680x230	895x680x230	1050x680x230	1050x680x230	1350x680x230	1350x680x230
	Package	mm	1120x690x285	1120x690x285	1275x690x285	1275x690x285	1625x690x285	1625x690x285
Net weight/Gross weight	kg	23/30	23/30	27/34	27/34	28/35	33/41	33/41
Connnection pipe	Water inlet & outlet	inch	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	Condensed water drain	mm	Φ22	Φ22	Φ22	Φ22	Φ22	Φ22
Loading quantity	40'GP/40'HQ	set	238/272	238/272	189/216	189/216	147/168	147/168
Standard	Wireless remote controller	-	Z5M5010AJ	Z5M5010AJ	Z5M5010AJ	Z5M5010AJ	Z5M5010AJ	Z5M5010AJ

Model		FP-34BA2/D-K	FP-51BA2/D-K	FP-68BA2/D-K	FP-85BA2/D-K	
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	2/2.7	2.5/3.2	3.6/4.6	
Power system	Type	V/Ph/Hz	220-240V~ 50Hz			
	Input	W	50	50	60	66
	Water flow volume	l/s	0.1	0.12	0.16	0.19
Water system	kPa	20	36	53	70	
	Power System	Ft.WG	6.5	11.8	17.4	23
Sound pressure level	dB(A)	35	40	43	48	
Dimension(WxDxH)	Outline	mm	845x180x275	845x180x275	940x200x298	940x200x298
	Package	mm	915x255x355	915x255x355	1010x285x380	1010x285x380
Net weight/Gross weight	kg	10	10	12	12	
Connnection pipe	Water inlet & outlet	inch	1/2"	1/2"	1/2"	1/2"
	Condensed water drain	mm	15.6	15.6	15.6	15.6
Loading quantity	40'GP/40'HQ	set	765/850	765/850	595/671	595/671
Standard	Wireless remote controller	-	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)

## Optional Function Section

Model		FP-34BA3/B-K	FP-51BA3/B-K	FP-68BA3/B-K	FP-85BA3/B-K
Air flow volume(H/M/L)	m³/h	360/322/282	510/413/367	680/591/532	830/708/616
	CFM	212/189/166	300/243/216	400/348/313	489/417/363
Capacity	Cooling/Heating	kW	1.85/2.45	2.65/3.05	3.5/3.85
	Type	V/Ph/Hz	220-240V~ 50Hz		
Power system	Input	W	30	40	60
	Water flow volume	l/s	0.11	0.13	0.17
Water system	kPa	13	25	40	65
	Ft.WG	4.3	8.2	13.1	21.3
Sound pressure level		dB(A)	35	40	43
Dimension(WxDxH)	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
Connection pipe	Water inlet & outlet	inch	1/2"	1/2"	1/2"
	Condensed water drain	mm	15.6	15.6	15.6
Loading quantity	40'GP/40'HQ	set	765/850	765/850	595/671
Standard	Wireless remote controller	-	YB1FA(XFAN)	YB1FA(XFAN)	YB1FA(XFAN)

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
	Type	V/Ph/Hz	220-240V~ 50Hz		
Power system	Input	W	12	18	29
	Water flow volume	l/s	0.1	0.14	0.18
Water system	kPa	18	28	43	47
	Ft.WG	5.9	9.2	14.1	15.5
Sound pressure level		dB(A)	31	36	43
Dimension(WxDxH)	Outline	mm	845×289×209	845×289×209	845×289×209
	Package	mm	970×360×280	970×360×280	970×360×280
Net weight/Gross weight		kg	10.5/12.5	10.5/12.5	12.5/15.5
Connection pipe	Water inlet & outlet	inch	1/2"	1/2"	1/2"
	Condensed water drain	mm	15.6	15.6	15.6
Loading quantity	40'GP/40'HQ	set	604/682	604/682	604/682
Standard	Wireless remote controller	-	YAP1F	YAP1F	YAP1F

Name	Sketch	Name	Sketch	Name	Sketch	Name	Sketch
Air-suction section (fresh air/return air)		Primary filtrating section (plate type/bag type)		Cooling coil section		Electrode humidifying section	
Air-suction section (secondary air-returning section)		Primary filtrating section (plate type/bag type)		Electrical heating section		Contact humidifying section	
Mixing section		Sub high-efficiency filtrating section		Heating coil section		Dry steam humidifying section	
Complex section (combination sections of exhaust, air-returning and fresh air sections)		High-efficiency filtrating section		Steam coil section		Fan section	
Air equalizing section		Sound absorber section		Service section (maintenance section)		Turning section	
Blowing section							



## Air Curtain

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



Washable filter

Quiet function

Compact design

Easier maintainability

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



Item		Working condition parameters	
Dry bulb temperature of inlet air C		5-40	
<b>Model</b>			
FM-1.25-9-K		FM-1.25-12-K	
Power supply	V/Hz	220-240/50	220-240/50
Power input	W	110	140
Air flow volume	m³/h	1200	1650
Sound pressure level	dB (A)	59	61
Dimension (WxDxH)	Outline	mm	900x225x220
	Package	mm	1015x270x256
Net weight /Gross weight	kg	16/18	20/22
Loading quantity	40'GP	set	848
	40'HQ	set	954
Setting height	m	2.3-3	2.3-3
Standard	Wired controller	ZY611(MC)	ZY611(MC)

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

## Control System Lineup

Control system	Product series	4-way cassette type	360°air discharge cassette type	Floor ceiling type	Concealed ceiling type	Vertical mounted type	Wall mounted	Wall mounted type (Lomo)	Air curtain
Wireless controller	YB1FA			●		●		●	
	YAP1F				●			●	
	ZY611								●
Wired controller	Z4E3512AJ		○	○	○		○		
	Z4E5512AJ			○				○	
Mechanical FCU controller	Z54352A1					○	○		
Digital thermostat	WK-011PM						○		
	WK-010PM							○	
	WK-011PN								
	WK-010PN								
	WK-010PV						○		
	WK-010PW							○	
	WK-010PR								
	WK-010PS								
Long-distance monitoring software	FE30-00/A(M)		○	○	○		○		
BMS accessories	ME30-17/E2(M)		○	○	○		○		
	ZJ0212				○				
Other modules	RS232-RS422/485		○	○	○		○		
	RS-422/485		○	○	○		○		

Notes:

● means standard, ○ means optional.

\*1 As for the unit and wireless remote controller, please refer to the actual product.

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

The selection shall refer to actual models.

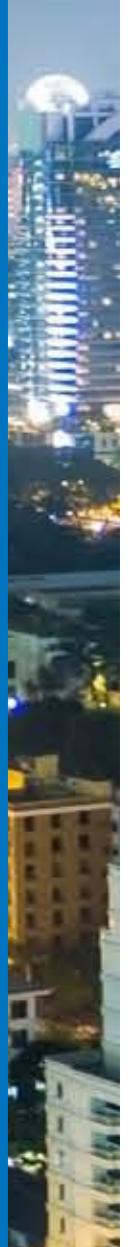




# SPECIALIZED AC

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Close Control Air Conditioner



C  
M  
Y  
CM  
MY  
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CMBK  
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## Close Control Air Conditioner\*

R410A

It is a kind of air cooled split AC that is widely used in equipment rooms, machinery rooms, etc. to precisely control the temperature and humidity.



- » Rapid and safe start-up.
- » Flexible installation and several air outlet directions to meet different installation requirements.
- » Modular design : up to 4 units with rated capacity of 5-20kw or 32 units with rated capacity of 25-100kw could be freely connected.

Class	Item	Model Unit	JKFD5CR/Na-E	JKFD5QSR/Na-E	JKFD7CR/Na-M	JKFD7QSR/Na-M
Characteristics	Total Cooling Capacity/Sensible Cooling Capacity(24°C/17°C)	kW	5.5/5.1		7.2/6.5	
	Heating Capacity	kW		2.7		
	Rated Humidifying Capacity	kg/h	2		4	
	Air Volume	m³/h	1900		1950	
	External Static Pressure	Pa	0	15	0	15
	Noise of Indoor Unit	dB(A)	58	56	63	55
Cooling System	Temperature Control Range and Precision		17 ~ 28°C±1°C			
	Humidity Control Range and Precision		40 ~ 60%±5%			
	Power Supply		220V ~ 50Hz		380V 3N~50Hz	
	Compressor	Type		Hermetic Scroll Type		
	Evaporator	Type		Inner Grooved Copper Pipe with Hyrophilic Film Aluminum Fin		
	Condenser	Type		Inner Grooved Copper Pipe with Hyrophilic Film Aluminum Fin		
Air Supply System	Refrigerant			R410A		
	Throttling Method			Electric Expansion Valve		
	Indoor Unit	Fan	Type	Low Noise and Centrifugal External Rotor		
			Type of Drive	Direct Drive		
		Filter	Type	Plate Filter(G4)		
Heating System	Heater	Type		Electric Heating		
	Humidifying System	Type		Infrared		
				Automatic Control by Mainboard		
		Control Method			JKFD5CR/Na-E(I)	JKFD5QSR/Na-E(I)
Evaporator	Indoor Unit Model				JKFD7CR/Na-M(I)	JKFD7QSR/Na-M(I)
	Dimension	Width	mm		800	
		Depth	mm		700	
		Height	mm	2250	1950	2250
	Net Weight	kg		257	237	257
	Outdoor Unit Model				JKFD5P/Na-E(O)	JKFD7P/Na-E(O)
Outdoor Unit	Quantity	set			1	
	Condensate Fan	Type		Low Noise Axial Type		
		Type of Drive		Direct Drive		
	Noise of Outdoor Unit		dB(A)		60	
	Dimension	Width	mm		900	
		Depth	mm		412	
		Height	mm		1350	
Connecting Pipe	Net Weight	kg			71	
	Liquid Pipe of Refrigerant		mmx (unit)		Φ9.52x1	
	Gas Pipe of Refrigerant		mmx (unit)		Φ12x1	
	Connecting Method				Flared Joint	



## CAC

Class	Item	Model Unit	JKFD15CR/Na-M	JKFD15QSR/Na-M	JKFD20CR/Na-M	JKFD20QSR/Na-M
Characteristics	Total Cooling Capacity/Sensible Cooling Capacity(24°C /17°C)	kW	15.0/13.6		20.0/18.4	
	Heating Capacity	kW	5.5	6.5	9.5	10.5
	Rated Humidifying Capacity	kg/h		4		
	Air Volume	m³/h	3700	4800	4150	6000
	External Static Pressure	Pa	0	75	0	75
	Noise of Indoor Unit	dB(A)	64	62	63	61
	Temperature Control Range and Precision		17 ~ 28°C ±1°C			
	Humidity Control Range and Precision		40 ~ 60%±5%			
Cooling System	Power Supply		380V 3N ~ 50Hz			
	Compressor	Type	Hermetic Scroll Type			
	Evaporator	Type	Inner Grooved Copper Pipe with Hyrophilic Film Aluminum Fin			
	Condenser	Type	Inner Grooved Copper Pipe with Hyrophilic Film Aluminum Fin			
	Refrigerant		R410A			
	Throttling Method		Electric Expansion Valve			
Air Supply System	Indoor Unit	Fan	Type	Low Noise and Centrifugal External Rotor		
			Type of Drive	Direct Drive		
	Filter	Type		Plate Filter(G4)		
Heating System	Heater	Type		Electric Heating		
Humidifying System	Humidifier	Type		Infrared		
Evaporator	Control Method		Automatic Control by Mainboard			
	Indoor Unit Model		JKFD15CR/Na-M(I)	JKFD15QSR/Na-M(I)	JKFD20CR/Na-M(I)	JKFD20QSR/Na-M(I)
	Dimension	Width	mm		980	
	Dimension	Depth	mm		950	
	Dimension	Height	mm	2250	1950	2250
	Net Weight	kg		380	348	400
	Outdoor Unit Model		JKFD15P/Na-M(O)		JKFD20P/Na-M(O)	
	Quantity	set		1		
Outdoor Unit	Condensate Fan	Type	Low Noise Axial Type			
		Type of Drive	Direct Drive			
	Noise of Outdoor Unit	dB(A)		64		
	Dimension	Width	mm		1400	
	Dimension	Depth	mm		715	
	Dimension	Height	mm		1130	
Connecting Pipe	Net Weight	kg		136		
	Liquid Pipe of Refrigerant	mmx (unit)		Φ16x1		
	Gas Pipe of Refrigerant	mmx (unit)		Φ19x1		
	Connecting Method			Flared Joint		

Class	Item	Model Unit	JKFD30QS/NaB-M	JKFD30SX/NaB-M	JKFD30QS2/NaB-M	JKFD30SX2/NaB-M
Characteristics	Total Cooling Capacity/Sensible Cooling Capacity(24°C /17°C)	kW	31.0/29.2		30.9/29.1	
	Heating Capacity	kW		9		
	Rated Humidifying Capacity	kg/h		8		
	Air Volume	m³/h		9000		
	External Static Pressure	Pa		100		
	Noise of Indoor Unit	dB(A)	65		63	
	Temperature Control Range and Precision			17 ~ 28°C ±1°C		
	Humidity Control Range and Precision			40 ~ 60%±5%		
Cooling System	Power Supply		380V 3N ~ 50Hz			
	Compressor	Type	Hermetic Scroll Type			
	Evaporator	Type	Inner Grooved Copper Pipe with Hyrophilic Film Aluminum Fin			
	Condenser	Type	Inner Grooved Copper Pipe with Hyrophilic Film Aluminum Fin			
	Refrigerant		R410A			
	Throttling Method		Electric Expansion Valve			
Air Supply System	Indoor Unit	Fan	Type	EC Low Noise and Centrifugal External Rotor		
			Type of Drive	Inverter Direct Drive		
	Filter	Type		Plate Filter(G4)		
Heating System	Heater	Type		Electric Heating		
Humidifying System	Humidifier	Type		Electrode		
Evaporator	Control Method		Independent Humidifying Panel			
	Indoor Unit Model		JKFD30QS/NaB-M(I)	JKFD30SX/NaB-M(I)	JKFD30QS2/NaB-M(I)	JKFD30SX2/NaB-M(I)
	Dimension	Width	mm	925	1300	
	Dimension	Depth	mm	990		
	Dimension	Height	mm		1980	
	Net Weight	kg		359	429	
	Outdoor Unit Model			JKFD30Pd/NaB-M(O)		JKFD15Pd/NaB-M(O)
	Quantity	set		1		2
Outdoor Unit	Condensate Fan	Type	Low Noise Axial Type			
		Type of Drive	Inverter Direct Drive			
	Noise of Outdoor Unit	dB(A)		62		
	Dimension	Width	mm	1340	930	
	Dimension	Depth	mm		765	
	Dimension	Height	mm	1740	1605	
Connecting Pipe	Net Weight	kg		193	125	
	Liquid Pipe of Refrigerant	mmx (unit)		Φ19x1		Φ12x2
	Gas Pipe of Refrigerant	mmx (unit)		Φ22x1		Φ16x2
	Connecting Method				Weld	

Class	Item	Model Unit	JKFD40QS/NaB-M	JKFD40SX/NaB-M	JKFD40QS2/NaB-M	JKFD40SX2/NaB-M
Characteristics	Total Cooling Capacity/Sensible Cooling Capacity(24°C /17°C)	kW	40.1/37.7		40.2/37.8	
	Heating Capacity	kW		9		
	Rated Humidifying Capacity	kg/h		8		
	Air Volume	m³/h		11000		
	External Static Pressure	Pa		100		
	Noise of Indoor Unit	dB(A)	69		68	
	Temperature Control Range and Precision			17 ~ 28°C ±1°C		
	Humidity Control Range and Precision			40 ~ 60%±5%		
Cooling System	Power Supply		380V 3N ~ 50Hz			
	Compressor	Type	Hermetic Scroll Type			
	Evaporator	Type	Inner Grooved Copper Pipe with Hyrophilic Film Aluminum Fin			
	Condenser	Type	Inner Grooved Copper Pipe with Hyrophilic Film Aluminum Fin			
	Refrigerant		R410A			
	Throttling Method		Electric Expansion Valve			
Air Supply System	Indoor Unit	Fan	Type	EC Low Noise and Centrifugal External Rotor		
			Type of Drive	Inverter Direct Drive		
	Filter	Type		Plate Filter(G4)		
Heating System	Heater	Type		Electric Heating		
Humidifying System	Humidifier	Type		Electrode		
Evaporator	Control Method		Independent Humidifying Panel			
	Indoor Unit Model		JKFD40QS/NaB-M(I)	JKFD40SX/NaB-M(I)	JKFD40QS2/NaB-M(I)	JKFD40SX2/NaB-M(I)
	Dimension	Width	mm	1125	1300	
	Dimension	Depth	mm		990	
	Dimension	Height	mm		1980	
	Net Weight	kg		403	447	
	Outdoor Unit Model			JKFD40Pd/NaB-M(O)		JKFD20Pd/NaB-M(O)
	Quantity	set		1		2
Outdoor Unit	Condensate Fan	Type	Low Noise Axial Type			
		Type of Drive	Inverter Direct Drive			
	Noise of Outdoor Unit	dB(A)		62		
	Dimension	Width	mm	1340	930	
	Dimension	Depth	mm		765	
	Dimension	Height	mm	1740	1605	
Connecting Pipe	Net Weight	kg		220	137	
	Liquid Pipe of Refrigerant	mmx (unit)		Φ19x1		Φ16x2
	Gas Pipe of Refrigerant	mmx (unit)		Φ22x1		Φ19x2
	Connecting Method				Weld	



## CAC

Class	Item	Model Unit	JKFD50QS/NaB-M	JKFD50SX/NaB-M	JKFD50QS2/NaB-M	JKFD50SX2/NaB-M
Characteristics	Total Cooling Capacity/Sensible Cooling Capacity(24°C /17°C)	kW	51.2/48.2		50.8/47.8	
	Heating Capacity	kW	9		18	
	Rated Humidifying Capacity	kg/h		8		
	Air Volume	m³/h		14000		
	External Static Pressure	Pa		100		
	Noise of Indoor Unit	dB(A)	69		67	
	Temperature Control Range and Precision			17 ~ 28°C ±1°C		
	Humidity Control Range and Precision			40 ~ 60%±5%		
	Power Supply			380V 3N ~ 50Hz		
Cooling System	Compressor	Type		Hermetic Scroll Type		
	Evaporator	Type		Inner Grooved Copper Pipe with Hydophilic Film Aluminum Fin		
	Condenser	Type		Inner Grooved Copper Pipe with Hydophilic Film Aluminum Fin		
	Refrigerant			R410A		
	Throttling Method			Electric Expansion Valve		
	Air Supply System	Indoor Unit	Fan	Type	EC Low Noise and Centrifugal External Rotor	
				Type of Drive	Inverter Direct Drive	
		Filter	Type		Plate Filter(G4)	
	Heating System	Heater	Type		Electric Heating	
	Humidifying System	Humidifier	Type		Electrode	
			Control Method		Independent Humidifying Panel	
Evaporator	Indoor Unit Model		JKFD50QS/NaB-M(I)	JKFD50SX/NaB-M(I)	JKFD50QS2/NaB-M(I)	JKFD50SX2/NaB-M(I)
	Dimension	Width	mm	1300		1800
		Depth	mm		990	
		Height	mm		1980	
	Net Weight	kg		417	608	
Outdoor Unit	Outdoor Unit Model		JKFD50Pd/NaB-M(O)		JKFD25Pd/NaB-M(O)	
	Quantity	set		1	2	
	Condensate Fan	Type		Low Noise Axial Type		
		Type of Drive		Inverter Direct Drive		
	Noise of Outdoor Unit		dB(A)	64	62	
	Dimension	Width	mm	1340	930	
		Depth	mm		765	
		Height	mm	1740	1605	
	Net Weight	kg		220	137	
	Connecting Pipe	Liquid Pipe of Refrigerant	mmx (unit)	Φ19x1	Φ19x2	
		Gas Pipe of Refrigerant	mmx (unit)	Φ22x1	Φ22x2	
		Connecting Method			Weld	
Class	Item	Model Unit	JKFD60QS2/NaB-M	JKFD60SX2/NaB-M	JKFD70QS2/NaB-M	JKFD70SX2/NaB-M
Characteristics	Total Cooling Capacity/Sensible Cooling Capacity(24°C /17°C)	kW	61.5/57.9		70.3/66.1	
	Heating Capacity	kW	18		18	
	Rated Humidifying Capacity	kg/h		8		
	Air Volume	m³/h	17500		20000	
	External Static Pressure	Pa		100		
	Noise of Indoor Unit	dB(A)	68		71	
	Temperature Control Range and Precision			17 ~ 28°C ±1°C		
	Humidity Control Range and Precision			40 ~ 60%±5%		
	Power Supply			380V 3N ~ 50Hz		
Cooling System	Compressor	Type		Hermetic Scroll Type		
	Evaporator	Type		Inner Grooved Copper Pipe with Hydophilic Film Aluminum Fin		
	Condenser	Type		Inner Grooved Copper Pipe with Hydophilic Film Aluminum Fin		
	Refrigerant			R410A		
	Throttling Method			Electric Expansion Valve		
	Air Supply System	Indoor Unit	Fan	Type	EC Low Noise and Centrifugal External Rotor	
				Type of Drive	Inverter Direct Drive	
		Filter	Type		Plate Filter(G4)	
	Heating System	Heater	Type		Electric Heating	
	Humidifying System	Humidifier	Type		Electrode	
			Control Method		Independent Humidifying Panel	
Evaporator	Indoor Unit Model		JKFD60QS2/NaB-M(I)	JKFD60SX2/NaB-M(I)	JKFD70QS2/NaB-M(I)	JKFD70SX2/NaB-M(I)
	Dimension	Width	mm	1800		
		Depth	mm		990	
		Height	mm		1980	
	Net Weight	kg		616		
Outdoor Unit	Outdoor Unit Model		JKFD30Pd/NaB-M(O)		JKFD35Pd/NaB-M(O)	
	Quantity	set		2		
	Condensate Fan	Type		Low Noise Axial Type		
		Type of Drive		Inverter Direct Drive		
	Noise of Outdoor Unit		dB(A)	62		
	Dimension	Width	mm	1340		
		Depth	mm		765	
		Height	mm	1740		
	Net Weight	kg		193		
	Connecting Pipe	Liquid Pipe of Refrigerant	mmx (unit)	Φ19x2		
		Gas Pipe of Refrigerant	mmx (unit)	Φ22x2		
		Connecting Method			Weld	

Class	Item	Model Unit	JKFD80QS2/NaB-M	JKFD80SX2/NaB-M	JKFD90QS2/NaB-M	JKFD90SX2/NaB-M	JKFD100QS2/NaB-M	JKFD100SX2/NaB-M
Characteristics	Total Cooling Capacity/Sensible Cooling Capacity(24°C /17°C)	kW	80.1/75.3		90.2/84.8		100.3/94.3	
	Heating Capacity	kW	18		18		18	
	Rated Humidifying Capacity	kg/h		8				
	Air Volume	m³/h		23000	26000		28000	
	External Static Pressure	Pa			100			
	Noise of Indoor Unit	dB(A)			71			
	Temperature Control Range and Precision				17 ~ 28°C ±1°C			
	Humidity Control Range and Precision				40 ~ 60%±5%			
	Power Supply				380V 3N ~ 50Hz			
Cooling System	Compressor	Type		Hermetic Scroll Type				
	Evaporator	Type		Inner Grooved Copper Pipe with Hydophilic Film Aluminum Fin				
	Condenser	Type		Inner Grooved Copper Pipe with Hydophilic Film Aluminum Fin				
	Refrigerant			R410A				
	Throttling Method			Electric Expansion Valve				
	Air Supply System	Indoor Unit	Fan	Type	EC Low Noise and Centrifugal External Rotor			
				Type of Drive	Inverter Direct Drive			
		Filter	Type		Plate Filter(G4)			
	Heating System	Heater	Type		Electric Heating			
	Humidifying System	Humidifier	Type		Electrode			
			Control Method		Independent Humidifying Panel			
Evaporator	Indoor Unit Model		JKFD80QS2/NaB-M(I)	JKFD80SX2/NaB-M(I)	JKFD90QS2/NaB-M(I)	JKFD90SX2/NaB-M(I)	JKFD100QS2/NaB-M(I)	JKFD100SX2/NaB-M(I)
	Dimension	Width	mm	1800			2200	
		Depth	mm		990		990	
		Height	mm	1980		1980		1980
	Net Weight	kg		766		766		766
Outdoor Unit	Outdoor Unit Model		JKFD40Pd/NaB-M(O)		JKFD45Pd/NaB-M		JKFD50Pd/NaB-M(O)	
	Quantity	set		2				
	Condensate Fan	Type		Low Noise Axial Type				
		Type of Drive		Inverter Direct Drive				
	Noise of Outdoor Unit		dB(A)	62	64	64		
	Dimension	Width	mm	1340		1340		1340
		Depth	mm		765		765	
		Height	mm	1740		1740		1740
	Net Weight	kg		220		220		220
	Connecting Pipe	Liquid Pipe of Refrigerant	mmx (unit)		Φ19x2			
		Gas Pipe of Refrigerant	mmx (unit)		Φ22x2			
		Connecting Method			Weld			

## Note:

1. The executive standard for the design of this unit: GB / T 19413-2010.
2. The ambient temperature for cooling capacity measurement: indoor dry bulb temperature is 24 °C, wet bulb temperature is 17 °C and outdoor dry bulb temperature is 35 °C.
3. The performance parameters of the unit will be changed due to the improvement of the product without prior notice. The specific parameters are subject to the nameplate of the unit.
4. The noise is the value tested in the semi-anechoic room according to the relevant standards. During actual operation, the noise may increase a little due to the change of ambient temperature.
5. The accuracy of temperature and humidity control is closely related to the temperature and humidity load at the project site. A detailed load calculation table should be provided for verification when high control accuracy is required.
6. When the altitude exceeds 1,000m, derating is required. Please contact our company for specific derating.
7. All above models can realize modular operation.
8. If you have special requirements, please contact us in time.
9. Electric heating and humidifier can be selected according to engineering needs. Please contact our company for specific requirements.
10. The unit is equipped with the top air discharge outdoor unit and its top air discharge indoor unit is without air cap. If you need side air discharge outdoor unit and the air cap for the indoor unit, please contact our company.

## Reference Projects



• Project Name: Mordovia Arena  
• Country: Russia  
• City: Saransk  
• Time: 2018  
• Product: Water-cooled Screw Chiller



• Project Name: Sochi More-Mall  
• Country: Russia  
• City: Sochi  
• Time: 2014  
• Product: Centrifugal Chiller



• Project Name: Jizan Double Tree By Hilton  
• Country: Saudi Arabia  
• City: Jizan  
• Time: 2019  
• Product: Air-cooled Screw Chiller



• Project Name: Holiday Inn Orchard  
• Country: Singapore  
• City: Singapore  
• Time: 2018  
• Product: Water-cooled Screw Chiller



• Project Name: China Pavilion of 2015 Milan World Expo  
• Country: Italy  
• City: Milan  
• Time: 2015  
• Product: GMV



• Project Name: Greenwood International Trade Center  
• Country: Russia  
• City: Moscow  
• Time: 2018  
• Product: GMV



• Project Name: Marriott Executive Apartments  
• Country: Ethiopia  
• City: Addis Ababa  
• Time: 2018  
• Product: Air-cooled Screw Chiller/FCU/AHU



• Project Name: 14 Regional Airports  
• Country: Greece  
• City: Actio, Corfu, Kefalonia, Kavala, Thessaloniki, Zante, Skiatos, Mykonos, Santorini, Kos, Mytilene, Rhodes, Samos, Chania  
• Time: 2019  
• Product: GMV



• Project Name: Minsk Shanter Hill  
• Country: Belarus  
• City: Minsk  
• Time: 2019  
• Product: GMV



• Project Name: Azerbaijan Ministry of Internal Affairs  
• Country: Azerbaijan  
• City: Baku  
• Time: 2018  
• Product: Telecom AC/Rooftop



• Project Name: Clinical Hospital Firule  
• Country: Croatia  
• Time: 2017  
• Product: GMV



• Project Name: Agri City Hospital  
• Country: Turkey  
• Time: 2016  
• Product: Air-cooled Screw Chiller



• Project Name: Mercedes Benz Showroom  
• Country: Georgia  
• City: Tbilisi  
• Time: 2018  
• Product: GMV



• Project Name: Hotel Palace Bellevue  
• Country: Croatia  
• City: Cavtat  
• Time: 2018  
• Product: GMV



• Project Name: Clinical Hospital Karlovac  
• Country: Croatia  
• City: Zagreb  
• Time: 2018  
• Product: GMV



• Project Name: FEO Residence  
• Country: Turkey  
• City: Northern Cyprus  
• Time: 2018  
• Product: GMV



## Reference Projects Lineup

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

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

