



#### GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

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##### Note:

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

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Distributor information

**GREE**  
AIR CONDITIONER

2016 CAC

T1 50HZ R410A/R134a



2016

**CAC**  
T1 50HZ  
R410A/R134a



Gree Electric Appliances Inc. of Zhuhai, founded in 1991, is the world's largest air conditioner enterprise integrating R&D, manufacturing, marketing and service.

- 2012, Gree became the first listed electrical appliances enterprise in China with sales revenue over 16 billion USD (RMB 100 billion).
- 2013, GREE's sales revenue exceeded 19 billion USD.

Gree has been ranked on the Fortune Magazine as one of the Top 100 Chinese listed companies for 12 consecutive years.

Thanks to 300 million user's choices, Gree products are sold widely in more than 200 countries and regions. Today Gree's annual production capacity of RAC and CAC are more than 60 million sets and 5.5 million sets respectively.

Action makes the future and innovation makes achievement. Looking forward, Gree will firmly persist in the business philosophy of passion, innovation and realization. We aim to build a century's standing air conditioning enterprise, to create a better life for human.

*For the Clearer Sky and Greener Earth.*

### The World's Biggest Public Companies

The List		Spreadsheet	Reprints	Logo Use
<small>Filter list by: All industries ▾ All countries ▾ All states ▾ Search by company name</small>				
Bank	Company	Country	Sales	Profits Assets Market Value
 #385	Gree Electric Appliances	China	\$21.2 B	\$2.1 B
 #436	Midea Group Co.Ltd.	China	\$22.9 B	\$1.7 B
 #625	Whirlpool	United States	\$19.9 B	\$65.0 M
 #781	Qingdao Haier	China	\$14.4 B	\$81.0 M
			\$12.1 B	\$13.7 B

مكيف گازی مكيف الهواء  
air conditioner  
랭온 풍기 エアコン エアコン  
空調 climatiser  
acondicionador de aire  
ar condicionado  
**300,000,000** users

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## Some Parts

-  **Golden fin condenser**  
Anti-corrosive performance of golden fin is 3 times better than normal Fin.
-  **Inner groove copper**  
Special thickened inner groove copper tube enhances heat exchanging performance.
-  **Built-in drain pump**  
The drain pump can pump the condensation to a high level. It facilitates condensation draining from the indoor unit and makes the installation of indoor unit easier.
-  **Washable filter**  
Filters are easy to dismantle and install. You can use dirt collector or water to clear away the dust.
-  **Quality motor**  
Quality motor makes operation steady and in low noise.
-  **Auxiliary electric heater**  
Auxiliary heater greatly improves heating capacity and saves energy.
-  **Slave and master wired controller**  
One indoor unit can be connected with two wired controllers to realize controlling of the same indoor unit from different control points.
-  **Long connection pipe design**  
The total length of connection pipe reaches 1000m, which greatly improves the project flexibility of the unit.

## 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.

## Comfortable & Healthy

-  **Vertical swing**  
Air discharge flaps can automatic move vertically for efficient air and temperature distribution throughout the room.
-  **Horizontal swing**  
Air discharge Louvre can automatic move horizontally for efficient air and temperature distribution throughout the room.
-  **Anti-cold function**  
The indoor unit will not blow in the winter if the air is not warm enough.
-  **Turbo function**  
To run with strong power and make you feel comfortable(cool or warm) quickly.
-  **Fresh air supply ventilation**  
The unit can introduce a certain percentage of fresh air to satisfy the fresh air requirement.
-  **Comfortable sleeping mode**  
The setting temperature and the indoor noise can be adjusted to a more comfortable level when you set the "sleeping mode".
-  **Quiet function**  
Unit is ensured to operate with the lowest noise by ultra-low fan speed and auto adjustment according to system parameter.

## Convenience

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

## Reliability

-  **Auto clean**  
After unit turn off , the indoor fan will keep running in low speed for a moment to dry the inner components and parts, in order to prevent mildew and keep users healthy.
-  **Self-diagnosis**  
Malfunction codes are shown on the display panel for fast and easy maintenance when problem occur.
-  **Low voltage startup**  
Unit is able to safely start when voltage is below standard.
-  **Low temperature heating**  
Unit is able to start and operate in normal when the ambient temperature is lower than -20°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**  
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.

## Control

-  **24 hour timer**  
Unit can be set to turn on or turn off at anytime in a day.(The timing interval is 5-minite.)
-  **Weekly timer**  
Unit can be set to start heating or cooling anytime on a daily or weekly basis.
-  **°C/°F switch**  
Under status of unit off, press MODE and "-" buttons simultaneously to switch °C/°F.
-  **Clock display**  
Time is shown on remote controller .
-  **Child lock**  
It avoids child's wrong operation on the remote controller.
-  **Key-card control**  
The Key-card control function is specially designed for the hotel rooms. By removing the key-card the air conditioner, it can be automatically switched to stand-by status.
-  **Centralized control**  
Starts, stops and regulates the air conditioner from a distance.
-  **Long-distance monitoring**  
Long-distance monitoring enables the unit to be controlled and monitored from a long distance.
-  **Shield function**  
Remote control the indoor unit and shield the functions of wired controller which include ON/OFF, temp or mode setting, energy-saving function, etc.
-  **Human engineering operation**  
Adopts the technologies of auto addressing, non-polar communication and auto debugging, which improves project efficiency.
-  **Floor Heating Debugging**

LIGHT COMMERCIAL AC

# LIGHT COMMERCIAL AC

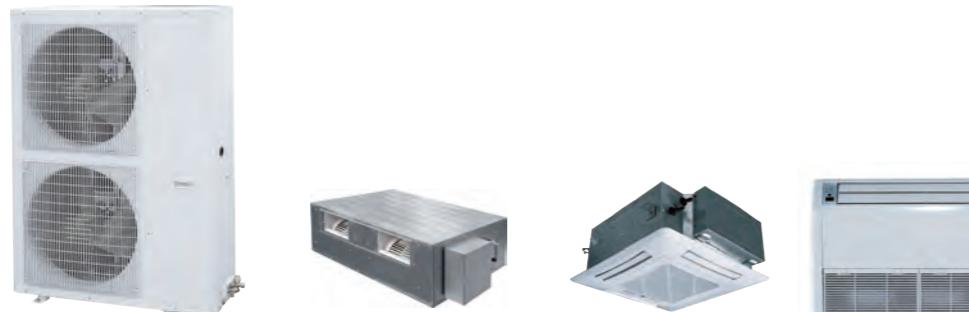
**U-Match**  
**Duct Split Unit**



# U-Match

## High Efficiency Series

It is a kind of split system that the outdoor unit can be freely connected to different types of indoor units according to various indoor decoration requirements.



- Double ambient temperature sensor design makes a precision temperature monitoring.
- Low start-up current thanks to power delay control design.
- Higher efficiency thanks to sine wave DC inverter compressor control.
- High reliability and easy maintenance thanks to one piece integrated PCB board.
- Stable cooling under -15°C and heating under -10°C outdoor environment temperature.



## Indoor Unit

Duct type	Cassette type	Floor ceiling type
<ul style="list-style-type: none"> <li>Drain pump fitted as optional with increased lift of 1100mm.</li> <li>Fresh air inlet and air valve control function improve the indoor air quality.</li> <li>Flexible air in/outlet and condensing water outlet direction according to different installation requirements.</li> <li>Optimized air duct design improves the performance and lower the noise.</li> </ul>	<ul style="list-style-type: none"> <li>Drain pump fitted as standard with increased lift of 1100mm.</li> <li>Special low noise fan design.</li> <li>Different swing angle design for cooling and heating mode for better comfort.</li> </ul>	<ul style="list-style-type: none"> <li>3-D air flue design.</li> <li>Easy replacement of motor and fan blade thanks to clamp block propeller design.</li> <li>Different swing angle design for cooling and heating mode for better comfort.</li> </ul>

Item	Nominal operating condition (temperature)				Operation 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	-	-10~24

## Indoor Units Lineup

Capacity Index (BTU/h)		9K	12K	18K	24K	30K
Outdoor Unit	Model	GUHD09NK3FO	GUHD12NK3FO	GUHD18NK3FO	GUHD24NK3FO	GUHD30NK3FO
	Picture					
Indoor Unit	Model	GFH09K3FI	GFH12K3FI	GFH18K3FI	GFH24K3FI	GFH30K3FI
	Picture					
Cassette	Model	—	GKH12K3FI	GKH18K3FI	GKH24K3FI	GKH30K3FI
	Picture					
Floor Ceiling	Model	GTH09K3FI	GTH12K3FI	GTH18K3FI	GTH24K3FI	GTH30K3FI
	Picture					

Capacity Index (BTU/h)		36K	42K	48K	60K			
Outdoor Unit	Model	GUHD36NK3FO	GUHD36NM3FO	GUHD42NK3FO	GUHD42NM3FO	GUHD48NK3FO	GUHD48NM3FO	GUHD60NM3FO
	Picture							
Indoor Unit	Model	GFH36K3FI	GFH36K3FI	GFH42K3FI	GFH42K3FI	GFH48K3FI	GFH48K3FI	GFH60K3FI
	Picture							
Cassette	Model	GKH36K3FI	GKH36K3FI	GKH42K3FI	GKH42K3FI	GKH48K3FI	GKH48K3FI	GKH60K3FI
	Picture							
Floor Ceiling	Model	GTH36K3FI	GTH36K3FI	GTH42K3FI	GTH42K3FI	GTH48K3FI	GTH48K3FI	GTH60K3FI
	Picture							

Model	Outdoor unit		GUHD09NK3FO			GUHD12NK3FO		
	Indoor unit		Duct	Floor Ceiling	Duct	Cassette	Floor Ceiling	
		GFH09K3FI	GTH09K3FI	GFH12K3FI	GKH12K3FI	GTH12K3FI		
Capacity	Cooling	kW	2.7	2.7	3.5	3.5	3.5	
		BTU/h	9212	9212	11942	11942	11942	
SEER/SCOP	Heating	kW	2.9	2.9	3.8	3.8	3.8	
		BTU/h	9895	9895	12966	12966	12966	
Power supply		W/W	5.6/3.8	6.1/3.8	5.6/4.0	5.6/4.0	6.1/4.0	
Power input		Ph/V/Hz	1/220-240/50			1/220-240/50		
Current input	Cooling	kW	0.84	0.84	1.17	1.09	1.09	
	Heating	kW	0.80	0.80	1.05	1.05	1.05	
Refrigerant charge volume	Cooling	A	3.9	3.9	5.4	5.0	5.0	
	Heating	A	3.7	3.7	4.9	4.9	4.9	
Air flow volume(H/M/L)		kg	1.2	1.2	1.2	1.2	1.2	
Indoor unit	CFM	383	353	441	412	412		
	m³/h	650	600	750	700	700		
	Rated ESP	Pa	25	—	25	—	—	
	Range	Pa	0-30	—	0-30	—	—	
Sound pressure level (SH/H/ML)		dB(A)	36/34/28/26	31/29/26/24	37/36/34/28	46/45/41/36	35/33/30/27	
Dimension (WxDxH)	Outline	mm	925x665x250	1220x700x225	1037x721x266	596x596x240	1220x700x225	
	Package	mm	1023x748x320	1343x823x315	1123x798x323	773x733x300	1343x823x315	
Net weight/Gross weight		kg	27/32	38/47	33/38	20/24	39/48	
Panel	Dimension (WxDxH)	Outline	mm	—	—	670x670x50	—	
	Package	mm	—	—	—	763x763x105	—	
	Net weight/Gross weight	kg	—	—	—	3.5/5.0	—	
Outdoor unit	Sound pressure level	dB(A)	52		52			
	Dimension (WxDxH)	Outline	mm	848x320x540		848x320x540		
	Package	mm	881x363x595		881x363x595			
Connection pipe	Net weight/Gross weight	kg	34/37		34/37			
	Outer diameter	Liquid	inch(mm)	φ1/4(6.35)		φ1/4(6.35)		
	Gas	inch(mm)	—	φ3/8(9.52)		φ3/8(9.52)		
Max.distance		Height/Length	m	15/20		15/20		
Loading quantity		40GP/40HQ	-	126/141	96/112	114/131	127/138	96/112

Model	Outdoor unit		GUHD18NK3FO			GUHD24NK3FO		
	Indoor unit		Duct	Cassette	Floor Ceiling	Duct	Cassette	Floor Ceiling
		GFH18K3FI	GKH18K3FI	GTH18K3FI	GFH24K3FI	GKH24K3FI	GTH24K3FI	
Capacity	Cooling	kW	5.0	5.0	5.0	7.0	7.0	7.0
		BTU/h	17060	17060	17060	23884	23884	23884
SEER/SCOP	Heating	kW	5.6	5.5	5.6	8.0	8.0	8.0
		BTU/h	19107	18766	19107	27296	27296	27296
Power supply		W/W	5.6/3.8	5.6/3.8	6.1/4.0	6.1/4.0	6.1/4.0	5.6/4.0
Power input		Ph/V/Hz	1/220-240/50			1/220-240/50		
Current input	Cooling	kW	1.55	1.60	1.55	2.18	2.18	2.18
	Heating	kW	1.55	1.58	1.55	2.21	2.21	2.21
Refrigerant charge volume	Cooling	A	7.5	7.2	7.2	10.1	10.1	10.1
	Heating	A	7.4	7.6	7.2	10.2	10.2	10.2
Indoor unit	Air flow volume(H/M/L)	kg	1.4	1.4	1.4	2.2	2.2	2.2
	CFM	589	447	589	824	765	706	
	m³/h	1000	760	1000	1400	1300	1200	
	Rated ESP	Pa	25	—	—	25	—	—
Connection pipe	Range	Pa	0-30	—	—	0-75	—	—
	Sound pressure level (SH/H/ML)	dB(A)	40/39/36/28	47/46/44/37	44/42/38/32	47/46/44/40	47/46/42/38	49/48/46/40
	Dimension (WxDxH)	Outline	mm	1037x721x266	596x596x240	1220x700x225	1279x558x268	840x840x240
Outdoor unit	Package	mm	1123x798x323	773x733x300	1343x823x315	1348x597x283	963x963x325	1343x823x315
	Net weight/Gross weight	kg	33/38	20/24	39/48	34/39	26/32	40/50
	Outer diameter	Liquid	inch(mm)	φ1/4(6.35)		φ3/8(9.52)		
Connection pipe	Gas	inch(mm)	—	φ1/2(12.7)		φ5/8(15.9)		
	Max.distance	Height/Length	m	15/20		15/30		
	Loading quantity	40GP/40HQ	-	93/95	95/105	89/97	76/89	64/71

Model	Outdoor unit		GUHD30NK3FO			GUHD36NK3FO		
	Indoor unit		Duct	Cassette	Floor Ceiling	Duct	Cassette	Floor Ceiling
		GFH30K3FI	GKH30K3FI	GTH30K3FI	GFH36K3FI	GKH36K3FI	GTH36K3FI	
Capacity	Cooling	kW	8.3	8.3	8.5	10.0	10.0	10.0
		BTU/h	28320	28320	29002	34120	34120	34120
SEER/SCOP	Heating	kW	9.2	9.2	9.2	12.0	12.0	12.0
		BTU/h	31390	31390	31390	40944	40944	40944
Power supply		W/W	6.1/4.0	6.1/4.0	6.1/4.0	5.6/4.0	6.1/4.0	6.1/4.0
Power input		Ph/V/Hz	1/220-240/50			1/220-240/50		
Current input	Cooling	kW	2.67	2.67	2.67	3.20	3.20	3.20
	Heating	kW	2.57	2.57	2.57	3.40	3.50	3.40
Refrigerant charge volume	Cooling	A	12.4	12.4	12.4	15.0	15.0	15.0
	Heating	A	12.0	12.0	12.0	15.5	16.2	15.8
Air flow volume(H/M/L)		kg	2.4	2.4	2.4	3.5	3.5	3.5
Indoor unit	CFM	824	883	883	1236	1095	1118	
	m³/h	1400	1500	1500	2100	1860	1900	
	Rated ESP	Pa	37	—	—	37	—	—
	Range	Pa	0-75	—	—	0-100	—	—

Model	Outdoor unit		GUHD42NM3FO			GUHD48NK3FO		
	Indoor unit		Duct	Cassette	Floor Ceiling	Duct	Cassette	Floor Ceiling
		GFH42K3FI	GKH42K3FI	GTH42K3FI	GFH48K3FI	GKH48K3FI	GTH48K3FI	
Capacity	Cooling	kW	11.5	11.0	11.5	14.0	14.0	14.0
		BTU/h	39238	37532	39238	47768	47768	47768
	Heating	kW	13.5	12.5	13.5	15.5	16.0	16.0
		BTU/h	46062	42650	46062	52886	54592	54592
SEER/SCOP		W/W	5.6/4.0	6.1/4.0	5.6/4.0	6.1/3.8	6.1/3.8	5.6/3.8
Power supply		Ph/V/Hz	3/380-415/50			1/220-240/50		
Power input	Cooling	kW	4.0	3.9	3.9	4.7	4.6	4.8
	Heating	kW	3.9	3.8	3.74	4.4	4.5	4.3
Current input	Cooling	A	6.9	6.7	6.7	21.8	21.3	22.3
	Heating	A	6.7	6.6	6.5	20.4	20.8	20.0
Refrigerant charge volume		kg	3.7	3.7	3.7	4.0	4.0	4.0
Indoor unit	Air flow volume(H/M/L)	CFM	1236	1095	1118	1412	1354	1354
		m³/h	2100	1860	1900	2400	2300	2300
	ESP	Rated Range	Pa Pa	37 0-100	— —	50 0-125	— —	— —
	Sound pressure level (SH/HML)	dB(A)	53/52/48/44	51/49/46/43	55/54/52/47	55/53/49/45	53/52/47/41	56/55/50/40
	Dimension (WxDxH)	Outline Package	mm mm	1226x775x290 963x963x409	840x840x320 1548x828x345	1420x700x245 1423x993x375	910x910x290 1023x993x375	1700x700x245 1828x828x345
	Net weight/Gross weight	kg kg	46/53	31/38	50/58	56/65	43/50	59/68
Panel	Dimension (WxDxH)	Outline Package	mm mm	— 1028x1043x130	— —	— 1137x1137x140	— —	— —
	Net weight/Gross weight	kg kg	— 7.0/11	— —	— —	— 8.0/12	— —	— —
Outdoor unit	Sound pressure level	dB(A)	61			59		
	Dimension (WxDxH)	Outline Package	mm mm	958x412x1349 1043x453x1500	— —	958x412x1349 1043x453x1500	— —	— —
	Net weight/Gross weight	kg kg	— 108/118	— —	— —	— 105/115	— —	— —
Connection pipe	Outer diameter	Liquid Gas	inch(mm) inch(mm)	φ3/8(9.52) φ5/8(15.9)	— —	φ3/8(9.52) φ5/8(15.9)	— —	— —
	Max.distance	Height/Length	m m	— 30/50	— —	— 30/50	— —	— —
	Loading quantity	40'GP/40'HQ	-	52/58	45/48	43/47	38/48	43/50

Model	Outdoor unit		GUHD48NM3FO			GUHD60NM3FO		
	Indoor unit		Duct	Cassette	Floor Ceiling	Duct	Cassette	Floor Ceiling
		GFH48K3FI	GKH48K3FI	GTH48K3FI	GFH60K3FI	GKH60K3FI	GTH60K3FI	
Capacity	Cooling	kW	14.0	14.0	14.0	16.0	16.0	16.0
		BTU/h	47768	47768	47768	54592	54592	54592
	Heating	kW	15.5	16.0	16.0	16.5	17.0	17.0
		BTU/h	52886	54592	54592	56298	58004	58004
SEER/SCOP		W/W	5.6/3.8	5.6/3.8	5.6/4.0	5.6/3.8	6.1/4.0	5.1/4.0
Power supply		Ph/V/Hz	3/380-415/50			3/380-415/50		
Power input	Cooling	kW	5.10	5.15	5.20	5.60	5.70	5.75
	Heating	kW	4.50	4.50	4.50	4.57	4.70	4.70
Current input	Cooling	A	8.80	8.90	8.60	9.70	9.80	10.0
	Heating	A	7.80	7.80	7.80	7.80	8.2	8.2
Refrigerant charge volume		kg	4.0	4.0	4.0	5.0	5.0	5.0
Indoor unit	Air flow volume(H/M/L)	CFM	1412	1354	1354	1766	1412	1471
		m³/h	2400	2300	2300	3000	2400	2500
	ESP	Rated Range	Pa Pa	50 0-125	— —	50 0-150	— —	— —
	Sound pressure level (SH/HML)	dB(A)	55/53/49/45	53/52/47/41	56/55/50/46	57/56/54/49	55/53/47/41	58/56/52/46
	Dimension (WxDxH)	Outline Package	mm mm	1340x750x350 1023x993x375	910x910x290 1828x828x345	1700x700x245 1423x993x375	1340x750x350 1023x993x375	1700x700x245 1828x828x345
	Net weight/Gross weight	kg kg	56/65	43/50	59/68	57/69	43/50	59/68
Panel	Dimension (WxDxH)	Outline Package	mm mm	— 1040x1040x65	— —	— 1040x1040x65	— —	— —
	Net weight/Gross weight	kg kg	— 1137x1137x140	— —	— —	— 1137x1137x140	— —	— —
Outdoor unit	Sound pressure level	dB(A)	59			63		
	Dimension (WxDxH)	Outline Package	mm mm	958x412x1349 1043x453x1500	— —	1085x427x1365 1143x478x1505	— —	— —
	Net weight/Gross weight	kg kg	— 114/124	— —	— —	— 126/138	— —	— —
Connection pipe	Outer diameter	Liquid Gas	inch(mm) inch(mm)	φ3/8(9.52) φ5/8(15.9)	— —	φ3/8(9.52) φ3/4(19.05)	— —	— —
	Max.distance	Height/Length	m m	30/50	— —	30/50	— —	— —
	Loading quantity	40'GP/40'HQ	-	38/48	43/50	43/47	40/40	38/48

## Control System Lineup

Controlling system	Product series	High efficiency series		
		Duct type	Cassette type	Floor ceiling type
Wireless remote controller	YB1FA			
	YV1FB7F			
	YV1FB7			
	YB1FAF			
	YAM1F			
	YAM1FF			
Wired controller	Z4K351J			
	Z4K351CJ			
Smart zone controller	CE50-24/E			
Other modules	Optoelectronic isolated converter			
	Optoelectronic isolated signal multiplier			

Note: ● means standard, ○ means optional.

# U-Match

R410A

## Fixed Frequency Series\*

It is a kind of split system that the outdoor unit can be freely connected to different types of indoor units according to various indoor decoration requirements.



- Double ambient temperature sensor design makes a precision temperature monitoring.
- With low ambient temperature cooling function, cooling normally in -7°C.
- The outdoor unit is universal, can be matched with floor ceiling, cassette, duct type indoor unit.



## Indoor Unit

Duct type	Cassette type	Floor ceiling type
<ul style="list-style-type: none"> <li>Fresh air inlet and air valve control function improve the indoor air quality.</li> <li>Flexible air in/outlet and condensing water outlet direction according to different installation requirements.</li> <li>Optimized air duct design improves the performance and lower the noise.</li> </ul>	<ul style="list-style-type: none"> <li>Drain pump fitted as standard with increased lift of 1100mm.</li> <li>Special low noise fan design.</li> <li>Different swing angle design for cooling and heating mode for better comfort.</li> <li>All kinds of air freshener can be installed in the filter, such as catechin</li> </ul>	<ul style="list-style-type: none"> <li>3-D air flue design.</li> <li>Easy replacement of motor and fan blade thanks to clamp block propeller design.</li> <li>Different swing angle design for cooling and heating mode for better comfort.</li> </ul>

Item	Nominal operating condition (temperature)				Operation range (temperature) Outdoor condition
	Outdoor condition		Indoor condition		
	DB (°C)	WB (°C)	DB (°C)	WB (°C)	DB (°C)
Cooling	35	24	27	19	-7~43(with low ambient cooling) 18~43(without low ambient cooling)
Heating	7	6	20	15	-7~24

\*:All product models of this series are not fit for EU.

## Indoor Units Lineup

Capacity Index (BTU/h)	9K	12K	18K	24K
Outdoor Unit				
	GUHN09NK3AO	GUHN12NK3AO	GUHN18NK3AO	GUHN24NK3AO
Duct	GFH09K3BI	GFH12K3BI	GFH18K3BI	GFH24K3BI
Indoor Unit	Cassette	—	GKH12K3BI	GKH18K3BI
			GKH24K3BI	
Floor Ceiling	GTH09K3BI	GTH12K3BI	GTH18K3BI	GTH24K3BI

Capacity Index (BTU/h)	30K	36K	42K	48K	60K
Outdoor Unit					
	GUHN30NK3A1O	GUHN36NK3AO GUHN36NM3AO	GUHN42NM3AO	GUHN48NM3A1O	GUHN60NM3A2O
Duct	GFH30K3B1I	GFH36K3BI	GFH42K3BI	GFH48K3B1I	GFH60K3B2I
Indoor Unit	Cassette	GKH30K3B1I	GKH36K3BI	GKH42K3BI	GKH48K3B1I
				GKH60K3B2I	
Floor Ceiling	GTH30K3B1I	GTH36K3BI	GTH42K3BI	GTH48K3B1I	GTH60K3B2I

Model	Outdoor unit			GUHN09NK3AO			GUHN12NK3AO		
	Indoor unit		Duct	Floor Ceiling	Duct	Cassette	Floor Ceiling		
		GFH09K3BI	GTH09K3BI	GFH12K3BI	GKH12K3BI	GTH12K3BI			
Capacity	Cooling	W	2600	2600	3500	3500	3500		
		BTU/h	8870	8870	11940	11940	11940		
	Heating	W	2850	2850	3600	3600	3600		
EER/COP	W/W		9720	9720	12280	12280	12280		
			2.60/2.94	2.60/2.85	2.92/3.27	2.99/3.27	2.99/3.27		
	Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50		
Power input	Cooling	kW	1.00	1.00	1.20	1.17	1.17		
		Heating	0.97	1.00	1.10	1.10	1.10		
	Current input	A	4.4	4.3	5.4	5.4	5.4		
Refrigerant charge volume	Cooling	A	4.3	4.5	5.1	5.1	5.1		
		Heating	1.1	1.1	1	1	1		
	Refrigerant charge volume	kg	1.1	1.1	1	1	1		
Indoor unit	Air flow volume(H/M/L)	m <sup>3</sup> /h	550/470/400	550/470/380	600/540/490	550/490/420	550/470/380		
		CFM	324/277/235	324/277/224	353/317/288	324/288/247	324/277/224		
		ESP	Pa	25	—	25	—	—	
	Sound pressure level(H/M/L)	Rated	Pa	0-25	—	0-25	—	—	
		Range	Pa	0-25	—	0-25	—	—	
	Dimension	dB(A)	37/36/34	47/44/41	40/38/36	47/45/43	47/44/41		
	(WxDxH)	mm	913×680×220	836×695×238	913×680×220	600×600×230	836×695×238		
	Package	mm	998×753×273	938×808×310	998×753×273	851×681×325	938×808×310		
	Net Weight /Gross Weight	kg	24/29	25/32	25/30	20/27	26/33		
	Panel	Dimension	mm	—	—	650×650×50	—	—	
		Outline	mm	—	—	670×730×102	—	—	
	Net weight/Gross weight	kg	—	—	—	2.5/3.5	—	—	
Outdoor unit	Sound pressure level	dB(A)	55	—	—	56	—	—	
		Dimension	mm	820×320×540	—	820×320×540	—	—	
		Outline	mm	—	—	873×363×605	—	—	
	Net weight/Gross weight	kg	32/37	—	—	32/37	—	—	
Connection pipe	Outer diameter	Liquid	inch(mm)	φ1/4(6.35)	—	φ1/4(6.35)	—	—	
	Gas	inch(mm)	—	φ3/8(9.52)	—	φ1/2(12.7)	—	—	
	Max.distance	Height/Length	m	15/20	—	15/20	—	—	
Loading quantity		40'GP/40'HQ	set	123/160	116/143	123/160	113/144	116/143	

Model	Outdoor unit			GUHN30NK3A1O			GUHN36NK3AO		
	Indoor unit		Duct	Cassette	Floor Ceiling	Duct	Cassette	Floor Ceiling	
		GFH30K3B1I	GKH30K3B1I	GTH30K3B1I	GFH36K3B1I	GKH36K3B1I	GTH36K3B1I		
Capacity	Cooling	W	8300	8300	8500	9800	10000	10000	
	Heating	BTU/h	28320	28320	29002	33440	34120	34120	
	BTU/h	W	9100	8800	9800	11000	11000	11000	
EER/COP	W/W		31050	30020	33440	37530	37530	37530	
	Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	
	Power input	Cooling	kW	3.00	2.90	3.00	4.00	3.60	3.60
Power input	Heating	kW	3.00	3.15	2.85	3.50	3.30	3.30	
	Current input	Cooling	A	13.5	13.1	13.6	22.0	20.0	20.0
	Heating	A	13.9	13.1	13.6	19.0	18.0	18.0	
Refrigerant charge volume	Refrigerant charge volume	kg	3.0	3.0	3.0	3.2	3.2	3.2	
	Air flow volume(H/M/L)	m <sup>3</sup> /h	1500/1300/1100	1400/1270/1170	1600/1450/1300	2000/1900/1800	1660/1570/1500	1800/1630/1520	
	CFM	CFM	882/765/647	824/747/689	942/853/765	1177/1118/1059	977/924/883	1059/959/895	
Indoor unit	ESP	Rated	Pa	37	—	—	37	—	—
	Range	Pa	0-100	—	—	0-150	—	—	
	Sound pressure level(H/M/L)	dB(A)	47/44/42	51/49/48	52/51/49	50/48/46	53/51/48	54/51/48	
Panel	Dimension	mm	1270×530×268	840×840×240	1420×700×245	1226×775×290	840×840×320	1590×695×238	
	Outline	mm	1348×597×283	963×963×325	1578×828×345	1338×837×305	963×963×409	1717×833×345	
	Package	mm	1025×1040×115	—	—	—	1025×1040×115	—	
Net weight/Gross weight	Net Weight /Gross Weight	kg	37/43	27/36	48/58	54/61	32/43	48/58	
	Panel	Dimension	mm	—	950×950×60	—	—	950×950×60	
	Outline	mm	—	—	1025×1040×115	—	—	1025×1040×115	
Outdoor unit	Net weight/Gross weight	kg	—	—	6.5/10	—	—	6.5/10	
	Sound pressure level	dB(A)	59	—	—	60	—	—	
	Dimension	mm	980×427×790	—	—	1018×412×840	—	—	
Connection pipe	Outline	mm	1083×488×855	—	—	1103×453×1000	—	—	
	Net weight/Gross weight	kg	70/75	—	—	90/100	—	—	
	Outer diameter	Liquid	inch(mm)	φ3/8(9.52)	—	φ1/2(12.7)	—	—	
Loading quantity	Gas	inch(mm)	—	φ5/8(15.9)	—	φ3/4(19.05)	—	—	
	Max.distance	Height/Length	m	15/30	—	30/50	—	—	
	Loading quantity	40'GP/40'HQ	set	74/85	56/64	72/84	64/70	44/53	55/58

Model	Outdoor unit			GUHN18NK3AO			GUHN24NK3AO		

## U-Match(Fixed Frequency Series)

Model	Outdoor unit			GUHN48NM3A10			GUHN60NM3A20				
	Indoor unit		Duct	Cassette	Floor Ceiling	Duct	Floor Ceiling	Cassette			
Capacity	Cooling		W	13200	13200	13200	15500	15500	15500		
	BTU/h			45040	45040	45040	52800	52800	52800		
	Heating		W	14500	14500	14500	18500	18500	18000		
EER/COP			BTU/h	49470	49470	49470	63120	63120	61410		
Power supply			W/W	2.59/3.15	2.75/2.79	2.64/3.02	2.50/3.49	2.58/3.49	2.58/3.40		
Power input			Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50		
Current input	Cooling		kW	5.10	4.80	5.0	6.20	6.00	6.00		
	Heating		kW	4.60	5.20	4.8	5.30	5.30	5.30		
	A		A	9.2	8.7	9.0	11.3	10.9	10.8		
Refrigerant charge volume			A	8.3	9.5	8.7	9.6	9.6	10.3		
Air flow volume(H/M/L)			kg	3.8	3.8	3.8	4.5	4.5	4.5		
Indoor unit	m <sup>3</sup> /h		2300/2110/1850	1660/1570/1500	2100/1900/1800	2500/2070/1730	2300/2100/1900	2400/2100/1900			
	CFM		1354/1242/1089	977/924/883	1236/1118/1059	1471/1218/1018	1353/1236/1118	1412/1295/1118			
	ESP	Rated	Pa	50	—	—	50	—	—		
		Range	Pa	0-150	—	—	0-50	—	—		
Sound pressure level(H/M/L)			dB(A)	53/50/46	53/51/48	58/55/52	53/50/48	58/55/52	55/53/49		
Panel	Dimension (WxDxH)		mm	1226x775x290	840x840x320	1590x695x238	1226x815x330	1700x700x245	910x910x290		
	Outline		mm	1338x837x305	963x963x409	1717x833x345	1338x885x345	1825x825x330	1020x990x360		
	Net weight /Gross weight		kg	57/67	32/43	48/58	66/76	65/73	43/53		
Outdoor unit	Net weight/Gross weight		kg	—	6.5/10	—	—	—	8/12		
	Sound pressure level			dB(A)	63	—	64	—	—		
	Outline		mm	1032x412x1250		1032x412x1250		1113x453x1400			
Connection pipe	Dimension (WxDxH)		mm	1113x453x1400		1113x453x1400		117/128			
	Outline		inch(mm)	φ1/2(12.7)		φ1/2(12.7)		φ3/4(19.05)			
	Max.distance		inch(mm)	φ3/4(19.05)		φ3/4(19.05)		30/50			
Loading quantity			m	30/50		30/50		30/50			
Loading quantity			40'GP/40'HQ	set	45/49	42/48	44/49	45/49	45/49		

## Control System Lineup

Product series		U-Match		
		Duct type	Fixed frequency series	Floor ceiling type
			4-Way Cassette type	
Controlling system				
Wireless remote controller		Y512		
YB1F2				
YX1F				
Z4B351A				
ZY512A				
Z7A351A				
Z4E351A				
Smart zone controller		ZJ401A		
CE50-24/E				
Other modules	Optoelectronic isolated converter	RS232-RS422/485		
	Optoelectronic isolated signal multiplier	RS-422/485		
Long-distance monitoring software	Gree AC Eudemon 2009*	FE30-00/A(M)		
BMS accessories	Communication module (modbus)	ME30-00/E2		

Note:

● means standard, ○ means optional.

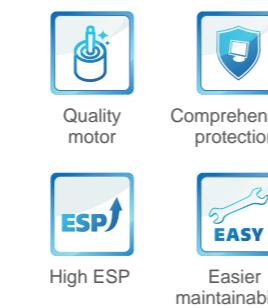
\* If Long-distance monitoring software Gree Eudemon 2009 is selected, the communication module ME30-00/E2 shall be selected also. The quantity of the module shall be confirmed according to the quantity of outdoor units.



# Duct Split Unit

## High Capacity Series\*

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



- Dual temperature sensor.
- Anticorrosion heat exchanger, easy cleaning and less performance decline after years operation.
- Optimized air flue design greatly improves the fan efficiency and largely lowers the operation noise.
- Five directions pipe connection connector to meet various installation environments (top discharge ODU only).
- Flexible air inlet/outlet direction and condensing water outlet direction, meet various installation environments.

Item	Nominal operating condition (temperature)				Operating range (temperature) Outdoor condition	
	Outdoor condition		Indoor condition			
	DB (°C)	WB (°C)	DB (°C)	WB (°C)		
Cooling	35	24	27	19	-15~43	
Heating	7	6	20	15	-7~24	

Model	Heat pump	FGR20/BNa-M	FGR25/CNa-M	FGR30/BNa-M	FGR40/BNa-M
Capacity	Cooling	kW	20	24.5	30
		BTU/h	68200	83597	102364
EER/COP	Heating	kW	22	27.5	33
		BTU/h	75067	93834	112601
Power supply	WW	2.38/3.14	2.5/3.06	2.4/3.14	2.50/3.00
	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling	kW	8.4	9.8	12.1
	Heating	kW	7.0	9.0	10.5
Current input	Cooling	A	15.3	22.2	23.4
	Heating	A	13.2	21.2	22.6
Refrigerant charge volume	kg	5.3	6.7	9.5	12
	Air flow volume	CFM	2354	2825	3237
Indoor unit		m <sup>3</sup> /h	4000	4800	5500
	ESP	Rated Pa	200	110	110
Outdoor unit		Range Pa	100-300	30-250	50-250
	Sound pressure level	dB (A)	56	54	57
Connection pipe	Dimension	Outline (WxDxH)	1463x799x389	1500x1000x500	1500x1000x500
		Package (WxDxH)	1546x866x485	1840x1230x688	1893x1463x850
Loading quantity	Net weight/Gross weight	kg	86/109	150/200	156/206
	Sound pressure level	dB (A)	65	66	67
Outer diameter	Dimension	Outline mm	1150x360x1350	1150x360x1600	990x880x1772
		Package mm	1320x505x1490	1320x505x1745	1165x983x1965
Max. distance	Net weight/Gross weight	kg	158/174	185/200	227/248
	Outer diameter	Liquid inch(mm)	φ3/8(9.52)	φ3/8(9.52)	φ1/2(12.7)
Connection pipe	Gas inch(mm)		φ3/4(19.05)	φ1(25.4)	φ9/8(28.6)
	Max. distance	Height m	30	30	30
Loading quantity	Length m		50	50	50
	20GP	set	17	13	13
	40GP/40HQ	set	36/36	28/38	28/38
					16/16

\*:All product models of this series are not fit for EU.

## Control System Lineup

Controlling system	Product series		High capacity series
	Wireless remote controller	YB1F2	
Wired controller	Z4E351A		
Long-distance monitoring software	Gree AC Eudemon 2009*	FE30-00/A(M)	
BMS accessories	Communication module (modbus)	ME30-00/E2	
Centralized controller	Smart zone controller	CE50-24/E	
Other modules	Optoelectronic isolated converter	RS232-RS422/485	
	Optoelectronic isolated signal multiplier	RS-422/485	

Note:

means standard, means optional.

\* If Long-distance monitoring software Gree Eude mon 2009 is selected, the communication module ME30-00/E2 shall be selected also. The quantity of the module shall be confirm according to the quantity of outdoor units.

# MULTI-VRF

**Free Match 4 & 4+  
Super Free-Match  
All DC Inverter VRF (GMV5)  
GMV5 HR  
GMV5 Home  
Energy Recovery Ventilation(ERV)  
Control System Lineup**



# Free Match 4 & 4+

Capacity range from 18K to 42K Btu/h can be widely used in residential house, hotel, business office and especially applicable in variable loading situation.

**INVERTER** **R410A**



- Operate stably when cooling at -15°C.
- Different units for selection, the same comfortable feeling for you.
- Lower power consumption; lower noise, more comfort; precise temperature control.
- Free Match 4 has no 0.5W standby function, while it has electric heating belt; Free Match 4+ has 0.5W standby function, while it hasn't electric heating belt.

## Outdoor Unit (Free match 4&4+)

Model	Heat Pump	GWHD(14)NK3DO	GWHD(18)NK3KO	GWHD(21)NK3KO	GWHD(24)NK3MO	GWHD(28)NK3KO	GWHD(36)NK3BO	GWHD(42)NK3AO
Capacity	Cooling BTU/h	14000	18000	21000	24000	28000	35826	41285
	Heating BTU/h	15000	18400	22000	29000	31800	40944	44356
SEER	W/W	6.1	6.1	6.1	6.1	5.5	5.5	5.5
Power supply	Ph/V/Hz				1Ph,220-240V,50Hz			
Power input	Cooling kW	1.2	1.45	1.91	2.18	2.54	3.5	3.59
	Heating kW	1.18	1.45	1.73	2.28	2.49	3.75	3.54
Refrigerant charge volume	kg	1.4	1.4	2.2	2.2	2.4	4.3	4.8
Air flow volume	m³/h	2600	3200	3200	4000	4000	5200	5500
Sound pressure level	dB(A)	55	56	56	58	57	54	
Dimension (WxDxH)	Outline mm	899x596x378	955x396x700	955x396x700	980x790x427	1088x440x1107	1088x440x1107	
	Package mm	948x420x645	1029x458x750	1029x458x750	1083x488x855	1083x488x855	1158x493x1235	1158x493x1235
Net weight/Gross weight	kg	43/46	51/55.5	62/66.5	68/73	69/74	94/104	102/112
Connecting pipe diameter	Gas inch(mm)	3/8(ø9.52)	3/8(ø9.52)	3/8(ø9.52)	3/8(ø9.52)	3/8(ø9.52)	1/2(ø12.7)	
	Liquid inch(mm)	1/4(ø6.35)	1/4(ø6.35)	1/4(ø6.35)	1/4(ø6.35)	1/4(ø6.35)	1/4(ø6.35)	
Max. equivalent connection pipe length	m	20	20	60	70	70	70	
Maximum drive IDU NO.	unit	5	5	5	5	4	5	
Loading quantity	40'GP/40'HQ set	204/272	171/171	171/171	96/144	96/144	48/96	48/96

Item	Nominal operating condition(temperature)				Operation range(temperature)	
	Outdoor condition		Indoor condition		Outdoor condition (Free match 4)	Outdoor condition (Free match 4+)
	DB(°C)	WB(°C)	DB(°C)	WB(°C)	DB(°C)	DB(°C)
Cooling	35	24	27	19	-15~43	18~43
Heating	7	6	20	15	-20~24	-15~24

## Combinations of Outdoor Unit

### 8 Combinations

GWHD(14)NK3DO	One unit	Two units
	7	7+7
	9	7+12
	12	9+12

### 10 Combinations

GWHD(18)NK3KO	One unit	Two units
	7	7+7
	9	7+12
	12	9+9
	-	12+12

### 18 Combinations

GWHD(21)NK3KO	Two units		Three units	
	7+7	7+9	7+7+7	7+7+9
	7+12	7+18	7+7+12	7+9+9
	9+9	9+12	7+9+12	7+9+12
	9+18	12+12	9+9+9	9+9+12
	12+18	-	12+12+12	-

### 23 Combinations

GWHD(24)NK3MO	Two units		Three units	
	7+7	7+9	7+7+7	7+7+9
	7+12	7+18	7+7+12	7+7+18
	9+9	9+12	7+9+9	7+9+12
	9+18	12+12	7+9+18	7+9+12+12
	12+18	18+18	18+18	9+9+18
	-	-	9+9+12	9+9+12

### 40 Combinations

GWHD(28)NK3KO	Two units		Three units		Four units	
	7+7	7+9	7+7+7	7+7+9	7+7+7+7	7+7+7+18
	7+12	7+18	7+7+12	7+7+18	7+7+7+12	7+7+7+18
	9+9	9+12	7+9+9	7+9+12	7+7+9+9	7+7+9+12
	9+18	12+12	7+9+18	7+9+18	7+7+9+18	7+9+9+18
	12+18	18+18	18+18	18+18	7+9+12+18	9+9+12+18
	-	-	9+9+12	9+9+12	7+9+12+12	-

### 97 Combinations

GWHD(36)NK3BO	Two units		Three units		Four units	
	7+12	18+18	7+7+7	9+12+21	7+7+7+7	7+7+12+21
	7+18	18+21	7+7+9	9+12+24	7+7+7+9	7+7+12+24
	7+21	18+24	7+7+12	9+12+24	7+7+7+12	7+7+12+24
	7+24	21+21	7+7+18	9+18+21	7+7+7+18	7+9+9+18
	9+9	21+24	7+7+21	9+18+24	7+7+7+21	7+9+9+2

## Indoor Unit Lineup

Capacity Index(Btu/h)	7000	9000	12000	18000	21000	24000
Wall-mounted type	Hansol	●	●	●	●	●
	Viola	●	●	●	●	●
	Lomo	●	●	●	●	●
	Cozy	●	●	●	●	●
	change	●	●	●	●	●
	U-crown	●	●	●	●	●
Duct type						
Cassette type						
Floor ceiling type						
Console						

## Viola (Free Match 4&amp;4+)\*

Model	GWH07RB-K3DNA5G/I		GWH09RB-K3DNA5G/I		GWH12RB-K3DNA5G/I		GWH18RC-K3DNA5G/I		GWH24RD-K3DNA5G/I				
	Cooling	BTU/h	7200	8880	12000	18000	22000	Heating	BTU/h	8880	10240	19790	24000
Capacity			7200	8880	12000	18000	22000			8880	10240	19790	24000
Power supply		Ph/V/Hz											
Airflow volume		m³/h	580	600	600	850	1000						
Sound pressure level(H/M/L/SL)		dB(A)	41/39/34/28	41/39/34/28	42/40/35/30	45/43/37/33	51/47/42/39						
Connecting pipe	Gas	inch(mm)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12)	5/8(φ16)	5/8(φ16)						
Dimension (WxHxD)	Liquid	inch(mm)	1/4(φ6)	1/4(φ6)	1/4(φ6)	1/4(φ6)	1/4(φ6)						
Net weight/Gross weight	Outline	mm	848x189x274	848x189x274	848x189x274	848x189x274	848x189x274						
Dimension (WxHxD)	Package	mm	926x267x371	926x267x371	926x267x371	1013x383x300	1013x383x300						
Net weight/Gross weight		kg	9.0/11.0	9.0/11.0	9.0/11.0	9.0/12.0	12.0/15.0						
Loading quantity	20'GP	set	306	306	306	306	252						
	40'GP/40'HQ	set	636/742	636/742	636/742	636/742	541/609						

## Wall-mounted Type Indoor Unit

## Hansol (Free Match 4&amp;4+)

Model	GWH07TB-S3DNA1D/I	GWH09TB-S3DNA1D/I	GWH12TB-S3DNA1D/I	GWH18TC-S3DNA1D/I	GWH24TD-S3DNA1D/I
Capacity	Cooling	BTU/h	7200	8530	12000
	Heating	BTU/h	8880	10920	13600
Power supply	Ph/V/Hz				
Airflow volume	m³/h	600	650	750	950
	CFM	353	383	441	559
Sound pressure level(SH/H/MH/M/ML/L/SL)	dB(A)	38/36/32/30	43/36/34/32	43/36/34/32	46/44/42/40
Connecting pipe	Gas	inch(mm)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12)
Dimension (WxHxD)	Liquid	inch(mm)	1/4(φ6)	1/4(φ6)	1/4(φ6)
Net weight/Gross weight	Outline	mm	806x209x292	806x209x292	1018x230x319
	Package	mm	888x297x377	888x297x377	1256x364x414
Net weight/Gross weight	kg	10/12	11/12	11.0/13.0	14.0/17.0
Loading quantity	20'GP	set	276	276	174
	40'GP/40'HQ	set	566/640	566/640	366/427
					276/322

## Lomo (Free Match 4&amp;4+)\*

Model	GWH07QB-K3DNA1G/I	GWH09QB-K3DNA1G/I	GWH12QC-K3DNA1G/I	GWH18QD-K3DNA1G/I	GWH24QE-K3DNA1G/I
Capacity	Cooling	BTU/h	7165	8880	12000
	Heating	BTU/h	8871	9550	12500
Power supply	Ph/V/Hz				
Airflow volume	m³/h	550	560	660	800
	CFM	324	330	388	471
Sound pressure level(H/M/L/SL)	dB(A)	38/36/32/26	55/52/44/38	42/39/33/26	46/42/39/36
Connecting pipe	Gas	inch(mm)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12)
Dimension (WxHxD)	Liquid	inch(mm)	1/4(φ6)	1/4(φ6)	1/4(φ6)
Net weight/Gross weight	Outline	mm	790x200x257	790x200x257	970x300x224
	Package	mm	866x271x367	866x271x367	1041x383x320
Net weight/Gross weight	kg	9/11	9/11	10.0/12.0	13.5/16.5
Loading quantity	20'GP	set	334	334	229
	40'GP/40'HQ	set	692/804	692/804	489/557
					336/392

## U Crown( Free Match 4)

Model	GWH09UB-K3DNA4F/I	GWH12UB-K3DNA4F/I	GWH18UC-K3DNA4F/I		
Capacity	Cooling	BTU/h	9000	12000	18000
	Heating	BTU/h	10200	12300	18000
Power supply	Ph/V/Hz				
Airflow volume	m³/h	650	720	850	
	CFM	389	424	500	
Sound pressure level(H/M/L/SL)	dB(A)	41/37/35/33/30/22/19	43/38/36/34/31/23/20	46/42/40/36/33/25/22	
Connecting pipe	Gas	inch(mm)	1/2(φ12.7)	1/2(φ12.7)	
Dimension (WxHxD)	Liquid	inch(mm)	1/4(φ3.5)	1/4(φ3.5)	
Net weight/Gross weight	Outline	mm	899x596x378	950700x396	
	Package	mm	948x645x420	1029x750x458	
Net weight/Gross weight	kg	44.5/47.5	44.5/47.5	51/55.5	
Loading quantity	20'GP	set	79	79	58
	40'GP/40'HQ	set	165/191	165/191	123/141

## Cozy (Free Match 4&amp;4+)

Model	GWH07MB-K3DNA3G/I	GWH09MB-K3DNA3G/I	GWH12MB-K3DNA3G/I	GWH18MC-K3DNA3G/I	GWH24MD-K3DNA3G/I
Capacity	Cooling	BTU/h	7200	8900	12000
	Heating	BTU/h	8880	10240	13600
Power supply	Ph/V/Hz				
Airflow volume	m³/h	580	600	600	850
	CFM	341	353	353	500
Sound pressure level(H/M/L/SL)	dB(A)	41/39/34/28	42/39/34/28	42/40/35/30	45/43/37/33
Connecting pipe	Gas	inch(mm)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12)
Dimension (WxHxD)	Liquid	inch(mm)	1/4(φ6)	1/4(φ6)	1/4(φ6)
Net weight/Gross weight	Outline	mm	845x180x275	845x180x275	940x200x295
	Package	mm	918x370x258	918x370x258	1013x383x300
Net weight/Gross weight	kg	9/11	9/11	12.0/15.0	15/18.5
Loading quantity	20'GP	set	318	318	254
	40'GP/40'HQ	set	684/798	684/798	541/609

## Cassette Type Indoor Unit

Model		GKH(12)BA-K3DNA2A/I	GKH(18)BA-K3DNA2A/I	GKH(24)BA-K3DNA1A/I
Capacity	Cooling	BTU/h	11942	15354
	Heating	BTU/h	13648	17060
Power supply	Ph/V/Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz
Airflow volume	m³/h	600	600	1180
Sound pressure level(H/L)	CFM	353	353	694
Connecting pipe	Gas	inch(mm)	3/8(φ9.52)	1/2(φ12.7)
	Liquid	inch(mm)	1/4 (φ6.35)	1/4 (φ6.35)
Main body	Dimention (WxDxH)	Outline mm	570x570x230	570x570x230
		Package mm	851x731x325	851x731x325
Panel	Net weight/Gross weight	kg	18/23	18/23
	Dimention (WxDxH)	Outline mm	650x650x50	650x650x50
		Package mm	733x673x117	733x673x117
Loading quantity	Net Weight/Gross weight	kg	2.5/3.5	2.5/3.5
	20'GP	set	102	102
	40'GP/40'HQ	set	209/246	209/246
			108/128	108/128

## Duct Type Indoor Unit

Model		GFH(09)EA-K3DNA1A/I	GFH(12)EA-K3DNA1A/I	GFH(18)EA-K3DNA1A/I	GFH(21)EA-K3DNA1A/I	GFH(24)EA-K3DNA1A/I
Capacity	Cooling	BTU/h	8530	11942	17060	20472
	Heating	BTU/h	9550	13140	18770	22520
Power supply	Ph/V/Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz
Airflow volume	m³/h	450	550	700	1000	1000
Sound pressure level(H/L)	CFM	265	324	412	589	589
Connecting pipe	Gas	inch(mm)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12.7)	5/8(φ15.88)
	Liquid	inch(mm)	1/4 (φ6.35)	1/4 (φ6.35)	1/4 (φ6.35)	3/8(φ9.52)
Dimension (WxDxH)	Outline	mm	700x615x200	700x615x200	900x615x200	1100x615x200
	Package	mm	893x743x305	893x743x305	1123x743x305	1323x743x305
Net weight/Gross weight	kg	22/27	23/29	27/36	31/41	31/41
Loading quantity	20'GP	set	108	108	90	72
	40'GP/40'HQ	set	234/234	234/234	180/180	162/162
				162/162	162/162	

## Floor Ceiling Type Indoor Unit

Model		GTH(09)BA-K3DNA1A/I	GTH(12)BA-K3DNA1A/I	GTH(18)BA-K3DNA1A/I	GTH(24)BA-K3DNA1A/I
Capacity	Cooling	BTU/h	8530	11942	17060
	Heating	BTU/h	9554	13136	18766
Power supply	Ph/V/Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz
Airflow volume	m³/h	650	650	950	1250
Sound pressure level(H/L)	CFM	383	383	559	736
Connecting pipe	Gas	inch(mm)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12.7)
	Liquid	inch(mm)	1/4 (φ6.35)	1/4 (φ6.35)	1/4 (φ6.35)
Dimension (WxDxH)	Outline	mm	1220x700x225	1220x700x225	1220x700x225
	Package	mm	1343x823x315	1343x823x315	1343x823x315
Net weight/Gross weight	kg	40/50	40/50	40/50	45/54
Loading quantity	20'GP	set	66	66	66
	40'GP/40'HQ	set	132/132	132/132	132/132

## Control System Lineup

Controlling system	Product series	Wall-mounted type						Duct type	Cassette type	Floor ceiling type	Console type
		U Crown	Hansol	Viola	Lomo	Cozy	Change				
Wireless remote controller	YAA1FB1										●
	YAA1FB					●					
	YT1F(XFAN)						●				
	YB1F2 (XFAN)							●			
	YAN1F1(XFAN)					●					
	YAG1FB				●						
	YT1F(MOTO)							●	●	●	
Wired controller	SAA1FB1										
	XK19							●	●	●	
Centralized controller	CE50-24/E								●	●	●

Note: ● means standard, ● means optional.

# Super Free-match

Capacity range from 42K to 56K Btu/h can be widely used in residential house, hotel, business office and especially applicable in variable loading situation.

INVERTER R410A



FXA\*\*

FXB\*\*

- High efficiency
- Intelligent defrosting
- Comprehensive protection
- Compact design
- Easier maintainability
- Inner groove copper
- Turbo function
- Self-diagnosis
- Low voltage startup

- Centralized control
- Long-distance monitoring
- Wide operation range
- Memory function
- Wide voltage range
- 24 hour timer
- Weekly timer
- Child lock

- Power supply startup delay design, lower the unit starting current.
- High efficiency thanks to DC inverter compressor.
- The lowest noise thanks to advanced technology.
- The system could run stably under hard operation conditions.
- Connection pipe up to 145 meter length that convenient on installation.

## GWHD\*\*NK3CO

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	Cooling:-15~48 (with low ambient cooling) Cooling:18~48(without low ambient cooling) Heating:-20~24(with low ambient cooling) Heating:-10~24( without low ambient cooling)	
Heating	7	6	20	15		

## GWHD\*\*NM3CO

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	10~48	
Heating	7	6	20	15	-15~27	

## 163 Combinations

GWHD(42S)NK3CO (2 to 6)	Two units	Three units	Four units	Five units	Six units			
	7+18	7+7+7	7+18+24	9+21+24	7+7+7+7	7+7+9+9+21	9+9+9+12+12	7+7+7+7+7+7
	7+21	7+7+9	7+21+21	12+12+12	7+7+7+9	7+7+18+24	9+9+9+9	7+7+7+7+7+9
	7+24	7+7+12	7+21+24	12+12+18	7+7+7+12	7+9+9+9	9+9+9+12	7+7+7+7+12+12
	9+12	7+7+18	7+24+24	12+12+21	7+7+7+18	7+9+9+12	9+9+9+18	7+7+7+7+18
	9+18	7+7+21	9+9+9	12+12+24	7+7+7+21	7+9+9+18	9+9+9+21	7+7+7+7+21
	9+21	7+7+24	9+9+12	12+18+18	7+7+7+24	7+9+9+21	9+9+9+24	7+7+7+7+24
	9+24	7+9+9	9+9+18	12+18+21	7+7+9+9	7+9+9+24	9+9+12+12	7+7+7+7+9+12
	12+12	7+9+12	9+9+21	12+18+24	7+7+9+9	7+9+12+12	7+7+7+9+12	7+7+7+7+9+12
	12+18	7+9+18	9+9+24	12+21+21	7+7+9+12	7+9+12+18	9+9+12+21	7+7+7+9+9+9
	12+21	7+9+21	9+12+12	-	7+7+9+18	7+9+12+21	9+9+12+21	7+7+7+9+9+9
	12+24	7+9+24	9+12+18	-	7+7+9+21	7+9+12+24	9+9+12+24	7+7+7+9+9+12
	18+18	7+12+12	9+12+21	-	7+7+9+24	7+9+18+18	9+12+12+12	7+7+9+9+9+9
	18+21	7+12+18	9+12+24	-	7+7+12+12	7+9+18+21	9+12+12+18	7+7+9+9+9+12
	18+24	7+12+21	9+18+18	-	7+7+12+18	7+12+12+12	9+12+12+21	7+7+9+9+12+12
	21+21	7+12+24	9+18+21	-	7+7+12+21	7+12+12+18	12+12+12+12	7+9+9+9+9+9
	21+24	7+18+18	9+18+24	-	7+7+12+24	7+12+12+21	12+12+12+18	7+9+9+9+9+12
	24+24	7+18+21	9+21+21	-	7+7+18+18	7+12+12+24	12+12+12+18	7+9+9+9+9+12

## 288 Combinations

GWHD(48S)NK3CO (2 to 8) GWHD(48S)NM3CO (2 to 8)	Two units	Three units	Four units					
	7+18	7+7+12	9+9+9	12+18+18	7+7+7+7	7+7+21+24	7+12+12+21	9+9+18+21
	7+21	7+7+18	9+9+12	12+18+21	7+7+7+9	7+7+24+24	7+12+12+24	9+9+18+24
	7+24	7+7+21	9+9+18	12+18+24	7+7+7+12	7+9+9+9	7+12+18+18	9+9+21+21
	9+18	7+7+24	9+9+21	12+21+21	7+7+7+18	7+9+9+12	7+12+18+21	9+9+21+24
	9+21	7+9+9	9+9+24	12+21+24	7+7+7+21	7+9+9+18	7+12+18+24	9+12+12+12
	9+24	7+9+12	9+12+12	12+24+24	7+7+7+24	7+9+9+21	7+12+21+21	9+12+12+18
	12+12	7+9+18	9+12+18	18+18+18	7+7+9+9	7+9+9+24	7+12+21+24	9+12+12+21
	12+18	7+9+21	9+12+21	18+18+21	7+7+9+12	7+9+12+12	7+18+18+18	9+12+12+24
	12+21	7+9+24	9+12+24	18+18+24	7+7+9+18	7+9+12+18	7+18+18+21	9+12+18+18
	12+24	7+12+12	9+18+18	18+21+21	7+7+9+21	7+9+12+21	9+9+9+9	9+12+18+21
	18+18	7+12+18	9+18+21	18+21+24	7+7+9+24	7+9+12+24	9+9+9+12	9+12+18+24
	18+21	7+12+21	9+18+24	21+21+21	7+7+12+12	7+9+18+18	9+9+9+18	9+12+21+21
	18+24	7+12+24	9+21+21	-	7+7+12+18	7+9+18+21	9+9+9+21	9+18+18+18
	21+21	7+18+18	9+21+24	-	7+7+12+21	7+9+18+24	9+9+9+24	12+12+12+12
	21+24	7+18+21	9+24+24	-	7+7+12+24	7+9+21+21	9+9+12+12	12+12+12+18
	24+24	7+18+24	12+12+12	-	7+7+18+18	7+9+21+24	9+9+12+18	12+12+12+21
	-	7+21+21	12+12+18	-	7+7+18+21	7+9+24+24	9+9+12+21	12+12+12+24
	-	7+21+24	12+12+21	-	7+7+18+24	7+12+12+12	9+9+12+24	12+12+18+18
	-	7+24+24	12+12+24	-	7+7+21+21	7+12+12+18	9+9+18+18	12+12+18+21

## 288 Combinations

	Five units				Six units				Seven units		Eight units	
	7+7+7+7+7	7+7+9+9+12	7+9+9+9+24	9+9+9+12+12	7+7+7+7+7+7	7+7+7+9+9+21	7+9+9+9+9+21	7+7+7+7+7+7+7	7+9+9+9+9+9+9			
GWHD(48S)NK3CO (2 to 8)	7+7+7+7+9	7+7+9+9+18	7+9+9+12+12	9+9+9+12+18	7+7+7+7+7+9	7+7+7+9+9+24	7+9+9+9+12+12	7+7+7+7+7+7+9	7+9+9+9+9+12			
GWHD(48S)NM3CO (2 to 8)	7+7+7+7+12	7+7+9+9+21	7+9+9+12+18	9+9+9+12+21	7+7+7+7+7+12	7+7+7+9+12+18	7+9+9+9+12+18	7+7+7+7+7+7+12	9+9+9+9+9+9			
	7+7+7+7+18	7+7+9+9+24	7+9+9+12+21	9+9+9+12+24	7+7+7+7+7+18	7+7+7+9+12+12	7+9+9+12+12+12	7+7+7+7+7+7+18	7+7+7+7+7+7+7+7			
	7+7+7+7+21	7+7+9+12+12	7+9+9+12+24	9+9+9+18+18	7+7+7+7+7+21	7+7+7+9+12+18	7+9+9+12+12+12	7+7+7+7+7+7+21	7+7+7+7+7+7+7+9			
	7+7+7+7+24	7+7+9+12+18	7+9+9+18+18	9+9+12+12+12	7+7+7+7+7+24	7+7+7+9+12+21	9+9+9+9+9+9	7+7+7+7+7+9+9	7+7+7+7+7+7+7+12			
	7+7+7+9+4	7+7+9+12+21	7+9+9+18+21	9+9+12+12+12	7+7+7+7+9+9	7+7+7+12+12+12	9+9+9+9+9+12	7+7+7+7+7+9+9	7+7+7+7+7+7+9+9			
	7+7+7+9+12	7+7+9+12+24	7+9+9+12+18	9+9+12+12+18	7+7+7+9+12+12	7+7+7+12+12+18	9+9+9+9+18+18	7+7+7+7+7+9+12	7+7+7+7+7+7+9+12			
	7+7+7+9+18	7+7+9+18+18	7+9+9+12+18	9+9+12+12+21	7+7+7+9+18+18	7+7+7+9+12+12	9+9+9+9+9+18	7+7+7+7+7+9+18	7+7+7+7+7+7+9+18			
	7+7+7+9+21	7+7+9+12+21	7+9+9+12+21	9+9+12+12+21	7+7+7+9+21	7+7+9+12+12+21	9+9+9+12+12+21	7+7+7+7+9+9+9	7+7+7+7+7+12+12			
	7+7+7+9+24	7+7+12+12+12	7+9+9+12+24	9+9+12+12+24	7+7+7+9+24	-	7+7+7+9+12+12	-	7+7+7+7+9+12+12			
	7+7+7+12+12	7+7+12+12+18	7+9+9+12+18	9+9+12+12+18	7+7+7+12+12	-	7+7+7+9+18+18	-	7+7+7+7+9+18+18			
	7+7+7+12+18	7+7+12+12+21	7+9+9+12+21	9+9+12+12+21	7+7+7+12+18	-	7+7+7+9+12+12	-	7+7+7+7+9+12+12			
	7+7+7+18+18	7+9+9+9+9	9+9+9+9+12	-	7+7+7+18+18	7+7+7+12+12	-	7+7+7+9+9+12	-	7+7+7+7+9+12+12		
	7+7+7+18+21	7+9+9+9+12	9+9+9+9+18	-	7+7+7+9+9+9	-	7+7+7+9+9+12+12	-	7+7+7+7+9+12+12			
	7+7+7+18+24	7+9+9+9+18	9+9+9+9+21	-	7+7+7+9+9+12	7+9+9+9+9+12	-	7+7+7+9+9+9+9	-	7+7+7+7+9+9+12		
	7+7+9+9+9	7+9+9+9+21	9+9+9+9+24	-	7+7+7+9+9+18	7+9+9+9+9+18	-	7+7+7+9+9+12+12	-	7+7+7+7+9+9+12		

## 448 Combinations

	Two units		Three units			Four units							
	7+18	7+7+18	7+21+24	9+24+24	18+21+24	7+7+7+7	7+7+12+24	7+9+12+24	7+12+21+24	9+9+12+21	9+12+21+21	12+12+18+24	
GWHD(56S)NK3CO (2 to 9)	7+21	7+7+21	7+24+24	12+12+12	18+24+24	7+7+7+9	7+7+18+18	7+9+18+18	9+9+12+24	9+12+21+24	12+12+21+21		
GWHD(56S)NM3CO (2 to 9)	7+24	7+7+24	9+9+12	12+12+18	21+21+21	7+7+7+12	7+7+18+21	7+9+18+21	7+18+18+21	9+9+18+18	9+12+24+24	12+12+21+24	
	9+18	7+9+12	9+9+18	12+12+21	21+21+24	7+7+7+18	7+7+18+24	7+9+18+24	7+18+18+24	9+9+18+21	9+18+18+18	12+12+24+24	
	9+21	7+9+21	9+9+21	12+12+24	21+24+24	7+7+7+21	7+7+21+21	7+9+21+21	7+18+21+21	9+9+18+24	9+18+18+21	12+18+18+18	
	9+24	7+9+21	9+9+24	12+18+18	24+24+24	7+7+7+24	7+7+21+24	7+9+21+24	7+18+21+24	9+9+21+21	9+18+18+24	12+18+18+21	
	12+18	7+9+24	9+12+12	12+18+21	-	7+7+9+9	7+7+24+24	7+9+24+24	7+18+24+24	9+9+21+24	9+18+21+21	12+18+18+24	
	12+21	7+12+12	9+12+18	12+18+24	-	7+7+9+9	7+9+9+9	7+12+12+12	7+21+21+21	9+9+12+24	9+18+21+21	12+18+21+21	
	12+24	7+12+18	9+12+21	12+21+21	-	7+7+9+12	7+9+9+12	7+12+12+18	9+9+9+9	9+12+12+12	9+21+21+21	18+18+18+18	
	18+18	7+12+21	9+12+24	12+21+24	-	7+7+9+18	7+9+9+18	7+12+12+21	9+9+9+12	9+12+12+18	12+12+12+12	-	
	18+21	7+12+24	9+18+18	12+24+24	-	7+7+9+21	7+9+9+21	7+12+12+24	9+9+9+18	9+12+12+21	12+12+12+18	-	
	18+24	7+18+18	9+18+21	18+18+18	-	7+7+9+24	7+9+9+24	7+12+18+18	9+9+9+21	9+12+12+24	12+12+12+21	-	
	21+21	7+18+21	9+18+24	18+18+21	-	7+7+12+12	7+9+12+12	7+12+18+21	9+9+9+24	9+12+18+18	12+12+12+24	-	
	21+24	7+18+24	9+21+21	18+18+24	-	7+7+12+18	7+9+12+18	7+12+18+24	9+9+12+12	9+12+18+21	12+12+18+18	-	
	24+24	7+21+21	9+21+24	18+21+21	-	7+7+12+21	7+9+12+21	7+12+21+21	9+9+12+18	9+12+18+24	12+12+18+21	-	

	Six units		Seven units		Eight units		Nine units	
	7+9+9+12+12+18	9+9+12+12+12+18	7+7+7+7+7+7	7+7+7+7+9+9+21	7+7+9+9+9+9+12	7+7+7+7+7+7+7	7+7+7+9+9+9+9+12	7+7+7+7+7+7+7+7+7
GWHD(56S)NK3CO (2 to 9)	7+9+12+12+18	12+12+12+12+18	7+7+7+7+7+12	7+7+7+7+9+12+12	7+7+9+9+9+12+12	7+7+7+7+7+7+12	7+7+7+7+7+7+9+12+12	7+7+7+7+7+7+7+7+7+7
GWHD(56S)NM3CO (2 to 9)	7+9+12+12+18	-	7+7+7+7+7+18	7+7+7+7+9+12+18	7+7+9+9+9+12+18	7+7+7+7+7+7+21	7+7+9+9+9+12+18	7+7+7+7+7+7+9+12+12
	7+12+12+12+12+18	-	-	7+7+7+7+7+21	7+7+7+7+9+12+18	-	7+7+9+9+9+12+18	-
	9+9							

## Wall Mounted Indoor Unit

### U Crown

Model		GWH09UB-K3DNA4F/I	GWH12UB-K3DNA4F/I	GWH18UC-K3DNA4F/I
Capacity	Cooling Heating	BTU/h BTU/h	9000 10200	12000 12300
Power supply	Ph/V/Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz
Airflow volume	m³/h CFM	650 383	720 424	850 500
Sound pressure level(SH/H/MH/M/ML/L/SL)	dB(A)	41/37/35/33/30/22/19	43/38/36/34/31/23/20	46/42/40/36/33/25/22
Connecting pipe	Gas Liquid	inch(mm) inch(mm)	1/2(ø12.7) 1/4(ø6.35)	1/2(ø12.7) 1/4(ø6.35)
Dimension (WxHxD)	Outline Package	mm mm	899x596x378 948x645x420	899x596x378 948x645x420
Net weight/Gross weight	kg	44.5/47.5	44.5/47.5	51/55.5
Loading quantity	20'GP 40'GP/40'HQ	set set	79 165/191	79 165/191
			123/141	

### U-Cool

Model		GWH(07)UA-K3DNA1B/I	GWH(09)UA-K3DNA1B/I	GWH(12)UB-K3DNA1B/I	GWH(18)UC-K3DNA1B/I
Capacity	Cooling Heating	BTU/h BTU/h	7167 8874	8874 9556	11946 12969
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Airflow volume	m³/h CFM	450 265	450 265	560 329	850 500
Sound pressure level (SH/H/MH/M/ML/L/SL)	dB(A)	37/35/32/30/28/26/24	38/34/32/29/27/25/22	39/36/34/31/29/27/23	44/40/37/35/33/31/28
Connecting pipe	Gas Liquid	inch(mm) inch(mm)	ø3/8(9.52) ø1/4(6.35)	ø3/8(9.52) ø1/4(6.35)	ø1/2(12.7) ø1/4(6.35)
Dimension (WxHxD)	Outline Package	mm mm	860X153X299 944X247X386	860X153X299 944X247X386	896X159X320 973X255X403
Net weight/Gross weight	kg	9.5/12.5	9.5/12.5	11.5/14.5	15/19
Loading quantity	20'GP 40' GP/40' HQ	set set	324 666/740	324 666/740	279 585/650
					216 440/495

### Cozy

Model		GWH(07)MA-K3DNA3E/I	GWH(09)MA-K3DNA3E/I	GWH(12)MB-K3DNA3E/I	GWH(18)MC-K3DNA3E/I
Capacity	Cooling Heating	BTU/h BTU/h	7167 8874	8874 9556	11946 12969
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Airflow volume	m³/h CFM	450 265	500 294	630 371	850 500
Sound pressure level (SH/H/M/L)	dB(A)	36/34/31/28	37/34/31/28	38/34/32/30	46/43/40/36
Connecting pipe	Gas Liquid	inch(mm) inch(mm)	ø3/8(9.52) ø1/4(6.35)	ø3/8(9.52) ø1/4(6.35)	ø1/2(12.7) ø1/4(6.35)
Dimension (WxHxD)	Outline Package	mm mm	790X170X265 873X251X370	790X170X265 873X251X370	845X180X275 918X256X370
Net weight/Gross weight	kg	9/11	9/11	10/12.5	13/16
Loading quantity	20'GP 40' GP/40' HQ	set set	348 732/852	348 732/852	336 684/798
					254 541/609

### Change

Model		GWH(07)KF-K3DNA6E/I	GWH(09)KF-K3DNA6E/I	GWH(12)KF-K3DNA6E/I	GWH(18)KG-K3DNA6E/I
Capacity	Cooling Heating	BTU/h BTU/h	7167 8874	8874 9556	11946 12969
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Airflow volume	m³/h CFM	550 324	600 353	680 400	800 471
Sound pressure level (SH/H/M/L)	dB(A)	40/38/30/24	41/38/30/24	42/39/31/25	45/40/37/32
Connecting pipe	Gas Liquid	inch(mm) inch(mm)	ø3/8(9.52) ø1/4(6.35)	ø3/8(9.52) ø1/4(6.35)	ø1/2(12.7) ø1/4(6.35)
Dimension (WxHxD)	Outline Package	mm mm	700X201X283 847X264X357	770X201X283 847X264X357	865X215X305 948X298X395
Net weight/Gross weight	kg	8/10	8/10	9/11	12/15
Loading quantity	20'GP 40' GP/40' HQ	set set	336 696/783	336 696/783	336 696/783
					264 542/616

### Hansol

Model		GWH(07)TA-K3DNA1E/I	GWH(09)TA-K3DNA1E/I	GWH(12)TB-K3DNA1E/I	GWH(18)TC-K3DNA1E/I
Capacity	Cooling Heating	BTU/h BTU/h	7167 8874	8533 9386	11946 12457
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Airflow volume	m³/h CFM	550 324	550 324	770 430	950 559
Sound pressure level(SH/H/MH/M/ML/L/SL)	dB(A)	41/36/34/32/28/24/21	41/36/34/32/28/24/21	43/36/34/32/28/24/21	49/44/41/39/36/33/30
Connecting pipe	Gas Liquid	inch(mm) inch(mm)	ø3/8(9.52) ø1/4(6.35)	ø3/8(9.52) ø1/4(6.35)	ø1/2(12.7) ø1/4(6.35)
Dimension (WxHxD)	Outline Package	mm mm	806x209x292 888x297x377	806x209x292 888x297x377	866x209x292 945x297x340
Net weight/Gross weight	kg	10.5/13.0	10.5/13.0	11.0/13.5	15.0/18.5
Loading quantity	20'GP 40' GP/40' HQ	set set	266 553/632	266 553/632	252 518/592
					174 366/427

### Viola

Model		GWH(07)RA-K3DNA3E/I	GWH(09)RA-K3DNA3E/I	GWH(12)RB-K3DNA3E/I	GWH(18)RC-K3DNA3E/I	GWH(24)RC-K3DNA3E/I
Capacity	Cooling Heating	BTU/h BTU/h	7167 8874	8874 9556	11946 12969	18089 19795
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Airflow volume	m³/h CFM	500 294	500 294	630 371	850 500	1000 588
Sound pressure level (SH/H/M/L)	dB(A)	40/37/35/32	40/37/35/32	42/39/36/33	45/42/37/33	48/46/44/42
Connecting pipe	Gas Liquid	inch(mm) inch(mm)	ø3/8(9.52) ø1/4(6.35)	ø3/8(9.52) ø1/4(6.35)	ø1/2(12.7) ø1/4(6.35)	ø5/8(15.9) ø3/8(9.52)
Dimension (WxHxD)	Outline Package	mm mm	794X186X265 873X270X353	794X186X265 873X270X353	848X189X274 926X279X359	945X208X298 1013X300X383
Net weight/Gross weight	kg	9/11.5	9/11.5	10/12.5	13/16	15.5/20.5
Loading quantity	20'GP 40' GP/40' HQ	set set	348 720/840	348 720/840	306 636/742	254 541/609
						174 366/427

### Duct Type Indoor Unit

## Console Type Indoor Unit

Model	GEH(09)AA-K3DNA1C/I		GEH(12)AA-K3DNA1C/I		GEH(18)AA-K3DNA1C/I	
Capacity	Cooling	BTU/h	8874	11946	18089	
	Heating	BTU/h	9556	12969	19795	
Power supply	Ph/V/Hz		1/220~240/50	1/220~240/50	1/220~240/50	
Airflow volume	m³/h		650	750	840	
	CFM		382.3529412	441	494	
Sound pressure level (SH/H/MH/M/ML/L/SL)	dB(A)		40/38/36/33/30/27/25	42/40/38/37/35/32/25	48/46/44/41/37/35/32	
Connecting pipe	Gas	inch(mm)	φ3/8(9.52)	φ3/8(9.52)	φ1/2(12.7)	
	Liquid	inch(mm)	φ1/4(6.35)	φ1/4(6.35)	φ1/4(6.35)	
Dimension(WxHxD)	Outline	mm	700X600X215	700X600X215	700X600X215	
	Package	mm	791X710X286	791X710X286	791X710X286	
Net weight/Gross weight	kg		15/18	15/18	15/18	
Loading quantity	20'GP	set	168	168	168	
	40' GP/40' HQ	set	348/440	348/440	348/440	

## Control System Lineup

Controlling system	Product series	Wall-mounted type							Duct type	Cassette type	Floor ceiling type	Console type
		Lomo	Hansol	U Crown	U-Cool	Cozy	Change	Viola				
Wireless remote controller	YAA1FB1											
	YT1F(MOTO)											
	YAG1FB											
	YB1F2 (XFAN)											
	YAN1F1(XFAN)											
	SAA1FB1											
Wired controller	XK19											
Centralized controller	CE50-24/E											

Note: ● means standard, ○ means optional.

## All DC Inverter VRF Air Conditioning System

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 180kW.

GMV5 Mini



GMV5 Slim



GMV5



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
Total piping length	300m	300m	1000m
Actual piping length	120m	100m	165m
Equivalent piping length	150m	120m	190m
Height difference between indoor units	15m	10m	30m
Height difference between ODU and IDU (ODU is located above the IDU)	50m	50m	90m
Height difference between ODU and IDU (IDU is located above the ODU)	40m	40m	90m
Piping length from first indoor branch to the farthest IDU	40m	40m	40m

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

## Outdoor Units Lineup

GMV5 Mini

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

GMV5 Slim

HP	Model	Product Outlook
8	GMV-224WL/B-X	
10	GMV-280WL/B-X	
12	GMV-335WL/B-X	

GMV5 Slim 50/60 Hz

Model	GMV-224WL/B-X <sup>2</sup>	GMV-280WL/B-X <sup>2</sup>	GMV-335WL/B-X <sup>2</sup>	
Capacity range	HP	8	10	
Capacity	Cooling kW	22.4	28.0	
	Heating kW	24.0	30.0	
EER	W/W	3.1	2.97	
COP	W/W	4.1	3.66	
IPLV	Cooling kW/kW	6.1	6.0	
Power supply	V/Ph/Hz	380-415-3Ph-50/60Hz		
Max. Circuit/Fuse Current	A	20	25	
Power consumption	Cooling kW	7.2	9.8	
	Heating kW	6.1	8.6	
Maximum drive IDU NO.	unit	13	17	
Refrigerant Charge volume	kg	5.5	7.5	
Sound pressure level	Cooling dB(A)	58	59	
	Heating dB(A)	59	61	
Connecting pipe	Liquid mm	Φ9.52	Φ9.52	
	Gas mm	Φ19.05	Φ22	
Dimension	Outline (W*D*H) mm	940x320x1430	940x460x1615	
(W*D*H)	Package mm	1038x433x1580	1038x578x1765	
Net weight/Gross weight	kg	133/144	166/183	
Loading quantity	40' GP set	54	44	
	40' HQ set	54	44	

Note:

\*2: This product is under development. The parameters are estimated, please refer to the value on the nameplate.

GMV5 50/60 Hz

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
Capacity	Cooling kW	22.4	28	33.5	40	45	50.4	56
	Heating kW	25	31.5	37.5	45	50	56	63
EER	W/W	4.31	4	3.98	3.76	3.56	3.55	3.5
COP	W/W	4.55	4.32	4.17	4.05	3.85	4.01	3.8
Power supply	V/Ph/Hz	380-415V-3Ph-50/60Hz						
Max. Circuit/Fuse Current	A	15.7/20	20.9/25	24.7/32	28.8/40	33.2/40	44.7/50	50/63
Power consumption	Cooling kW	5.2	7	8.41	10.65	12.65	14.2	16
	Heating kW	5.5	7.3	9	11.1	13	14.1	16.6
Maximum drive IDU NO.	unit	13	16	19	23	26	29	32
Refrigerant Charge volume	kg	5.9	6.7	8.2	9.8	10.3	11.3	14.3
Sound pressure level	dB(A)	60	61	63	63	63	63	64
Connecting pipe	Liquid mm	Φ9.52			Φ12.7			Φ15.9
	Gas mm	Φ19.05			Φ22.2			Φ28.6
Dimension	Outline (W*D*H) mm	930x765x1605			1340x765x1605			1340x765x1740
(W*D*H)	Package mm	1010x840x1775			1420x840x1775			1420x840x1910
Net weight/Gross weight	kg	225/235	225/235	285/300	360/375	360/375	360/375	385/400
Loading	40' GP set	24	24	16	16	16	16	16
	40' HQ set	24	24	16	16	16	16	16

\*1: This series outdoor unit cannot match with US air handler, fresh air processing unit and high static ESP duct type unit.

Model	GMV-120WL/A-X	GMV-140WL/A-X	GMV-160WL/A-X	
Capacity range	HP	4	5	
Capacity	Cooling kW	12.10	14.00	
	Heating kW	14.00	16.50	
EER	kW/kW	3.97	3.52	
COP	kW/kW	4.28	4.14	
Power supply	V/Ph/Hz	380-415V-3Ph-50Hz/60Hz		
Max. Circuit/Fuse Current	A	11.1/5	11.4/5	
Power consumption	Cooling kW	3.05	3.98	
	Heating kW	3.27	3.99	
Maximum drive IDU NO.	unit	7	8	
Refrigerant Charge volume	kg	5	5	
Sound pressure level	dB(A)	55	56	
Connecting pipe	Liquid mm	Φ9.52	Φ9.52	
	Gas mm	Φ15.9	Φ15.9	
Dimension	Outline (W*D*H) mm	900/340/1345	900/340/1345	
(W*D*H)	Package mm	998/458/1515	998/458/1515	
Net weight/Gross weight	kg	120/130	120/130	
Loading	40' GP set	57	57	
	40' HQ set	57	57	

## ODU Combination Lineup-GMV5

MODEL	GMV-224WM/B-X (8HP)	GMV-280WM/B-X (10HP)	GMV-335WM/B-X (12HP)	GMV-400WM/B-X (14HP)	GMV-450WM/B-X (16HP)	GMV-504WM/B-X (18HP)	GMV-560WM/B-X (20HP)	GMV-615WM/B-X (22HP)
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								●
GMV-680WM/B-X		●			●			
GMV-730WM/B-X		●			●			
GMV-785WM/B-X						●		
GMV-850WM/B-X		●					●	
GMV-900WM/B-X		●						●
GMV-960WM/B-X			●					●
GMV-1010WM/B-X				●				●
GMV-1065WM/B-X					●			●
GMV-1130WM/B-X						●		●
GMV-1180WM/B-X							●	●
GMV-1235WM/B-X								●
GMV-1300WM/B-X		●			●		●	
GMV-1350WM/B-X		●			●		●	
GMV-1410WM/B-X			●		●		●	
GMV-1460WM/B-X		●				●		●
GMV-1515WM/B-X		●					●	●
GMV-1580WM/B-X			●				●	●
GMV-1630WM/B-X				●			●	●
GMV-1685WM/B-X					●		●	●
GMV-1750WM/B-X						●	●	●
GMV-1800WM/B-X						●	●	●
GMV-1845WM/B-X							●	●
GMV-1908WM/B-X		●			●		●	●
GMV-1962WM/B-X		●				●	●	●
GMV-2016WM/B-X		●				●	●	●
GMV-2072WM/B-X		●				●	●	●
GMV-2128WM/B-X		●					●	●
GMV-2184WM/B-X			●				●	●
GMV-2240WM/B-X				●			●	●
GMV-2295WM/B-X					●		●	●
GMV-2350WM/B-X						●	●	●
GMV-2405WM/B-X							●	●
GMV-2460WM/B-X							●	●

## Specifications of ODU Combination

50/60 Hz

Model	Power Supply	Capacity		Power Input		Dimension(WxDxH) mm	Airflow Volume m³/h	ESP	Sound Pressure Level dB(A)	Connecting pipe diameter			Min. circuit current mm	Max. fuse current A	Weight kg	
		Cooling kW	Heating kW	Cooling kW	Heating kW					Liquid	Gas	Oil				
										mm	mm	mm				
GMV-680WM/B-X	380~415V-3Ph-50/60Hz	68	76.5	17.65	18.4	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	54.1	63	225+360
GMV-730WM/B-X		73	81.5	19.65	20.3	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	57.9	63	225+360
GMV-785WM/B-X		78.4	88	21.2	21.4	(930×765×1605)+(1340×765×1740)	11400+16000	82	66	43	Φ19.05	Φ31.8	Φ9.52	65.6	80	225+360
GMV-850WM/B-X		84	94.5	23	23.9	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	71	80	225+385
GMV-900WM/B-X		89.5	100.5	25.5	26.2	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	72.7	80	225+385
GMV-960WM/B-X		95	106.5	26.91	27.9	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	76.5	80	285+385
GMV-1010WM/B-X		101.5	114	29.15	30	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	80.6	100	360+385
GMV-1065WM/B-X		106.5	119	31.15	31.9	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	85	100	360+385
GMV-1130WM/B-X		111.9	125.5	32.7	33	(1340×765×1740)×2	16000×2	82	68	43	Φ19.05	Φ38.1	Φ9.52	96.5	100	360+385
GMV-1180WM/B-X		117.5	132	34.5	35.5	(1340×765×1740)×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	101.9	125	385+385
GMV-1235WM/B-X		123	138	37	37.8	(1340×765×1740)×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	103.6	125	385+385
GMV-1300WM/B-X		129	144.5	35.65	36.9	(930×765×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	104.2	125	225+360+385
GMV-1350WM/B-X		134.5	150.5	38.15	39.2	(930×765×1605)+(1340×765×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	105.9	125	225+360+385
GMV-1410WM/B-X		140	156.5	39.56	40.9	(1340×765×1605)×2+(1340×765×1740)	14000×2+16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	109.7	125	285+360+385
GMV-1460WM/B-X		145.5	163.5	41.5	42.8	(930×765×1605)+(1340×765×1740)×2	11400+16000×2	82	69	45	Φ19.05	Φ41.3	Φ9.52	122.8	125	225+385×2
GMV-1515WM/B-X		151	169.5	44	45.1	(930×765×1605)+(1340×765×1740)×2	11400+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	124.5	125	225+385×2
GMV-1580WM/B-X		156.5	175.5	45.41	46.8	(1340×765×1605)+(1340×765×1740)×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	128.3	160	285+385×2
GMV-1630WM/B-X		163	183	47.65	48.9	(1340×765×1605)+(1340×765×1740)×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	132.4	160	360+385×2
GMV-1685WM/B-X		168	188	49.65	50.8	(1340×765×1605)+(1340×765×1740)×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	136.8	160	360+385×2
GMV-1750WM/B-X		173.4	194.5	51.2	51.9	(1340×765×1740)×3	16000×3	82	70	45	Φ19.05	Φ41.3	Φ9.52	148.3	160	360+385×2
GMV-1800WM/B-X		179	201	53</												

# GMV5 HR

(Heat Recovery Series)

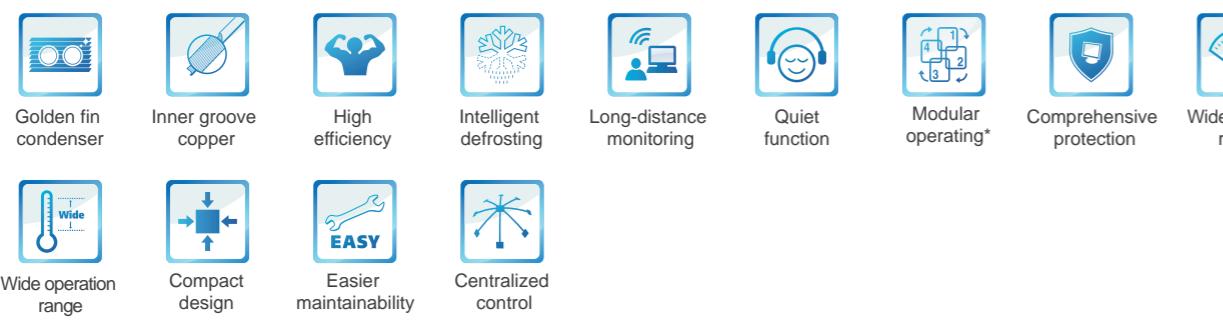
GMV5 Heat Recovery System embodies the excellent features of GMV5(DC inverter technology, DC fan linkage control, precise control of capacity output, balancing control of refrigerant, original oil balancing technology with high pressure chamber, high-efficiency output control, low-temperature operation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


**INVERTER R410A**

## Specification and Parameters

50/60 Hz

Model	GMV-Q224WM/B-X	GMV-Q280WM/B-X	GMV-Q335WM/B-X	GMV-Q400WM/B-X	GMV-Q450WM/B-X
Capacity range	HP	8	10	12	14
Capacity	Cooling kW	22.4	28	33.5	40
	Heating kW	25	31.5	37.5	45
EER	W/W	4.31	4.06	4.09	3.77
COP	W/W	4.72	4.32	4.31	4.17
IPLV	Cooling kW/kW	/	/	/	/
Power Supply	V/Ph/Hz		380~415V-3Ph-50/60Hz		
Max. circuit/fuse current	A	16.3/20	20.9/25	24.7/32	28.8/40
Power consumption	Cooling kW	5.2	6.9	8.2	10.6
	Heating kW	5.3	7.3	8.7	10.8
Maximum drive IDU NO.	unit	13	16	19	23
Refrigerant Charge volume	kg	6.2	7.1	9.6	11.1
Sound pressure level	dB(A)	60	61	63	63
Connecting pipe	Liquid mm	Φ9.52		Φ12.7	
	Gas(Low pressure) mm	Φ19.05	Φ22.2	Φ25.4	Φ28.6
	Gas(High pressure) mm	Φ15.9	Φ19.05	Φ19.05	Φ22.2
Dimension	Outline (W*D*H) mm	930x765x1605		1340x765x1605	
	Package mm	1010x840x1775		1420x840x1775	
Net weight/Gross weight	kg	233/243	233/243	303/318	360/375
Loading quantity	40' GP set	24	24	16	16
	40' HQ set	24	24	16	16



- 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

## Outdoor Units Lineup-GMV5 Heat Recovery Series

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

Model	Product Outlook
NCHS1B	
NCHS4B	
NCHS8B	

## ODU Combination Lineup-GMV5 HR

Model	GMV-Q224WM/B-X ( 8HP)	GMV-Q280WM/B-X ( 10HP)	GMV-Q335WM/B-X ( 12HP)	GMV-Q400WM/B-X(14HP)	GMV-Q450WM/B-X(16HP)
GMV-Q224WM/B-X	●				
GMV-Q280WM/B-X		●			
GMV-Q335WM/B-X			●		
GMV-Q400WM/B-X				●	
GMV-Q450WM/B-X					●
GMV-Q504WM/B-X	●	●			
GMV-Q560WM/B-X		●●			
GMV-Q615WM/B-X		●	●		
GMV-Q680WM/B-X		●		●	
GMV-Q730WM/B-X		●			●
GMV-Q785WM/B-X			●		●
GMV-Q850WM/B-X				●	●
GMV-Q900WM/B-X					●●
GMV-Q960WM/B-X		●●		●	
GMV-Q1010WM/B-X		●●			●
GMV-Q1065WM/B-X		●	●		●
GMV-Q1130WM/B-X		●		●	●
GMV-Q1180WM/B-X		●		●●	
GMV-Q1235WM/B-X			●		●●
GMV-Q1300WM/B-X				●	●●
GMV-Q1350WM/B-X					●●●
GMV-Q1410WM/B-X		●●		●	●
GMV-Q1460WM/B-X		●●			●●
GMV-Q1515WM/B-X		●		●●	●
GMV-Q1580WM/B-X		●		●	●●
GMV-Q1630WM/B-X		●			●●●
GMV-Q1685WM/B-X				●●	●●
GMV-Q1750WM/B-X				●	●●●
GMV-Q1800WM/B-X					●●●●

## Specification of ODU Combination of GMV5 HR

Model	Power Supply	Capacity		Power Input		Dimension (WxDxH)	Airflow Volume	ESP	Sound Pressure Level	Operation sound pressure level at night	Connecting pipe diameter			Min.circuit current	Max.fuse current	Weight
		Cooling	Heating	Cooling	Heating						Liquid	HP Gas	LP Gas			
		kW	kW	kW	kW	mm	m³/h	Pa	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-Q224WM/B-X	380-415V 50/60Hz	22.40	25.00	5.20	5.30	930x765x1605	11400	82	60	40	Φ9.52	Φ15.9	Φ19.05	16.3	20	233.0
GMV-Q280WM/B-X		28.00	31.50	6.90	7.30	930x765x1605	11400	82	61	40	Φ9.52	Φ19.05	Φ22.2	20.9	25	233.0
GMV-Q335WM/B-X		33.50	37.50	8.20	8.70	1340x765x1605	14000	82	63	40	Φ12.7	Φ19.05	Φ25.4	24.7	32	302.0
GMV-Q400WM/B-X		40.00	45.00	10.60	10.80	1340x765x1605	14000	82	63	40	Φ12.7	Φ22.2	Φ25.4	28.8	40	346.0
GMV-Q450WM/B-X		45.00	50.00	12.10	12.50	1340x765x1605	14000	82	63	40	Φ12.7	Φ22.2	Φ28.6	33.2	40	346.0
GMV-Q504WM/B-X		50.40	56.50	12.10	12.60	2x(930x765x1605)	22800	82	64	43	Φ15.9	Φ25.4	Φ28.6	36.6	40	466.0
GMV-Q560WM/B-X		56.00	62.50	13.80	14.60	2x(930x765x1605)	22800	82	64	43	Φ15.9	Φ25.4	Φ28.6	41.8	50	466.0
GMV-Q615WM/B-X		61.50	69.00	15.10	16.00	(930x765x1605)+ (1340x765x1605)	25400	82	65	43	Φ15.9	Φ25.4	Φ28.6	45.6	50	535.0
GMV-Q680WM/B-X		68.00	76.50	17.50	18.10	(930x765x1605)+ (1340x765x1605)	25400	82	65	43	Φ15.9	Φ25.4	Φ28.6	49.7	63	579.0
GMV-Q730WM/B-X		73.00	81.50	19.00	19.80	(930x765x1605)+ (1340x765x1605)	25400	82	65	43	Φ19.05	Φ28.6	Φ31.8	54.1	63	579.0
GMV-Q785WM/B-X		78.50	87.50	20.30	21.20	2x(1340x765x1605)	28000	82	66	43	Φ19.05	Φ28.6	Φ31.8	57.9	80	648.0
GMV-Q850WM/B-X		85.00	95.00	22.70	23.30	2x(1340x765x1605)	28000	82	66	43	Φ19.05	Φ28.6	Φ31.8	62	80	692.0
GMV-Q900WM/B-X		90.00	100.00	24.20	25.00	2x(1340x765x1605)	28000	82	66	43	Φ19.05	Φ28.6	Φ31.8	66.4	80	692.0
GMV-Q960WM/B-X		96.00	108.00	24.40	25.40	2x(930x765x1605) +(1340x765x1605)	36800	82	67	43	Φ19.05	Φ28.6	Φ31.8	70.6	80	812.0
GMV-Q1010WM/B-X		101.00	113.00	25.90	27.10	2x(930x765x1605) +(1340x765x1605)	36800	82	67	43	Φ19.05	Φ31.8	Φ38.1	75	80	812.0
GMV-Q1065WM/B-X		106.50	119.00	27.20	28.50	(930x765x1605)+ 2x(1340x765x1605)	39400	82	67	43	Φ19.05	Φ31.8	Φ38.1	78.8	100	881.0
GMV-Q1130WM/B-X		113.00	126.50	29.60	30.60	(930x765x1605)+ 2x(1340x765x1605)	39400	82	67	45	Φ19.05	Φ31.8	Φ38.1	82.9	100	925.0
GMV-Q1180WM/B-X		118.00	131.50	31.10	32.30	(930x765x1605)+ 2x(1340x765x1605)	39400	82	67	45	Φ19.05	Φ31.8	Φ38.1	87.3	100	925.0
GMV-Q1235WM/B-X		123.50	137.50	32.40	33.70	3x(1340x765x1605)	42000	82	68	45	Φ19.05	Φ31.8	Φ38.1	91.1	125	994.0
GMV-Q1300WM/B-X		130.00	145.00	34.80	35.80	3x(1340x765x1605)	42000	82	68	45	Φ19.05	Φ31.8	Φ38.1	95.2	125	1038.0
GMV-Q1350WM/B-X		135.00	150.00	36.30	37.50	3x(1340x765x1605)	42000	82	68	45	Φ19.05	Φ31.8	Φ38.1	99.6	125	1038.0
GMV-Q1410WM/B-X		141.00	158.00	36.50	37.90	2x(930x765x1605)+ 2x(1340x765x1605)	50800	82	69	45	Φ22.2	Φ38.1	Φ44.5	103.8	125	1158.0
GMV-Q1460WM/B-X		146.00	163.00	38.00	39.60	2x(930x765x1605)+ 2x(1340x765x1605)	50800	82	69	45	Φ22.2	Φ38.1	Φ44.5	108.2	125	1158.0
GMV-Q1515WM/B-X		151.50	169.00	39.30	41.00	(930x765x1605)+3 (1340x765x1605)	53400	82	69	45	Φ22.2	Φ38.1	Φ44.5	112	125	1227.0
GMV-Q1580WM/B-X		158.00	176.50	41.70	43.10	(930x765x1605)+3 (1340x765x1605)	53400	82	69	45	Φ22.2	Φ38.1	Φ44.5	116.1	125	1271.0
GMV-Q1630WM/B-X		163.00	181.50	43.20	44.80	(930x765x1605)+3 (1340x765x1605)	53400	82	69	45	Φ22.2	Φ38.1	Φ44.5	120.5	160	1271.0
GMV-Q1685WM/B-X		168.50	187.50	44.50	46.20	4x(1340x765x1605)	56000	82	70	45	Φ22.2	Φ38.1				

# GMV5 Home

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



Outdoor Unit



Water Tank

SXD200LC JW/C1--K<sup>\*2</sup>

Hydro Box

Hot water converter<sup>\*1</sup>

- Golden fin condenser
- Inner groove copper
- Compact design
- High efficiency
- Wide voltage range
- Easier maintainability

Item	Nominal operating condition(temperature)					
	Outdoor condition		Indoor condition		Water	
Cooling	DB(°C)	WB(°C)	DB(°C)	WB(°C)	Start(°C)	End(°C)
Heating	7	6	20	15	/	/
Hot water	20	15	/	/	15	52

Operation range	Mode		Outdoor Condition( DB 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	GMV-S224W/A-X	GMV-S280W/A-X
Capacity	Cooling kW	12.1	14	16	22.40
	Heating kW	14	16.5	18.5	31.50
ECOP	kW/kW	/	/	/	7.00
Power supply	V/Ph/Hz	220-240V~1Ph~50/60Hz	220-240V~1Ph~50/60Hz	220-240V~1Ph~50/60Hz	380~415V 3Ph 50/60Hz
Refrigerant Charge volume	kg	5	5	5	10.50
Rated power input	Cooling kW	3.05	3.98	4.85	5.35
	Heating kW	3.3	4.1	4.67	5.80
	Water Heating kW	3.3	3.8	4.2	5.00
Airflow volume	m <sup>3</sup> /h	6000	6300	6600	14000.00
Sound pressure level	dB(A)	55	56	58	57
Connecting pipe diameter	Gas mm	Φ15.9	Φ15.9	Φ19.05	Φ19.05
	Liquid mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas (high pressure) mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9
Dimension (WxDxH)	Outline mm	900x340x1345	900x340x1345	900x340x1345	1340x765x1605
	Package mm	998x458x1515	998x458x1515	998x458x1515	1420x840x1775
Net weight/Gross weight	kg	113/123	113/123	113/123	295/310
Loading quantity	40' GP set	57	57	57	16.00
	40' HQ set	57	57	57	16.00

## Water Tank

Model	SXVD200LCJ/A-K	SXVD300LCJ/A-K	SXVD350LCJ/A-K	SXVD400LCJ/A-K	
Tank volume	L	200	300	350	
Max. working pressure	Mpa	0.7	0.7	0.7	
Auxiliary electrical heater power input	kW	3.0	3.0	3.0	
Power supply	V-Ph-Hz	1Ph,220-240V,50Hz			
Dimension	Thickness(inner) mm	1.5	1.5	1.5	
	Thickness(external) mm	50	45	45	
	Outline diameter mm	540	620	620	
	Outline height mm	1595	1620	1895	
	Package(WxDxH) mm	625x1620x630	705x1645x710	705x2150x722	
Net/Gross weight	kg	68/77	82/92	96/122	
Outer diameter	Circular pipe mm	DN20	DN20	DN20	
	Cold water pipe mm	DN15	DN15	DN15	
	Hot water pipe mm	DN15	DN15	DN15	
Loading quantity	40GP/40HQ set	78/104	63/63	54/54	

Model	SXVD200LCJ2/A-K	SXVD300LCJ2/A-K	SXVD350LCJ2/A-K	SXVD400LCJ2/A-K	
Tank volume	L	200	300	350	
Max. working pressure	Mpa	0.7	0.7	0.7	
Auxiliary electrical heater power input	kW	3.0	3.0	3.0	
Power supply	V-Ph-Hz	1Ph,220-240V,50Hz			
Dimension	Thickness(inner) mm	1.5	1.5	1.5	
	Thickness(external) mm	50	45	45	
	Outline diameter mm	540	620	620	
	Outline height mm	1595	1620	1895	
	Package(WxDxH) mm	625x1620x630	705x1645x710	705x1920x722	
Net/Gross weight	kg	71/80	87/97	100/126	
Outer diameter	Circular pipe mm	DN20	DN20	DN20	
	Cold water pipe mm	DN15	DN15	DN15	
	Hot water pipe mm	DN15	DN15	DN15	
Loading quantity	40GP/40HQ set	78/104	63/63	54/54	

## Hydro Box

Model	NRQD16G/A-S	
Heating capacity	kW	4.5(3.6-16)
Dimension (WxDxH)	Outline mm	500x919x328
	Package mm	1155x605x385
Power supply	Ph/V/Hz	1Ph 220~240V 50/60Hz
Connecting pipe diameter	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	40GP/40HQ set	190/228

## Hot Water Converter

Model	NRZ16G/A-S	
Heating capacity	kW	4.5(2.8-5.6)
Dimension (WxDxH)	Outline mm	370x135x485
	Package mm	648x473x225
Power supply	Ph/V/Hz	1Ph 220~240V 50/60Hz
Connecting pipe diameter	Gas mm	Φ15.9
	Liquid mm	Φ9.52
	Gas(high pressure) mm	Φ12.7
Net/Gross Weight	kg	8.5/13.5
Loading quantity	40GP set	840/924

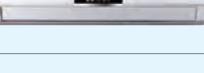
## Water Tank

Model	SXD200LCJW/C1-K	
Capacity	L	185
Power Supply for Electric Heater	-	220V-240V~50Hz
Input Power for Electric Heater	W	1500
Outline Dimensions(W x D x H)	mm	545x545x1919
Package Dimensions(W x D x H)	mm	2009x656x625
Water Tank Gross/Net Weight	kg	60/52
Outer Size of Connection Pipe	mm	Φ6, Φ9.52

## Note:

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

## Specifications of Indoor Units (GMV5 Series and GMV5 Hor)

Type of indoor unit	Specification	22	25	28	32	36	40	45	50	56	63	71	72	80	90	100	112	125	140	160	224
High Static Pressure Duct Type Unit										●	●	●				●	●	●	●	●	●
Low Static Pressure Duct Type Unit		●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	
Slim Ducted Type Indoor Unit		●	●	●	●	●	●	●	●	●	●	●					●				
4-way Cassette Unit				●		●		●	●	●	●	●		●	●	●	●	●	●	●	
Compact 4-way Cassette Indoor Unit		●		●		●		●	●	●	●										
2-way Cassette Indoor Unit				●		●		●	●	●	●	●									
1-way Cassette Unit		●		●		●		●	●	●											
Wall-mounted Type Unit		●		●		●		●	●	●	●	●									
Floor Ceiling Type Indoor Unit				●		●			●		●	●		●			●	●	●	●	
Console Indoor Unit		●		●		●		●	●	●											
Floor Standing Type Indoor Unit																	●		●		
Fresh Air Processing Indoor Unit																		●		●	

# Duct Type Indoor Unit

## High ESP Ser



## | Low ESP Series



Washable filters Easier maintainability High ESP Auto addressing technology Slave and master wired controller Centralized control Quality monitoring

## High Static Pressure Duct Type Indoor Unit

50/6

Model		GMV-ND56PHS/A-T	GMV-ND63PHS/A-T	GMV-ND71PHS/A-T	GMV-ND80PHS/A-T	GMV-ND90PHS/A-T
Capacity	Cooling	kW	5.6	6.3	7.1	8.0
	Heating	kW	6.3	7.1	8.0	9.0
Power supply		V/Ph/Hz	220~240/1/50 & 208~230/1/60			
Power consumption		W	120	120	130	130
Airflow volume(H/M/L)	m <sup>3</sup> /h		1000/800/600	1000/800/600	1100/900/700	1100/900/700
	CFM		590/471/355	590/471/355	650/530/410	650/530/410
Rated Current <sup>2</sup>	Cooling	A	0.6	0.6	0.6	0.6
	Heating	A	0.6	0.6	0.6	0.6
	Water Heating	A	/	/	/	/
ESP		Pa	70/0~100			
Sound pressure level(H/M/L)		dB(A)	44/40/36	44/40/36	45/41/37	45/41/37
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	1271x558x268			
	Package	mm	1348x597x283			
Net weight/Gross weight		kg	35/40	35/40	35/40	47/54
Loading	40' GP	set	192	192	192	128
	40' HQ	set	216	216	216	128

Model		GMV-ND100PHS/A-T		GMV-ND112PHS/A-T		GMV-ND125PHS/A-T		GMV-ND140PHS/A-T		GMV-ND160PHS/A-T		GMV-ND224PH/A-T		GMV-ND280PH/A-T	
Capacity	Cooling	kW	10.0	11.2	12.5	14.0	16.00	22.4	28.0						
	Heating	kW	11.2	12.5	14.0	16.0	17.00	25.0	31.0						
Power supply		V/Ph/Hz	220~240/1/50 & 208~230/1/60												
Power consumption		W	200	200	220	220	560	800	900						
Airflow volume(H/M/L)	m <sup>3</sup> /h		1700/1450/1100	1700/1450/1100	2000/1550/1200	2000/1700/1400	2650	4000	4400						
	CFM		1000/853/650	1000/853/650	1175/912/706	1175/1000/824	1560	2355	2590						
Rated Current <sup>2</sup>	Cooling	A	1.0	1.0	1.0	1.0	4	4.1	4.6						
	Heating	A	1.0	1.0	1.0	1.0	4	4.1	4.6						
	Water Heating	A	/	/	/	/	/	/	/						
ESP		Pa	70/0~100				70/0~150	150/50~200	150/50~200						
Sound pressure level(H/M/L)		dB(A)	46/44/42	46/44/42	48/45/42	48/46/44	50/48/46	54.0	55.0						
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52						
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19	Φ19.05	Φ22.2						
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ20	Φ30	Φ30						
	Thickness	mm	2.5	2.5	2.5	2.5	1.2	1.5	1.5						
Dimension (WxDxH)	Outline	mm	1229x775x290				1340x750x350	1483x791x385	1686x870x450						
	Package	mm	1338x877x305				1423x837x455	1578x883x472	1788x988x580						
Net weight/Gross weight		kg	47/54	47/54	47/54	47/54	60/71	82/104	105/140						
Loading	40' GP	set	128	128	128	128	110	52	52						
	40' HQ	set	128	128	128	128	110	55	52						

## Low Static Pressure Duct Type Indoor Unit

50/60 Hz

Model	GMV-ND22PLS/A-T	GMV-ND25PLS/A-T	GMV-ND28PLS/A-T	GMV-ND32PLS/A-T	GMV-ND36PLS/A-T
Capacity	Cooling kW	2.2	2.5	2.8	3.2
	Heating kW	2.5	2.8	3.6	4.0
Power supply V/Ph/Hz					
Power consumption W	35	35	35	43	43
Airflow volume(H/M/L) m³/h	450/350/250	450/350/250	450/350/250	550/450/350	550/450/350
CFM	265/206/147	265/206/147	265/206/147	325/265/206	325/265/206
Rated Current <sup>2</sup>	Cooling A	0.2	0.2	0.2	0.2
	Heating A	0.2	0.2	0.2	0.2
	Water Heating A	/	/	/	/
ESP Pa	15/0-30				
Sound pressure level(H/M/L) dB(A)	31/28/25	31/28/25	31/28/25	32/30/27	32/30/27
Connecting pipe Liquid mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
diameter Gas mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7
External dia. Drain pipe mm	25	25	25	25	25
Thickness mm	2.5	2.5	2.5	2.5	2.5
Dimension Outline (WxDxH) mm	700 x 615 x 200				
Package mm	893x743x305				
Net weight/Gross weight kg	22/27	22/27	22/27	22/28	22/28
Loading 40' GP set	192	192	192	192	192
40' HQ set	192	192	192	192	192

## Slim Ducted Type Indoor Unit

50/60 Hz

Model	GMV-ND22PL/B-T*	GMV-ND25PL/B-T*	GMV-ND28PL/B-T*	GMV-ND32PL/B-T*	GMV-ND36PL/B-T*
Capacity	Cooling kW	2.2	2.5	2.8	3.2
	Heating kW	2.5	2.8	3.2	4.0
Power supply V/Ph/Hz					
Power consumption W	25	25	25	30	30
Airflow volume(H/M/L) m³/h	450/400/320	450/400/320	450/400/320	550/450/340	550/450/340
CFM	265/235/188	265/235/188	265/235/188	324/265/200	324/265/200
Rated Current <sup>2</sup>	Cooling A	0.2	0.2	0.3	0.3
	Heating A	0.2	0.2	0.3	0.3
	Water Heating A	/	/	/	/
ESP Pa	0/15				
Sound pressure level(H/M/L) dB(A)	30/28/22	30/28/22	30/28/22	31/29/25	31/29/25
Connecting pipe Liquid mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
diameter Gas mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
External dia. Drain pipe mm	25	25	25	25	25
Thickness mm	2.5	2.5	2.5	2.5	2.5
Dimension Outline (WxDxH) mm	710x450x200				
Package mm	1003x551x285				
Net weight/Gross weight kg	18.5/22	18.5/22	18.5/22	19.5/23	19.5/23
Loading 40' GP set	352	352	352	352	352
40' HQ set	352	352	352	352	352

Model	GMV-ND40PLS/A-T	GMV-ND45PLS/A-T	GMV-ND50PLS/A-T	GMV-ND56PLS/A-T	GMV-ND63PLS/A-T
Capacity	Cooling kW	4.0	4.5	5.0	6.3
	Heating kW	4.5	5.0	5.6	7.1
Power supply V/Ph/Hz					
Power consumption W	52	52	52	99	99
Airflow volume(H/M/L) m³/h	700/600/450	700/600/450	700/600/450	1000/800/600	1000/800/600
CFM	410/355/265	410/355/265	410/355/265	590/471/355	590/471/355
Rated Current <sup>2</sup>	Cooling A	0.3	0.3	0.3	0.5
	Heating A	0.3	0.3	0.3	0.5
	Water Heating A	/	/	/	/
ESP Pa	15/0-30				
Sound pressure level(H/M/L) dB(A)	33/31/28	33/31/28	33/31/28	35/33/30	35/33/30
Connecting pipe Liquid mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
diameter Gas mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9
External dia. Drain pipe mm	25	25	25	25	25
Thickness mm	2.5	2.5	2.5	2.5	2.5
Dimension Outline (WxDxH) mm	900 x 615 x 200				
Package mm	1123x743x305				
Net weight/Gross weight kg	27/33	27/33	27/33	31/38	31/38
Loading 40' GP set	192	192	192	162	162
40' HQ set	192	192	192	162	162

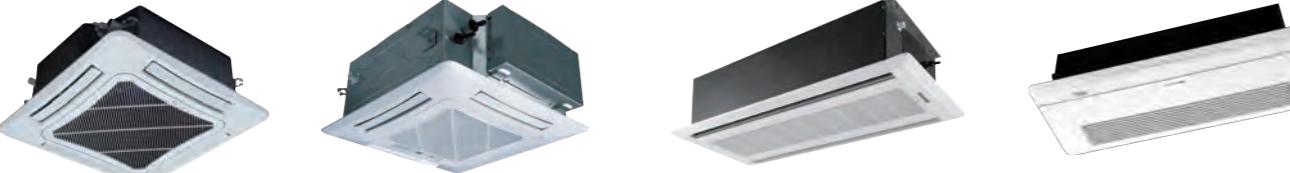
Model	GMV-ND40PL/B-T*	GMV-ND45PL/B-T*	GMV-ND50PL/B-T*	GMV-ND56PL/B-T*	GMV-ND63PL/B-T*	GMV-ND72PL/B-T*
Capacity	Cooling kW	4.0	4.5	5.0	5.6	6.3
	Heating kW	4.5	5.0	5.6	6.3	7.0
Power supply V/Ph/Hz						
Power consumption W	35	35	35	45	45	50
Airflow volume(H/M/L) m³/h	750/660/540	750/660/540	750/660/540	850/700/610	850/700/610	1100/800/640
CFM	441/388/318	441/388/318	441/388/318	500/412/359	500/412/359	647/471/377
Rated Current <sup>2</sup>	Cooling A	0.3	0.3	0.3	0.3	0.5
	Heating A	0.3	0.3	0.3	0.3	0.5
	Water Heating A	/	/	/	/	/
ESP Pa	0/15					
Sound pressure level(H/M/L) dB(A)	33/30/27	33/30/27	33/30/27	35/33/29	35/33/29	37/34/30
Connecting pipe Liquid mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
diameter Gas mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
External dia. Drain pipe mm	25	25	25	25	25	25
Thickness mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension Outline (WxDxH) mm	1010x450x200					1310x450x200
Package mm	1303x551x285					1603x551x285
Net weight/Gross weight kg	23.5/28	23.5/28	23.5/28	24.5/29	24.5/29	30.5/36
Loading 40' GP set	288	288	288	288	288	224
40' HQ set	288	288	288	288	288	224

Note:  
\* This series is without water pump.

Model	GMV-ND71PLS/A-T	GMV-ND80PLS/A-T	GMV-ND90PLS/A-T	GMV-ND100PLS/A-T	GMV-ND112PLS/A-T	GMV-ND125PLS/A-T	GMV-ND140PLS/A-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							
Power consumption W	105	140	209	209	209	230	230
Airflow volume(H/M/L) m³/h	100						

# Cassette Type Indoor Unit

The cooling capacity of the cassette type units ranges from 2.2~16.0 kW, which can be widely applied in hotels, office buildings, apartments and villas, etc.



- Built-in drain pump
- Washable filter
- Quiet function
- Easier maintainability
- Auto addressing technology
- Quality motor
- Slave and master wired controller
- Centralized control
- Horizontal swing

## 4-way Cassette Indoor Unit

50/60 Hz

Model		GMV-ND28T/A-T	GMV-ND36T/A-T	GMV-ND45T/A-T	GMV-ND50T/A-T	GMV-ND56T/A-T	GMV-ND63T/A-T	GMV-ND71T/A-T		
Capacity	Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3		
	Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1		
Power supply		V/Ph/Hz	220~240/1/50 & 208~230/1/60							
Power consumption		W	48	48	48	50	59	59	68	
Airflow volume(H/M/L)		m³/h	750/650/550	750/650/550	750/650/550	830/650/550	1000/900/750	1000/900/750	1180/950/850	
Rated Current <sup>2</sup>		A	/	/	/	/	/	/	/	
Sound pressure level(H/M/L)		dB(A)	36/34/31	36/34/31	36/34/31	36/34/31	37/35/32	37/35/32	38/36/33	
Connecting pipe diameter		Liquid	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ12.7	
Drain pipe		External dia.	mm	25	25	25	25	25	25	
Main Body	Dimension (WxDxH)	Outline	mm	840x840x190	840x840x190	840x840x190	840x840x240	840x840x240	840x840x240	
	Package	mm	963x963x272	963x963x272	963x963x272	963x963x325	963x963x325	963x963x325	963x963x325	
Net weight/Gross weight		kg	22.5/29.5	22.5/29.5	22.5/29.5	22.5/29.5	26.5/34.5	26.5/34.5	26.5/34.5	
Panel	Dimension (WxDxH)	Outline	mm	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	
	Package	mm	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	
Net weight/Gross weight		kg	7/11	7/11	7/11	7/11	7/11	7/11	7/11	
Loading quantity		40'GP	set	167	167	167	140	140	140	
		40'HQ	set	171	171	171	156	156	156	

Model		GMV-ND80T/A-T	GMV-ND90T/A-T	GMV-ND100T/A-T	GMV-ND112T/A-T	GMV-ND125T/A-T	GMV-ND140T/A-T	GMV-ND160T/A-T		
Capacity	Cooling	kW	8.0	9.0	10.0	11.2	12.5	14.0		
	Heating	kW	9.0	10.0	11.2	12.5	14.0	17.5		
Power supply		V/Ph/Hz	220~240/1/50 & 208~230/1/60							
Power consumption		W	68	98	98	110	110	110	130	
Airflow volume(H/M/L)		m³/h	1180/950/850	1500/1350/1100	1500/1350/1100	1700/1400/1100	1860/1500/1150	1860/1500/1150	2100/1700/1400	
Rated Current <sup>2</sup>		A	0.3	0.4	0.4	0.5	0.5	0.5	0.6	
Sound pressure level(H/M/L)		dB(A)	38/36/33	40/37/35	40/37/35	41/38/36	43/41/38	43/41/38	47/44/42	
Connecting pipe diameter		Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
Drain pipe		External dia.	mm	25	25	25	25	25	25	
Main Body	Dimension (WxDxH)	Outline	mm	840x840x240	840x840x320	840x840x320	840x840x320	840x840x320	910x910x293	
	Package	mm	963x963x325	963x963x409	963x963x409	963x963x409	963x963x409	1023x993x375		
Net weight/Gross weight		kg	26.5/34.5	32.5/40.0	32.5/40.0	32.5/40.0	32.5/40.0	46.5/56.5		
Panel	Dimension (WxDxH)	Outline	mm	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	1040x1040x65	
	Package	mm	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1137x1137x140		
Net weight/Gross weight		kg	7/11	7/11	7/11	7/11	7/11	7.5/11.5		
Loading quantity		40'GP	set	140	104	104	104	144		
		40'HQ	set	156	119	119	119	144		

## Compact 4-way Cassette Indoor Unit

50/60 Hz

Model		GMV-ND22T/B-T	GMV-ND28T/B-T	GMV-ND36T/B-T	GMV-ND45T/B-T	GMV-ND50T/B-T	GMV-ND56T/B-T
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5
	Heating	kW	2.5	3.2	4	5	5.6
	V/Ph/Hz						
Power supply	W	35	35	35	45	45	45
Power consumption	m³/h	600/500/400	600/500/400	600/500/400	700/600/480	700/600/480	700/600/480
Airflow volume(H/M/L)	CFM	355/295/235	355/295/235	355/295/235	410/355/283	410/355/283	410/355/283
Rated Current <sup>2</sup>	Cooling	A	0.4	0.4	0.4	0.5	0.5
	Heating	A	0.4	0.4	0.4	0.5	0.5
	Water Heating	A	/	/	/	/	/
Sound pressure level(H/M/L)	dB(A)	41/39/35	41/39/35	41/39/35	45/43/38	45/43/38	45/43/38
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	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
Main Body	Dimension (WxDxH)	Outline	mm	596x596x240	596x596x240	596x596x240	596x596x240
	Package	mm	773x733x300	773x733x300	773x733x300	773x733x300	773x733x300
Net weight/Gross weight	kg	20.5/25.5	20.5/25.5	20.5/25.5	20.5/25.5	20.5/25.5	20.5/25.5
Panel	Dimension (WxDxH)	Outline	mm	670x670x50	670x670x50	670x670x50	670x670x50
	Package	mm	763x763x105	763x763x105	763x763x105	763x763x105	763x763x105
Net weight/Gross weight	kg	3.5/5.0	3.5/5.0	3.5/5.0	3.5/5.0	3.5/5.0	3.5/5.0
Loading quantity	40'GP	set	245	245	245	245	245
	40'HQ	set	279	279	279	279	279

## 2-way Cassette Indoor Unit

50/60 Hz

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



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## Wall-mounted Type Indoor Unit

The cooling capacity of wall-mounted type indoor unit ranges from 2.2kW~7.1kW, which can be widely adopted in hotels, restaurants, office, etc.



- Washable filter
- Auto clean
- Vertical swing
- Anti-cold function
- Quiet function
- Compact design
- Easier maintainability

50 Hz

Model		GMV-N22G/A3A-K*	GMV-N28G/A3A-K*	GMV-N36G/A3A-K*	GMV-N45G/A3A-K*	GMV-N50G/A3A-K*	GMV-N56G/A3A-K*	GMV-N63G/A3A-K*	GMV-N71G/A3A-K*
Capacity	Cooling kW	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1
	Heating kW	2.5	3.2	4.0	5.0	5.8	6.3	7.0	7.5
Power supply V/Ph/Hz									
Power consumption W	50	50	60	60	60	70	70	70	70
Airflow volume(H/M/L) m³/h	500/420/350	500/420/350	630/550/480	630/550/480	630/550/480	750/600/500	750/600/500	750/600/500	750/600/500
CFM	294/247/206	294/247/206	371/324/282	371/324/282	371/324/282	441/353/294	441/353/294	441/353/294	441/353/294
Rated Current <sup>2</sup> Cooling A	0.2	0.2	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Heating A	0.2	0.2	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Water Heating A	/	/	/	/	/	/	/	/	/
Sound pressure level(H/M/L) dB(A)	38/34/30	38/34/30	44/41/38	44/41/38	44/41/38	44/41/38	44/41/38	44/41/38	44/41/38
Connecting pipe diameter Liquid mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Gas mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe External dia. mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ30	Φ30	Φ30	Φ30
Thickness mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dimension (WxDxH) Outline mm	843x180x275		940x200x298		1065x285x380		1008x221x319		
Package mm	970x255x355				1128x395x313				
Net weight/Gross weight kg	10/12.5	10/12.5	12.5/15.5	12.5/15.5	12.5/15.5	15/18.5	15/18.5	15/18.5	15/18.5
Loading 40' GP set	702	702	557	557	557	441	441	441	441
40' HQ set	819	819	624	624	624	503	503	503	503

Note:

\* This series is without water pump.

## Floor Ceiling Type Indoor Unit



- Washable filter
- Quiet function
- Vertical swing
- Horizontal swing
- Compact design
- Easier maintainability

50/60 Hz

Model		GMV-ND28ZD/A-T	GMV-ND36ZD/A-T	GMV-ND50ZD/A-T	GMV-ND63ZD/A-T	GMV-ND71ZD/A-T	GMV-ND90ZD/A-T	GMV-ND112ZD/A-T	GMV-ND125ZD/A-T	GMV-ND140ZD/A-T
Capacity	Cooling kW	2.8	3.6	5.0	6.3	7.1	9.0	11.2	12.5	14.0
	Heating kW	3.2	4.0	5.6	7.1	8.0	10.0	12.5	14.0	16.0
Power supply V/Ph/Hz										
Power consumption W	40	40	50	75	75	140	160	160	160	160
Airflow volume(H/M/L) m³/h	650/580/500	650/580/500	950/850/700	1400/1150/1000	1400/1150/1000	1600/1400/1200	2000/1800/1450	2000/1800/1450	2000/1800/1450	2000/1800/1450
CFM	380/341/294	380/341/294	560/500/410	825/677/590	825/677/590	940/824/706	1175/1059/853	1175/1059/853	1175/1059/853	1175/1059/853
Rated Current <sup>2</sup>	Cooling A	0.2	0.2	0.25	0.38	0.38	0.7	0.95	0.95	0.95
Heating A	A	0.2	0.2	0.25	0.38	0.38	0.7	0.95	0.95	0.95
Water Heating A	/	/	/	/	/	/	/	/	/	/
Sound pressure level(H/M/L) dB(A)	36/34/32	36/34/32	42/38/33	44/42/39	44/42/39	50/47/43	51/47/42	52/49/45	52/49/45	52/49/45
Connecting pipe diameter Liquid mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Gas mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe External dia. mm	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17
Thickness mm	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Dimension (WxDxH) Outline mm	1220x700x225				1420x700x245				1700x700x245	
Package mm	1343x823x315				1548x828x315				1828x828x345	
Net weight/Gross weight kg	40' GP set	40/49	40/49	40/49	50/58	50/58	50/58	60/68	60/68	60/68
Loading 40' HQ set	40' HQ set	145	145	145	90	90	90	84	84	84
	40' HQ set	158	158	158	98	98	98	98	98	98

## Console Indoor Unit

The cooling capacity of console indoor unit ranges from 2.2kW~5.0kW, which can be widely adopted in hotels, restaurants, office, etc.



- Vertical swing
- Anti-cold function
- Self-diagnosis
- Quiet function
- Comprehensive protection
- Auto Restart
- Compact design
- Easier maintainability

50/60 Hz

Model		GMV-ND22C/A-T	GMV-ND28C/A-T	GMV-ND36C/A-T	GMV-ND45C/A-T	GMV-ND50C/A-T
Capacity	Cooling kW	2.2	2.8	3.6	4.5	5.0
	Heating kW	2.5	3.2	4.0	5.0	5.5
Power supply V/Ph/Hz						
Power consumption W	15	15	20	40	40	40
Airflow volume(H/M/L) m³/h	430-400/320/270	430-400/320/270	570-480/400/300	280-680/600/500	280-680/600/500	280-680/600/500
CFM	253-235/188/159	253-235/188/159	335-282/235/188	460-400/353/294	460-400/353/294	460-400/353/294
Rated Current <sup>2</sup>	Cooling A	0.15	0.15	0.15	0.15	0.15
Heating A	A	0.15	0.15	0.15	0.15	0.15
Water Heating A	/	/	/	/	/	/
ESP Pa	0	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	46/43/39
Connecting pipe diameter Liquid mm	6.35	6.35	6.35	6.35	6.35	6.35
Gas mm	9.52	9.52	9.52	9.52	9.52	9.52
Drain pipe External dia. mm	28	28	28	28	28	28
Thickness mm	1	1	1	1	1	1
Dimension (WxDxH) Outline mm	700/215/600	700/215/600	700/215/6			

## Floor Standing Type Indoor Unit

The cooling capacity of floor standing type indoor unit ranges from 10kW~14kW, which can be widely adopted in hotels, restaurants, office, etc.



50/60 Hz

Model		GMV-ND100L/A-T	GMV-ND140L/A-T
Capacity	Cooling kW	10	14
	Heating kW	11	15
Power supply	V/Ph/Hz	220-240/1/50Hz & 208-230/1/60 Hz	
Power consumption	W	200	200
Airflow volume(H/M/L)	m³/h	1850/1600/1400	1850/1600/1400
	CFM	1089/942/824	1089/942/824
Rated Current <sup>2</sup>	Cooling A	1.5	1.5
	Heating A	1.5	1.5
	Water Heating A	/	/
ESP	Pa	0	0
Sound pressure level(H/M/L)	dB(A)	50/48/46	50/48/46
Connecting pipe diameter	Liquid mm	9.52	9.52
	Gas mm	15.9	15.9
Drain pipe	External dia. mm	31	31
	Thickness mm	4.5	4.5
Dimension (WxDxH)	Outline mm	1870x580x400	
	Package mm	2083x738x545	
Net weight/Gross weight	kg	54/74	57/77
Loading	40' GP set	67	67
	40' HQ set	67	67

50/60Hz

Model		GMV-NX140P/A (X1.2)-K *	GMV-NX224P/A (X2.0)-M *	GMV-NX280P/A (X2.5)-M *	GMV-NX280P/A (X3.0)-M *	GMV-NX450P/A (X4.0)-M *	GMV-NDX224P/A-T*	GMV-NDX280P/A-T*
Capacity	Cooling kW	14.0	22.4	28.0	28.0	4.5	22.4	28.0
	Heating kW	10.0	16.0	20.0	20.0	3.2	16.0	20.0
Power supply	V/Ph/Hz	220-240/1/50		380-415/3/50			220-240V/1/50Hz& 208-230/1/60Hz	
Power consumption	W	360	740	760	1060	1240	760	860
Airflow volume(H/M/L)	m³/h	1200	2000	2500	3000	4000	2000/2000~3500	2500/2000~3500
	CFM	705	1175	1470	1765	2355	1177/1177~2060	1471/1177~2060
Rated Current <sup>2</sup>	Cooling A	1.82	1.32	1.36	1.89	2.22	4.3	4.9
	Heating A	1.82	1.32	1.36	1.89	2.22	4.3	4.9
	Water Heating A	/	/	/	/	/	/	/
ESP	Pa	150		200			200/50~270	200/50~280
Sound pressure level(H/M/L)	dB(A)	42	47	48	51	58	50	51
Connecting pipe diameter	Liquid mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ9.52	Φ9.52
	Gas mm	Φ15.9	Φ19.05	Φ22.2	Φ22.2	Φ28.6	Φ19.05	Φ22.2
Drain pipe	External dia. mm	25	25	25	25	25	Φ30	Φ30
	Thickness mm	2.5	2.5	2.5	2.5	2.5	1.5	1.5
Dimension (WxDxH)	Outline mm	1463x756x300		1500x1000x500		1700x1100x650	1483x791x385	1483x791x385
	Package mm	1514x785x360		1840x1200x673		1890x1460x835	1578x883x472	1578x883x472
Net weight/Gross weight	kg	63.5/71	130/182	134/188	134/188	208/266	82/104	82/104
Loading	40' GP set	84.0	18.0	18.0	18.0	16.0	65	65
	40' HQ set	98.0	18.0	18.0	18.0	16.0	65	65

Note: \* This series can be matched with GMV5(Top discharge outdoor unit)only.



## Fresh Air Processing Indoor Unit

Fresh air processing indoor unit is widely adopted in villas, high-end communities, business places and public places. It introduces outdoor fresh air into the room to improve the air quality without fluctuation of indoor temperature, which belongs to the most advanced and comfortable VRF air conditioning technology.



# Energy Recovery Ventilation (ERV)

It is a kind of ventilation system that could recover the total heat of indoor air to save energy and it is widely used in residential or commercial building.



- |                     |                        |                |                |                        |              |                     |
|---------------------|------------------------|----------------|----------------|------------------------|--------------|---------------------|
|                     |                        |                |                |                        |              |                     |
| Inner groove copper | Intelligent defrosting | Quiet function | Compact design | Easier maintainability | Weekly timer | Centralized control |

Model			FHBQ-D3.5-K	FHBQ-D5-K	FHBQ-D8-K	FHBQ-D10-K
Air flow Volume	H/M/L	m³/h	350/260/210	500/380/300	800/600/480	1000/750/600
ESP	H/M/L	Pa	100/80/60	100/80/60	110/85/65	110/85/65
Temperature exchange efficiency	H/M/L	%	71/73/75	68/70/72	70/72/74	73/77/79
Enthalpy exchange efficiency (H/M/L)	Heating	%	65/67/68	62/64/65	63/65/67	66/68/70
	Cooling	%	61/63/65	57/59/61	60/62/64	62/64/65
Power supply	Ph/V/Hz		1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Power input	W		165	262	400	440
Power input	dB(A)		37	39	45	46
Dimension (WxDxH)	Outline	mm	800×879×306	800×879×306	832×1016×380	832×1016×380
	Package	mm	1050×1165×315	1050×1165×315	1087×1320×400	1087×1320×400
Net weight	kg		45	45	57	57
Gross weight	kg		53	53	66.5	66.5
Loading quantity	40'GP	set	147	147	85	59
	40'HQ	set	168	168	104	67
Standard wired remote controller	Z5N15		Z5N15	Z5N15	Z5N15	Z5N15

- 4 models in a range of 350~1000m³/h fit for different spaces and reduce the waste of power.
- Filter and heat exchange core can be easily take out from the access for cleaning.
- Internal air filter keeps the fresh air introduced into room pure and dustless.
- With antibacterial and anti-mildew materials, the heat exchange core is suiting for healthy.
- Unique by-pass mode can reduce power consumption of fan motor to prolong lifetime of heat exchanger core.



## Control System Lineup

Controlling system		Product 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	ERV
Wireless Controller	YAP1F		<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
	YV1L1		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Wired controller	XK46		<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	XK49		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	XK55		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Z5N151										<input checked="" type="radio"/>
	JS05(receiver)				<input type="radio"/>	<input type="radio"/>					
E-smart Zone Controller	CE54-24/F(C)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smart Zone Controller	CE52-24/F(C)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Centralized Controller	CE53-24/F(C)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Long-distance monitoring software	FE31-00/AD(BM)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
BMS Accessories	Communication module(modbus)	ME30-24/E4(M)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	GMV BACnet gateway (BACnet)	MG30-24/D2(B)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Interface of the main board	BMS									<input checked="" type="radio"/>
Other modules	Optoelectronic isolated converter	RS232-RS422/485		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Optoelectronic isolated signal multiplier	RS-422/485		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Note: ● means standard, ○ means optional.



AIR TO WATER

# AIR TO WATER

**Versati II**

**Versati II+ (Monobloc Type)**

**Split Type Water Heater**

**Integral Type Water Heater**

**Ultra Series**



# VERSATI II

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

R410A



- Twin rotary DC inverter compressor creates comfortable living circumstance and saves energy.
- The electronic expansion valve guarantees that the system made adjustments 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 the use.
- 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	Operation range (temperature)			Outdoor condition
	Nominal operating condition		WB(°C)	
Cooling	DB(°C)	24	10~48	
Heating	7	6	-20~35	
Water heating	7	6	-20~45	

## Outdoor Unit

Model	GRS-CQ8.0Pd/NaD-K(O)	GRS-CQ10Pd/NaD-K(O)	GRS-CO12Pd/NaD-M(O)	GRS-CQ14Pd/NaD-M(O)
Power Supply	V/Ph/Hz	230/1/50	230/1/50	400/3/50
Capacity*1	Cooling*3 kW	8.6	9.8	13.6
	Heating*4 kW	8.2	9.5	13.1
Power Input*1	Cooling*3 kW	2	2.5	3.44
	Heating*4 kW	1.82	2.2	2.87
EER/COP*1	W/W	4.3/4.51	3.92/4.32	3.95/4.56
Capacity*2	Cooling*5 kW	6.2	7.4	9.6
	Heating*6 kW	7.8	9.5	12.5
Power Input*2	Cooling*5 kW	1.9	2.38	3.0
	Heating*6 kW	2.3	2.69	3.35
EER/COP*2	W/W	3.26/3.39	3.11/3.53	3.18/3.73
Refrigerant charge volume	kg	3.5	3.5	5.3
Sanitary water Temperature	℃	40~80	40~80	40~80
Sound Pressure Level	cooling dB(A)	53	53	56
	heating dB(A)	53	53	56
Connecting pipe	Gas inch(mm)	15.9	15.9	15.9
	Liquid inch(mm)	9.52	9.52	9.52
Dimensions(WxDxH)	Outline mm	980x790x360	980x790x360	900x1345x412
	Packaged mm	1097x862x477	1097x862x477	998x1515x458
Net weight/Gross weight	kg	80/85	80/85	106/118
Loading quantity	40'GP	-	96	50
	40'HQ	-	96	50

### Note:

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.
- 

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.
- 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	230/1/50	230/1/50	400/3/50	400/3/50
Nominal input	W	6140	6140	6140	6140
Leaving water temperature	Cooling*1 °C	7	7	7	7
	Cooling*2 °C	18	18	18	18
	Heating*1 °C	35	35	35	35
	Heating*2 °C	45	45	45	45
Pump	Type	- PB-2.5/11-A	PB-2.5/11-A	PB-2.5/11-A	PB-2.5/11-A
	Nr. of speed	variable-speed	variable-speed	variable-speed	variable-speed
	Power input	W	140	140	140
	Water flow limit	LPM	10.5	10.5	10.5
Electric Heater	Operation	-	-	-	-
	Steps	-	2	2	2
	Capacity	kW	3	3	3
	Combination	kW	6	6	6
	Power input	Ph/V/Hz	230/1/50	230/1/50	400/3/50
Sound pressure level	dB(A)	31	31	31	31
Connecting pipe	Gas	inch(mm)	15.9	15.9	15.9
	Liquid	inch(mm)	9.52	9.52	9.52
Dimensions (WxDxH)	Outline	mm	900x324x500	900x324x500	900x324x500
	Packaged	mm	1043x395x608	1043x395x608	1043x395x608
Net weight/Gross weight	kg	57.5/67	57.5/67	57.5/67	57.5/67
Loading quantity	40'GP	-	205	205	205
	40'HQ	-	246	246	246

Note:  
\*<sup>1</sup> for fan coil unit; \*<sup>2</sup>for floor cooling; \*<sup>3</sup> for floor heating

## Water Tank

Model	SXVD200LCJ/A-K	SXVD200LCJ2/A-K	SXVD300LCJ/A-K	SXVD300LCJ2/A-K
Water tank volume	L	200	200	300
Power supply	Ph/V/Hz	1/230/50	1/230/50	1/230/50
Electric heater power	W	3000	3000	3000
Screw thread spec of pipe	Cool water inlet inch(mm)	ø1/2"Female BSP(12.7)	ø1/2"Female BSP(12.7)	ø1/2"Female BSP(12.7)
	Hot water outlet inch(mm)	ø1/2"Female BSP(12.7)	ø1/2"Female BSP(12.7)	ø1/2"Female BSP(12.7)
Dimension	Outline	Diameter×H	mm	ø540×1595
	Packaged	WxDxH	mm	1623x628x630
Net weight/Gross weight	kg	68/77	71/80	82/92
Loading quantity	40'GP/40'HQ	set	75/100	63/63

Model	SXVD200LCJ/A-M	SXVD200LCJ2/A-M	SXVD300LCJ/A-M	SXVD300LCJ2/A-M
Water tank volume	L	200	200	300
Power supply	Ph/V/Hz	3/400/50	3/400/50	3/400/50
Electric heater power	W	3000	3000	3000
Screw thread spec of pipe	Cool water inlet inch(mm)	ø1/2"Female BSP(12.7)	ø1/2"Female BSP(12.7)	ø1/2"Female BSP(12.7)
	Hot water outlet inch(mm)	ø1/2"Female BSP(12.7)	ø1/2"Female BSP(12.7)	ø1/2"Female BSP(12.7)
Dimension	Outline	Diameter×H	mm	ø540×1595
	Packaged	WxDxH	mm	1620x625x630
Net weight/Gross weight	kg	68/77	71/80	82/92
Loading quantity	40'GP/40'HQ	set	75/100	63/63

VERSATI II<sup>+</sup>(Monobloc Type)

R410A  
It is a kind of DC inverter multifunctional air to water heat pump that could not only supply domestic hot water, but also realize cooling or heating for residential use.



8-10kW



12-14kW



200/300L



Wired controller Z263P



- Integral installation, convenient and cost-saving.
- Two-stage compression technology is adopted to greatly improve the system's performance, especially for improving energy efficiency of heating in low ambient temperature.
- Smart dual-temperature detection control technology.
- Solar kit linkage function is added to automatically control water heating of solar energy, energy-saving and eco-friendly.
- High outlet water temperature and wide water temperature range, meeting the demands of various terminals.



Item	Nominal operating condition		Outdoor condition
	DB(°C)	WB(°C)	
Cooling	35	24	10-48
Heating	7	6	-20-35
Water heating	7	6	-20-45

Model		GRS-CQ8.0Pd/NaC-K(O)	GRS-CQ10Pd/NaC-K(O)	GRS-CQ12Pd/NaC-M(O)	GRS-CQ14Pd/NaC-M(O)
Power supply	V/Ph/Hz	220~240V-1Ph-50Hz		380~415V-3Ph-50Hz	
Capacity <sup>*1</sup>	Cooling <sup>*3</sup>	kW	8.6	9.8	13.6
	Heating <sup>*4</sup>	kW	8.2	9.5	13
Power Input <sup>*1</sup>	Cooling <sup>*3</sup>	kW	2	2.5	3.45
	Heating <sup>*4</sup>	kW	1.82	2.2	2.85
EER/COP <sup>*1</sup>	W/W	4.3/4.51	3.92/4.3	3.94/4.56	3.92/4.24
Capacity <sup>*2</sup>	Cooling <sup>*5</sup>	kW	6.2	7.4	9.55
	Heating <sup>*6</sup>	kW	7.8	9.5	12.5
Power Input <sup>*2</sup>	Cooling <sup>*5</sup>	kW	1.9	2.38	3.0
	Heating <sup>*6</sup>	kW	2.3	2.69	3.35
EER/COP <sup>*2</sup>	W/W	3.26/3.39	3.1/3.53	3.18/3.73	3.12/3.61
Refrigerant charge volume	kg	3.5	3.5	4	4
Sanitary water temperature	°C	40~80	40~80	40~80	40~80
Sound pressure level	Cooling	dB(A)	53	53	54
	Heating	dB(A)	53	53	54
Connecting pipe diameter	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)
Dimensions (WxDxH)	Outline	mm	1390x890x420	1390x890x420	1350x1438x381
	Packaged	mm	1463x1005x438	1463x1005x438	1428x1465x418
Net weight/Gross weight	kg	148/161	148/161	205/220	205/220
Loading quantity	40'GP	-	80	80	43
	40'HQ	-	80	80	43

## Note:

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.

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

## ● Safety 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 temp and pressure. The water tank adopts advanced stainless steel inner container with magnesium sticks. 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 kitchen, garage, stock room or basement. It is also suitable for skyscrapers, villa, and so on. Installation and maintenance is convenient for its no cycle waterway 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 platzkurtosis is possible to reduce electricity fee.

## ● Intelligent defrosting

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

## ● All-day use

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

## Outdoor Unit

Rated Heating Capacity <sup>(1)</sup>	W	2800
Rated Input Power <sup>(1)</sup>	W	700
Load Profile	-	L
COP <sup>(2)</sup>	W/W	2.9
Energy Efficiency Class <sup>(2)</sup>	-	A
Water Heating Energy Efficiency <sup>(2)</sup>	-	110%
Annual Electricity Consumption (Average climate conditions)	kWh	878
Maximum Input Power	W	1180+1500W (Electric Heater)
Outlet Water Temperature	°C	Default: 55°C, 35°C~70°C
Power Supply	-	220V~240V ~50Hz
Insulation Level	-	I
Protection of Ingression	-	IPX4
Refrigerant	Name	R134a
	Charge	kg
		1.2
Outline Dimensions	W x D x H	mm
	848x320x540	
Package Dimensions	W x D x H	mm
	881x363x595	
Gross/Net Weight	kg	41/35.5
Sound Power Level(3)	dB(A)	61
Operating Range	°C	-7~45°C

## Water Tank

Model	SXD200LCJW/C1-K
Capacity	L
Power Supply for Electric Heater	-
Input Power for Electric Heater	W
Outline Dimensions(W x D x H)	mm
	545 x 545 x 1919
Package Dimensions(W x D x H)	mm
	2009 x 656 x 625
Water Tank Gross/Net Weight	kg
	60/52
Outer Size of Connection Pipe	mm
	Φ6, Φ9.52

Notes: Please always see the nameplate for the exact data as this table is subject to change.

## Split Type Water Heater

R134a

High-temperature split type air source water heater can operate from -7°C to 45°C. Its installation is convenient and it is applicable for a family of 3 to 5 members.



Controller XK64

- Self-diagnosis
- °C/°F switch
- Compact design
- Clock display
- Intelligent defrosting
- Easier maintainability
- Child lock





# Integral Type Water Heater

The unit is with new integrated structure, concise design, and centrifugal type wind system design, which can connect air inlet pipe and air outlet pipe. The rated heating capacity for the unit is 2.4KW, equipped with 270L water tank, high-efficiency and energy-saving. This unit is applicable for garage, storage room, balcony and other household locations.



Controller XK64



- Safety 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 temp and pressure. The water tank adopts advanced stainless steel inner container with magnesium sticks. 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. It is also suitable for skyscrapers, villa, and so on. Installation and maintenance is convenient for its no cycle waterway 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 platiyurtosis 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.



Model		GRS-2.4/D270ANbA-K	
Rated Heating Capacity <sup>(1)</sup>	W	2400	
Rated Input Power <sup>(1)</sup>	W	685	
Capacity	L	270	
Load Profile	-	XL	
COP <sup>(2)</sup>	W/W	2.58	
Energy Efficiency Class <sup>(2)</sup>	-	A	
Water Heating Energy Efficiency <sup>(2)</sup>	-	105%	
Annual electricity consumption (average climate conditions)	kWh	1594	
Maximum Input Power	W	1300+1500W (Electric Heater)0.79	
Outlet Water Temperature	°C	Default: 55°C, 35°C~70°C	
Power Supply	-	220V-240V ~50Hz	
Insulation Level	-	I	
Protection of Ingression	-	I PX4	
Refrigerant	Name	R134a	
	Charge	kg	1.1
Outline Dimensions	WxDxH	mm	660x667x1958
Package Dimensions	WxDxH	mm	813x813x2100
Gross/Net Weight	kg	See the nameplate	
Sound Power Level <sup>(2)</sup>	dB(A)	62	
Operating Range	°C	-7~45	

## 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, (EU) No 814/2013.

③ Value obtained as per EN 12102-2008.

④ Please always see the nameplate for the exact data as this table is subject to change.



# Ultra Series

R410A

Ultra series water heat including direct and circulating types, which is capable of operation in ambient temperature from -26°C to 46°C with the maximum tank water temperature of 60°C. It is with multiple protection functions and intelligent management functions to ensure safety, reliable and energy-saving operation of unit.



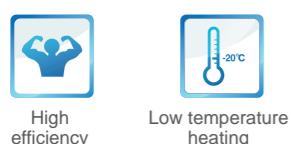
Wired controller Z26301K

GRS-Dm30/NaA-M  
GRS-Dm40/NaA-M

GRS-Dm40/NaA-M

GRS-Cm28/NaA-M  
GRS-Cm36/NaA-M

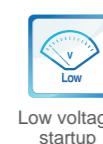
GRS-Cm53/NaA-M



High efficiency



Low temperature heating



Low voltage startup



Compact design



Intelligent defrosting



Wide voltage range



Easier maintainability



Energy Saving



Comprehensive protection



Wide operation range



Modular operating

- Grounding protection: The system is with multiple grounding protection to avoid electric leakage.
- Over-current protection: The system will turn off automatically in overload, in order to ensure safety of the system.
- High pressure protection: Protection in overhigh pressure ensures the reliability of the system.
- Auto protection when the system pressure is low.
- High discharge temperature protection: It avoid the influence of overhigh discharge temperature to ensure the lubrication effect of compressor lubricant.
- Water pressure protection: It restricts the lowest water pressure to ensure the reliability of the system.
- Water flow protection: It detects the water flow to avoid no water operation.
- Anti-freezing protection: It is with multiple anti-freezing design to ensure reliable operation of the system in ultra-low ambient temperature.

## Direct Heating Type

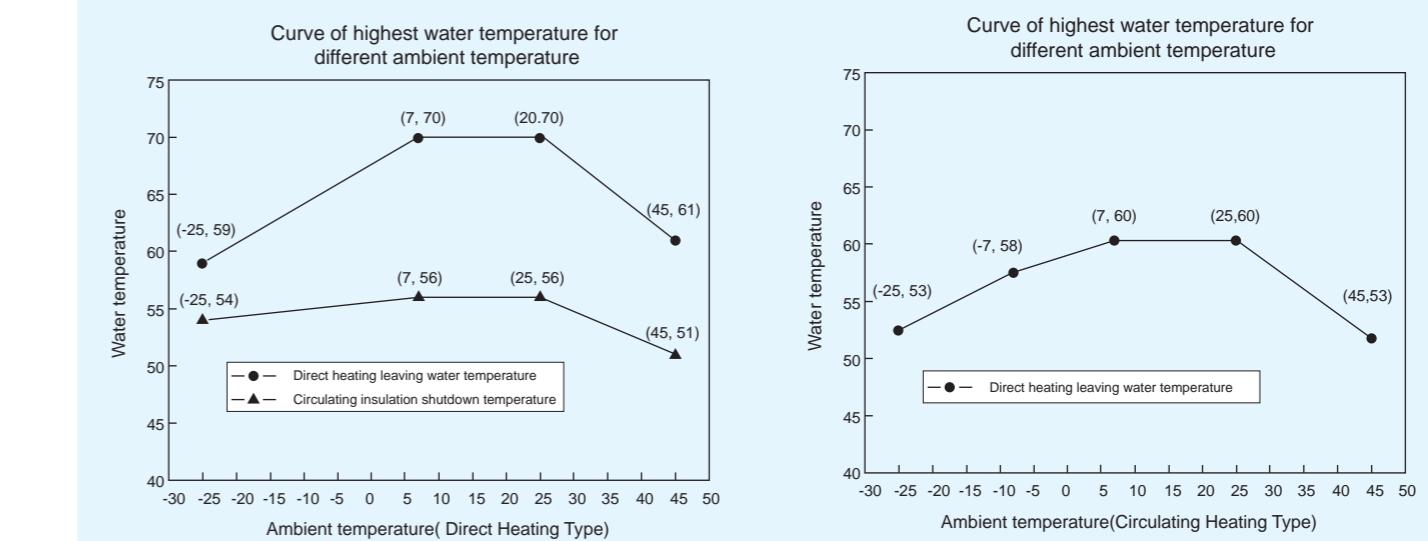
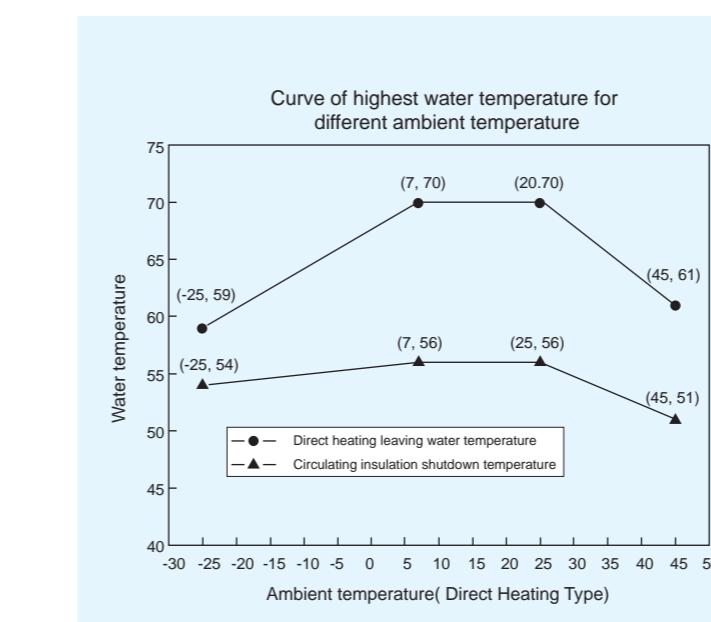
Model	GRS-Dm30/NaA-M	GRS-Dm40/NaA-M	GRS-Dm60/NaA-M
Rated water heating capacity	kW	31	40
Rated water supply	l/h	667	860
COP	W/W	3.83	4
Water temperature range	°C	35~70	35~70
Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50
Rated power input	Water heating kW	8.1	10
Max power input	Water heating kW	10.5	13
Sound Pressure level	Db(A)	≤67	≤67
Dimension(WxDxH)	Outline mm	930x800x1605	930x800x1605
	Packaged mm	1010x865x1775	1010x865x1775
Net weight/Gross weight	kg	238/252	264/286
Loading quantity	40'GP/40'HQ	set	26/26
			21/21

## Circulating Heating Type

Model	GRS-Cm28/NaA-M	GRS-Dm40/NaA-M	GRS-Dm60/NaA-M
Rated water heating capacity	kW	28	36
Rated water supply	l/h	620	775
COP	W/W	3.8	3.87
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	9.3
Max power input	Water heating kW	10.1	13.2
Sound Pressure level	Db(A)	67	67
Dimension(WxDxH)	Outline mm	930x800x1605	930x800x1605
	Packaged mm	1010x865x1775	1010x865x1775
Net weight/Gross weight	kg	243/260	260/277
Loading quantity	40'GP/40'HQ	set	26/26
			21/21

### Note:

- Testing conditions of above data: Ambient temperature 20°C DB/15°C WB; entering/leaving water temperature: 15°C/55°C; power supply: 3/380/50Hz;
- 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.



SCROLL  
CHILLER

# SCROLL CHILLER

**Inverter Mini Chiller**  
**Modular Air-cooled Scroll Chiller**

C  
M  
Y  
CM  
MY  
CY  
CMY  
K

C  
M  
Y  
CM  
MY  
CY  
CMY  
K



# Inverter Mini Chiller

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



8-10kW

12-14kW

Wired controller Z263P



Inner groove copper

Self-diagnosis

Comprehensive protection

Memory function

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



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

Model	Heat Pump	HLR8Na-K	HLR10Na-K	HLR12Na-M	HLR14Na-M	
Capacity	Cooling	kW	6.20	7.50	9.50	11.00
	Heating	kW	8	10	12	14
EER/COP		W/W	3.1/3.5	3.1/3.4	3.2/3.7	3.1/3.4
Power Supply	V/Ph/Hz					
	220~240/1/50					
Power input	Cooling	kW	2	2.4	2.97	3.55
	Heating	kW	2.25	2.9	3.24	4.12
Compressor	Type	-	Rotary	Rotary	Rotary	Rotary
	Quantity	-	1	1	1	1
Refrigerant Charge volume		kg	3.5	3.5	4.0	4.0
Water flow volume	I/s	1.25	1.25	1.25	1.25	
	GPM	16.515	16.515	16.515	16.515	
Build-in chilled	pump power input	kW	0.14	0.14	0.14	0.14
	Delivery lift	m	11	11	11	11
Build-in expansion vessel volume		L	10	10	10	10
Chilled water outlet/inlet screw thread spec		inch	1	1	1	1
Sound Pressure level		Db(A)	53	55	54	54
Dimension(W*D*H)	Outling	mm	1390x412x890	1390x412x890	1354x365x1365	1354x365x1365
	Package	mm	1496x435x900	1496x435x900	1425x415x1450	1425x415x1450
Net weight/Gross weight		kg	140/155	140/155	194/209	194/209
Loading quantity 40'GP/40'HQ		set	80/80	80/80	43/43	43/43



# Modular Air-cooled Scroll Chiller

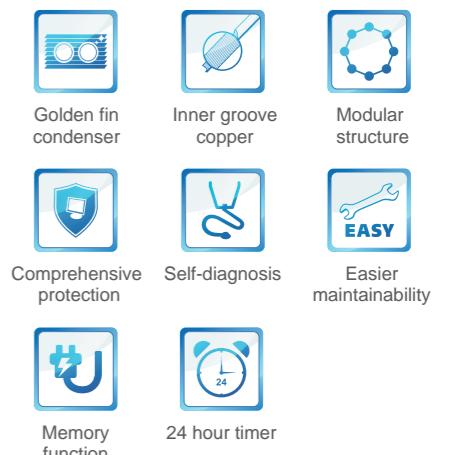
It is a kind of air-cooled scroll chiller that can be connected to all sorts of fan coil unit to realize cooling/heating for civil or industrial buildings.

## D Series



65/80kW

130/160kW

Display panel  
Z26301C

- 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 patent: any unit can be set as main module via 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.



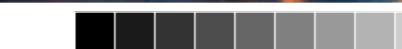
Item	Water side (water temperature)				Air side (outdoor temperature)	
	Nominal operating condition		Operating range		Nominal operating condition	Operating range
	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	DB(°C)	WB(°C)
Cooling	12	7	7~25	2~10	35	24
Heating	40	45	25~60	2~10	7	6
					10~48	-20~35

Model	Heat pump	LSQWRF65M/NaD-M		LSQWRF80M/NaD-M		LSQWRF130M/NaD-M		LSQWRF160M/NaD-M	
		Capacity	Cooling/Heating	kW	RT	DB(°C)	WB(°C)	DB(°C)	
		%		60/65	17.06/18.51	71/79.5	20.22/22.64	120/130	34.17/37.02
						0-50%-100%			41.23/48.34
								0-25%-50%-75%-100%	
									2.74/3.04
Power supply	Power input	W/W		2.84/3.09		2.76/2.94		2.84/2.93	
		V/Ph/Hz		380~415V-3Ph-50Hz					
Compressor	Type	Cooling	kW	21.1	25.7	42.3	53		
		Heating	kW	21	27	44.4	56		
Water side heat exchanger	Starting mode	—		Constant Speed Scroll					
		—		Direct Starting					
Air side heat exchanger	Type	—		High-efficient shell and tube heat exchanger					
		L/s	2.87	3.39	5.73	6.92			
Sound pressure level	Fan type and quantity	GPM	45	54	91	110			
		kPa	15	20	30	35			
Dimension	Total fan air flow	ft.WG	4.92	6.56	9.84	11.48			
		kW	2x0.650	2x0.950	4x0.650	4x0.950			
Net/Gross/Operating weight	Sound pressure level	dB(A)	70	71	72	74			
		mm	2040x1000x2230	2040x1000x2230	2226X1650X2230	2226X1650X2230			
Loading quantity	Outline(WxDxH)	mm	2120x1080x2230	2120x1080x2230	2306X1730X2230	2306X1730X2230			

SCREW  
CHILLER

# SCREW CHILLER

**Modular Air-cooled Screw Chiller**  
**High-efficiency Modular Air-cooled Screw Chiller**  
**Water-Cooled Screw Chiller**



R134a

# Modular Air-cooled Screw Chiller

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



230kW



330kW



430kW

Display panel  
Z2F3M

600/760kW

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

\*: Photos are for reference only.

- The compressor adopts stepless capacity control, which matches perfectly with actual load.
- Throttling by electronic expansion valve with more accurate control and more rapid adjustment to ensure the best running status of the system.
- Unique extend performance: flexible combination in different models, 4 modules for each system and the cooling capacity can reach 1680kW.
- High efficient oil separator with the efficiency of 99.97%, which greatly improves the reliability of the unit.
- Oil supply is done with the oil pump for the heat pump unit, which can effectively prevent oil supply failure at the low pressure difference of the compressor or during defrosting and thus enhance the operation reliability of the unit.
- The heat pump's economizer design will help to remarkably enhance the heating capacity and EER at low ambient temperature.
- Equipped with perfect protection function to ensure safe running.
- With multiple freeze prevention, can prevent shell and tube heat exchanger from freezing up when the unit is running, powered off or in malfunction condition.



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	Cooling only	LSBLGF230MT3/NbA-M <sup>1</sup>	LSBLGF330MT3/NbA-M <sup>1</sup>	LSBLGF430MT3/NbA-M <sup>1</sup>	LSBLGF600MT3/NbA-M	LSBLGF760MT3/NbA-M	
Capacity	Cooling	kW	220	320	420	570	740
		TR	63	91	119	162	210
Capacity steps		%	25%,50%~100%	25%,50%~100%	25%,50%~100%	12.5%,25%~100%	12.5%,25%~100%
EER		W/W	2.72	2.67	2.80	2.65	3.06
Power supply		Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50
Power input	Cooling	kW	81	120	150	215	242
	Type	-	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw
Compressor	Starting mode	-	Star Delta Start	Star Delta Start	Star Delta Start	Star Delta Start	Star Delta Start
	Quantity	-	1	1	1	2	2
	Type	-	Dry Expansion Evaporator	Dry Expansion Evaporator	Dry Expansion Evaporator	Dry Expansion Evaporator	Dry Expansion Evaporator
Water side heat exchanger	Water flow volume	m3/h	37.8	55.0	72.2	98.0	127.3
	GPM		167	242	318	432	560
	Pressure drop	kPa	≤ 50	≤ 50	≤ 50	≤ 65	≤ 65
	ft.WG		≤ 16.7	≤ 16.7	≤ 16.7	≤ 21.8	≤ 21.8
	Connection pipe	-	DN100	DN100	DN125	DN150	DN150
Air side heat exchanger	Type	-	flange connection	flange connection	flange connection	flange connection	flange connection
	Fan type and quantity	-	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Total fan air flow	m3/h	20000×6	20000×8	20000×10	22000×12	22000×12
	CFM		11772×6	11772×8	11772×10	12949×12	12949×12
	Total fan motor power	kW	1.5×6	1.5×8	1.5×10	2.2×12	2.2×12
Sound pressure level	level	dB(A)	78	79	80	82	82
Dimension	Outline(WxDxH)	mm	4000×2250×2550	5000×2250×2550	6000×2250×2550	7540×2250×2550	7540×2250×2550
	Package(WxDxH)	mm	4080×2330×2550	5080×2330×2550	6080×2330×2550	7620×2330×2550	7620×2330×2550
Net/Gross/Operting Weight	Cooling only	kg	3770/3810/4147	4970/5010/5467	5600/5640/6160	8080/8120/8888	8600/8640/9460
Loading quantity	40'GP/40'HQ	set	0/2	0/2	0/1	0/1	0/1

Model	Heat pump	LSBLGRF230MT3/NbA-M <sup>1</sup>	LSBLGRF330MT3/NbA-M <sup>1</sup>	LSBLGRF430MT3/NbA-M <sup>1</sup>	LSBLGRF600MT3/NbA-M	LSBLGRF760MT3/NbA-M	
Capacity	Cooling	kW	220	320	420	580	740
	Heating	kW	245	355	450	585	745
	TR		70	101	128	166	212
Capacity steps		%	25%,50%~100%	25%,50%~100%	25%,50%~100%	12.5%, 25-100%	12.5%, 25-100%
EER/COP		W/W	2.72/2.88	2.67/2.91	2.66/2.92	3.05/3.07	3.06/3.08
Power supply		Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50
Power input	Cooling	kW	81	120	158	190	242
	Heating	kW	85	122	154	190	242
Compressor	Type	-	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
	Quantity	-	1	1	1	2	2
Water side heat exchanger	Type	-	Dry Expansion Evaporator	Dry Expansion Evaporator	Dry Expansion Evaporator	Dry Expansion Evaporator	Dry Expansion Evaporator
	Water flow volume	m3/h	37.8	55.0	72.2	99.8	127.3
	GPM		167	242	318	439	560
	Pressure drop	kPa	≤ 50	≤ 50	≤ 50	≤ 65	≤ 65
	ft.WG		≤ 16.7	≤ 16.7	≤ 16.7	≤ 21.8	≤ 21.8
	Connection pipe	-	DN100	DN100	DN100	DN150	DN150
Air side heat exchanger	Type	-	flange connection	flange connection	flange connection	flange connection	flange connection
	Fan type and quantity	-	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Total fan air flow	m3/h	20000×6	20000×8	20000×10	22000×12	22000×12
	CFM		11772×6	11772×8	11772×10	12949×12	12949×12
	Total fan motor power	kW	1.5×6	1.5×8	1.5×10	2.2×12	2.2×12
Sound pressure level	dB(A)		78	79	80	82	82
Dimension	Outline(WxDxH)	mm	4000×2250×2550	5000×2250×2550	6000×2250×2550	7540×2250×2550	7540×2250×2550
	Package(WxDxH)	mm	4080×2330×2550	5080×2330×2550	6080×2330×2550	7620×2330×2550	7620×2330×2550
Heat pump	kg	4020/4060/4422	5270/5310/5797	5950/5990/6545	8170/8210/8987	8700/8740/9570	
Loading quantity	40GP/40HQ	set	0/2	0/2	0/1	0/1	0/1

Note: EER/COP Applicable Standard Eurovent

\* Only available for heat pump model.

\*1: This series are certified by Eurovent and AHRI.

# High-efficiency Modular Air-cooled Screw Chiller

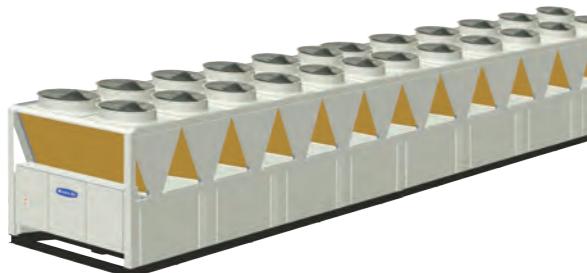
It is a kind of High-efficiency air-cooled screw chiller that can be connected to all sorts of fan coil unit to realize cooling/heating for civil or industrial buildings.



320/420/520MH/NbA-M



580/650/750/860/950MH/NbA-M



1050/1160/1320/1520MH/NbA-M

Note: Photos are for reference only.



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

R134a

Model	Cooling only	LSBLGF320 MH/NbA-M*	LSBLGF420 MH/NbA-M*	LSBLGF520 MH/NbA-M*	LSBLGF580 MH/NbA-M*	LSBLGF650 MH/NbA-M*	LSBLGF750 MH/NbA-M*	
Capacity	Cooling	kW	320	420	520	580	650	750
		RT	91.0	119.4	147.9	164.9	184.8	213.3
Capacity steps	%	25%,50%~100%	25%,50%~100%	25%,50%~100%	12.5%,25%~100%	12.5%,25%~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	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	
Power input	Cooling	kW	100	130	162	180	200	230
Compressor	Type	—	Semi-hermetic screw					
	Starting mode	—	Star Delta Start					
Quantity	—	1	1	1	2	2	2	
Type	—	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	
Water side heat exchanger	Water flow volume	m³/h	55.0	72.2	89.4	99.8	111.8	129.0
	GPM	242	318	394	439	492	568	
Pressure drop	kPa	≤45	≤45	≤45	≤50	≤50	≤55	
	ft.WG	≤15.1	≤15.1	≤15.1	≤16.7	≤16.7	≤18.4	
Connection pipe	—	DN100	DN125	DN125	DN150	DN150	DN150	
Air side heat exchanger	Type	Aluminum Fin-copper Tube						
	Total fan air flow	m³/h	20000×6	20000×8	20000×10	20000×12	20000×12	20000×14
	CFM	11772×6	11772×8	11772×10	11772×12	11772×12	11772×14	
	Total fan motor power	kW	1.5×6	1.5×8	1.5×10	1.5×12	1.5×12	1.5×14
Sound pressure level	dB(A)	73	74	74	75	75	75	
Dimension	Outline(WxDxH)	mm	3670X2250X2550	4890X2250X2550	6110X2250X2550	7340X2250X2550	7340X2250X2550	8560X2250X2550
	Package(WxDxH)	mm	3850X2330X2550	4970X2330X2550	6190X2330X2550	7420X2250X2550	7420X2330X2550	8640X2330X2550
Net/Gross/Operating	Cooling only	kg	3650/3690/3723	4650/4690/4743	5550/5590/5661	6450/6490/6579	7440/7480/7589	8350/8390/8517
Loading quantity	40'GP/40'HQ	set	0/2	0/2	0/1	0/1	0/1	0/1

Model	Cooling only	LSBLGF860 MH/NbA-M*	LSBLGF950 MH/NbA-M*	LSBLGF1050 MH/NbA-M*	LSBLGF1160 MH/NbA-M*	LSBLGF1320 MH/NbA-M*	LSBLGF1520 MH/NbA-M*	
Capacity	Cooling	kW	860	950	1050	1160	1320	1520
	RT	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	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	
Power input	Cooling	kW	260	280	320	350	395	450
Compressor	Type	—	Semi-hermetic screw					
	Starting mode	—	Star Delta Start					
Quantity	—	2	2	2	3	4	4	
Type	—	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	
Water side heat exchanger	Water flow volume	m³/h	147.9	163.4	180.6	199.5	227.0	261.4
	GPM	651	719	795	878	1000	1151	
Pressure drop	kPa	≤60	≤60	≤70	≤75	≤75	≤85	
	ft.WG	≤20.1	≤20.1	≤23.4	≤25.1	≤25.1	≤28.4	
Connection pipe	—	DN150	DN150	DN200	DN200	DN200	DN200	
Air side heat exchanger	Type	Aluminum Fin-copper Tube						
	Total fan air flow	m³/h	20000×16	20000×18	20000×20	20000×22	20000×24	20000×28
	CFM	11772×16	11772×18	11772×20	11772×22	11772×24	11772×28	
	Total fan motor power	kW	1.5×16	1.5×18	1.5×20	1.5×22	1.5×24	1.5×28
Sound pressure level	dB(A)	75	76	75	76	76	76	
Dimension	Outline(WxDxH)	mm	9780X2250X2550	11000X2250X2550	12230X2250X2550	13450X2250X2550	14670X2250X2550	17120X2250X2550
	Package(WxDxH)	mm	9860X2330X2550	11080X2330X2550	12310X2330X2550	13530X2330X2550	14750X2330X2550	17200X2330X2550
Net/Gross/Operating	Cooling only	kg	9550/9590/9741	10280/10320/10485	11750/11830/11985	13000/13080/13260	14750/14830/15045	16950/17030/17289
Loading quantity	40'GP/40'HQ	set	0/1	0/1	0/0	0/0	0/0	0/0

Note:

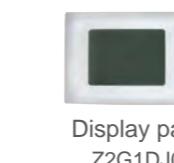
\* This product is under development. The parameters are estimated, please refer to the value on the nameplate.

This series is certified by Eurovent and AHRI.

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

# Water-cooled Screw Chiller

It is a kind of water-cooled screw chiller with flooded screw compressor that can be connected to all sorts of fan coil unit to realize cooling for large civil or industrial buildings.



Comprehensive protection



Self-diagnosis



Memory function



Easier maintainability



24 hour timer

Display panel  
Z2G1DJ01

- Precision water temperature control thanks to stepless capacity adjustment from 25%~100%. (single comp.) or 12.5%~100% (dual comp.).
- Higher heat exchange efficiency thanks to flooded evaporating method.
- Higher efficiency under partial load thanks to paralleling operation design.
- High reliability oil return technology to avoid compressor damage from oil lack.
- Precision and stable volume adjusting thanks to orifice plus EXV throttle method.
- Automatic operation and energy saving operation makes an easier management.



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	7	30	35	4~15	2.5~8	18~35	3.5~8

Model	LSBLG180H/Nb-M	LSBLG210H/Nb-M	LSBLG240H/Nb-M	LSBLG300H/Nb-M	LSBLG340H/Nb-M	LSBLG380H/Nb-M	
Cooling capacity	kW	175	202	231	292	331	
	RT	49.76	57.44	65.69	83.03	94.12	
Capacity steps	%	25-100	25-100	25-100	25-100	25-100	
EER	W/W	5.00	5.05	5.13	5.21	5.25	
IPLV	W/W	5.87	5.71	5.80	5.91	5.94	
Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	
Power input	kW	35	40	45	56	63	
RLA	A	68.4	77.2	77.2	102.5	117.9	
Compressor	Type	—	Semi-hermetic twin screw comp.				
	Starting mode	—	Y-△				
	Quantity	—	1	1	1	1	1
Refrigerant charge volume	kg	100	100	100	110	120	130
Refrigeration oil	Type	—	BSE170	BSE170	BSE170	BSE170	BSE170
	Charge volume	L	15	15	15	19	19
Evaporator	Type	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator
	Fouling factor	m <sup>2</sup> ·c/kW	0.086	0.086	0.086	0.086	0.086
	Water flow volume	m <sup>3</sup> /h	30	35	40	50	57
		GPM	132	154	176	220	251
	Pressure drop	kPa	40	45	50	60	62
	ft.WG	13.12	14.76	16.40	19.68	19.68	20.34
	Connection pipe	—	DN100	DN100	DN100	DN125	DN125
Condenser	Type	—	shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
	Fouling factor	m <sup>2</sup> ·c/kW	0.086	0.086	0.086	0.086	0.086
	Water flow volume	m <sup>3</sup> /h	38	43	50	63	71
		GPM	168	190	220	278	313
	Pressure drop	kPa	56	57	65	65	67
	ft.WG	18.37	18.70	21.32	21.32	21.65	21.98
	Connection pipe	—	DN100	DN100	DN100	DN125	DN125
Sound pressure level	dB(A)	76.2	76.6	77.4	80.1	81.2	83.3
Outline dimension (WxDxH)	mm	3160×1150×1587	3160×1150×1587	3160×1150×1587	3160×1400×1680	3160×1400×1680	3160×1400×1720
Net/Gross/Operating weight	kg	1800/1850/1890	1900/1950/1995	2100/2150/2205	2800/2850/2940	2900/2950/3045	3100/3150/3255
Loading quantity	set	3/3	3/3	3/3	3/3	3/3	3/3

Model	LSBLG450H/Nb-M	LSBLG500H/Nb-M	LSBLG580H/Nb-M	LSBLG640H/Nb-M	LSBLG680H/Nb-M	LSBLG760H/Nb-M	
Cooling capacity	kW	442	495	572	636	676	
	RT	125.69	140.76	162.65	180.85	192.23	
Capacity steps	%	25-100	25-100	25-100	25-100	25-100	
EER	W/W	5.33	5.32	5.35	5.30	5.30	
IPLV	W/W	6.09	6.08	5.87	5.85	6.01	
Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	
Power input	kW	83	93	107	120	126	
RLA	A	136.5	154.3	169.6	199.4	202.5	
Compressor	Type	—	Semi-hermetic twin screw comp.				
	Starting mode	—	Y-△				
	Quantity	—	1	1	1	2	2
Refrigerant charge volume	kg	210	210	210	200	240	
Refrigeration oil	Type	—	BSE170	BSE170	BSE170	BSE170	
	Charge volume	L	35	35	35	19	
Evaporator	Type	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	Flooded Evaporator	
	Fouling factor	m <sup>2</sup> ·c/kW	0.086	0.086	0.086	0.086	
	Water flow volume	m <sup>3</sup> /h	76	85	98	116	
		GPM	335	375	432	511	
	Pressure drop	kPa	64	66	68	76	
	ft.WG	20.99	21.65	22.30	24.27	24.93	
	Connection pipe	—	DN150	DN150	DN150	DN200	
Condenser	Type	m <sup>3</sup> /h	Shell and tube	Shell and tube	Shell and tube	Shell and tube	
	Fouling factor	m <sup>2</sup> ·c/kW	0.086	0.086	0.086	0.086	
	Water flow volume	m <sup>3</sup> /h	95	106	123	145	
		GPM	419	467	542	639	
	Pressure drop	kPa	69	71	72	76	
	ft.WG	22.63	23.29	23.62	23.94	25.26	
	Connection pipe	—	DN200	DN200	DN200	DN200	
Sound pressure level	dB(A)	83.9	84.1	84.3	85.4	82.5	
Outline dimension (WxDxH)	mm	3160×1520×2130	3160×1520×2130	3160×1520×2130	3160×1520×2130	3400×1700×2030	
Net/Gross/Operating weight	kg	3850/3900/4043	4100/4160/4305	4400/4460/4620	4600/4660/4830	5100/5160/5355	
Loading quantity	set	3/3	3/3	3/3	3/3	3/3	

Model	LSBLG880H/Nb-M	LSBLG1000H/Nb-M	LSBLG160H/Nb-M	LSBLG1280H/Nb-M	LSBLG1400H/Nb-M
Cooling capacity	kW	871	990	1144	1275
	RT	247.68	281.51	325.30	362.56
Capacity steps	%	12.5-100	12.5-100	12.5-100	12.5-100
EER	W/W	5.34	5.32	5.35	5.62
IPLV	W/W	5.94	5.97	5.82	5.98
Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50
Power input	kW	163	186	214	227
RLA	A	136.5	154.3	169.6	199.4
Compressor	Type	—	Semi-hermetic twin screw comp.		

CENTRIFUGAL CHILLER

# CENTRIFUGAL CHILLER

**C Series Fixed-speed Centrifugal Chiller**

**CVE Series Permanent Magnet**

**Synchronous Inverter Centrifugal**

**CC Series Magnetic Suspension Inverter Centrifugal**



G 085/086





# C Series Fixed-speed Centrifugal Chiller

It is a kind of water-cooled chiller with centrifugal compressor that can be connected to all sorts of fan coil unit to realize cooling for large civil or industrial buildings.



A screenshot of a 3D CAD application interface. The main view shows a complex mechanical part with several callout boxes pointing to specific features like a rib and a hole. A circular selection tool is visible in the top right corner. The software has a dark theme with blue highlights.

Touch Screen  
CM27-GM12/A



## Quiet function

## Comprehensive protection

Long-d  
man

- Precision water temperature control thanks to stepless capacity adjustment from 10%~100%.
  - Higher reliability and less maintenance cost thanks to 3D-covered impeller.
  - Lower noise and less vibration thanks to variable cross-section diffuser technology.
  - Higher compressor reliability thanks to keyless connection technology.
  - Urgent oil providing system to avoid compressor damage when sudden power failure occurs.
  - Orifice throttle makes a steady flow volume adjustment.
  - Multilevel password protection makes the operation controllable and reliable.
  - Adjustable water outlet temperature according to various project requirement.
  - Thanks to special refrigerant loop to cool the lubricant, no field oil cooling water pipe or external connection lubricant cooling system is needed.



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	2.5~11	16~35	3.5~11

Single-stage

Model

Model		LSBLX1400-M	LSBLX1600-M	LSBLX1800-M	LSBLX2000-M	LSBLX2200-M	LSBLX2400-M	
		LSBLX1400-G	LSBLX1600-G	LSBLX1800-G	LSBLX2000-G	LSBLX2200-G	LSBLX2400-G	
Cooling capacity	kW	1400	1600	1800	2000	2200	2400	
	RT	398	456	511	562	625	682	
Capacity adjustment range	%	10-100	10-100	10-100	10-100	10-100	10-100	
EER	W/W	5.33	5.41	5.57	5.60	5.70	5.70	
IPLV	W/W	6.02	6.11	6.29	6.35	6.45	6.44	
Power supply	-M	Ph/V/Hz	3Ph,380V,50Hz	3Ph,380V,50Hz	3Ph,380V,50Hz	3Ph,380V,50Hz	3Ph,380V,50Hz	
	-G	Ph/V/Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	
Power input	kW	263	296	323	357	386	421	
RLA	-M	A	454.1	511.1	557.7	616.4	666.5	
	-G	A	17.3	19.4	21.2	23.4	25.3	
Compressor	Type	—	Semi-hermetic Centrifugal Compressor					
	Starting mode*	—	Star-delta					
Quantity	—	1	1	1	1	1	1	
Refrigerant charge volume	kg	330	360	600	625	650	700	
Refrigeration oil	Type	—	No.68 synthetic fatty oil					
	Charge volume	L	50	50	60	60	60	80
Evaporator	Type	—	Flooded Shell and Tube					
	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	60.3	68.9	77.5	86.1	94.7	103.3
		GPM	955	1092	1228	1365	1501	1638
	Pressure drop	kPa	75	75	75	75	75	90
		ft.WG	25.1	25.1	25.1	25.1	25.1	30.1
	Connection pipe	mm	200	200	250	250	250	250
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	75.4	86.2	97.0	107.8	118.6	129.3
		GPM	1196	1367	1537	1708	1879	2050
	Pressure drop	kPa	70	70	70	70	70	85
		ft.WG	23.4	23.4	23.4	23.4	23.4	28.5
	Connection pipe	mm	200	200	250	250	250	250
Sound pressure level (Max.)	dB(A)	≤88	≤88	≤88	≤90	≤90	≤90	
Dimension	Outline(Wx Dx H)	mm	3630x1680x2060	3630x1680x2060	4150x1900x2250	4150x1900x2250	4150x1900x2250	4350x2070x2500
	Package(Wx Dx H)	mm	3700x1750x2130	3700x1750x2130	4200x1970x2410	4200x1970x2410	4200x1970x2410	4650x2110x2660
Net/Gross/Operating weight	kg	6300/6500/6800	6600/6800/7100	8800/9000/9800	9200/9400/10200	9400/9600/10600	10800/11000/12800	
Loading quantity	40GP/40HQ	set	0/2	0/2	0/2	0/2	0/2	

Model		LSBLX2600-M	LSBLX2800-M	LSBLX3000-M	LSBLX3200-M	LSBLX3400-M	LSBLX3600-M	
		LSBLX2600-G	LSBLX2800-G	LSBLX3000-G	LSBLX3200-G	LSBLX3400-G	LSBLX3600-G	
Cooling capacity	kW	2600	2800	3000	3200	3400	3600	
	RT	740	796	854	909	967	1023	
Capacity adjustment range	%	10-100	10-100	10-100	10-100	10-100	10-100	
EER	W/W	5.76	5.79	5.70	5.75	5.80	5.66	
IPLV	W/W	6.52	6.54	6.45	6.49	5.65	6.40	
Power supply	-M	Ph/V/Hz	3Ph,380V,50Hz	3Ph,380V,50Hz	3Ph,380V,50Hz	3Ph,380V,50Hz	3Ph,380V,50Hz	
	-G	Ph/V/Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	
Power input	kW	451	484	526	557	586	636	
RLA	-M	A	778.7	835.7	908.2	961.7	1011.8	
	-G	A	29.6	31.8	34.5	36.5	38.4	
Compressor	Type	—	Semi-hermetic Centrifugal Compressor					
	Starting mode*	—	Star-delta					
	Quantity	—	1	1	1	1	1	1
Refrigerant charge volume	kg	725	750	775	800	825	900	
Refrigeration oil	Type	—	No.68 synthetic fatty oil					
	Charge volume	L	80	80	80	80	80	100
Evaporator	Type	—	Flooded Shell and Tube					
	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	111.9	120.6	129.2	137.8	146.4	155.0
		GPM	1774	1911	2047	2184	2320	2457
	Pressure drop	kPa	90	90	90	90	90	115
		ft.WG	30.1	30.1	30.1	30.1	30.1	38.5
	Connection pipe	mm	250	250	300	300	300	300
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	140.1	150.9	161.7	172.4	183.2	194.0
		GPM	2221	2392	2562	2733	2904	3075
	Pressure drop	kPa	85	85	85	85	85	100
		ft.WG	28.5	28.5	28.5	28.5	28.5	33.5
	Connection pipe	mm	250	250	300	300	300	350
Sound pressure level (Max.)	dB(A)	≤90	≤90	≤90	≤92	≤92	≤92	
Dimension	Outline(WxDxH)	mm	4350x2070x2500	4350x2070x2500	4530x2070x2500	4530x2120x2500	4530x2120x2500	4750x2330x2750
	Package(WxDxH)	mm	4650x2110x2660	4650x2110x2660	4650x2160x2660	4650x2160x2660	4650x2160x2660	5000x2340x2910
Net/Gross/Operating weight	kg	11200/11400/13000	11600/11800/13200	11800/12000/13500	12000/12200/14000	12200/12400/14500	14600/14800/16500	
Loading quantity	40GP/40HQ	set	0/0	0/0	0/0	0/0	0/0	

Note: \* The starting mode of star-delta is applicable for the models with suffix"-M", while the starting mode of direct-start is applicable with the suffix"-G".

Model	LSBLX3800-M		LSBLX4000-M		LSBLX4400-M		LSBLX4800-G		LSBLX5200-G	
	LSBLX3800-G	LSBLX4000-G	LSBLX4000-G	LSBLX4400-G	LSBLX4800-G	LSBLX5200-G				
Cooling capacity	kW	3800	4000	4400	4800	5200				
	RT	1081	1136	1251	1364	1479				
Capacity adjustment range	%	10-100	10-100	10-100	10-100	10-100				
EER	W/W	5.70	5.78	5.72	5.78	5.87				
IPLV	W/W	6.45	6.53	6.47	6.54	6.64				
Power supply	-M	Ph/V/Hz	3Ph,380V,50Hz	3Ph,380V,50Hz	3Ph,380V,50Hz	—	—	—	—	—
	-G	Ph/V/Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz	3Ph,10000V,50Hz
Power input	kW	667	692	769	830	886				
RLA	-M	A	1151.6	1194.8	1327.7	—	—	—	—	—
	-G	A	43.8	45.4	50.5	54.5	58.1	—	—	—
Compressor	Type	—	Semi-hermetic Centrifugal Compressor					—	—	—
	Starting mode*	—	star-delta					—	—	—
	Quantity	—	1	1	1	1	1	1	1	1
Refrigerant charge volume	kg	925	950	1000	1050	1100				
Refrigeration oil	Type	—	No.68 synthetic fatty oil					—	—	—
Charge volume	L	100	100	100	100	100				
Evaporator	Type	—	Flooded Shell and Tube					—	—	—
	Fouling factor	m <sup>2</sup> ·°C/kW	0.018	0.018	0.018	0.018	0.018	—	—	—
	Water flow volume	L/s	163.6	172.2	189.4	206.7	223.9	—	—	—
	GPM	2593	2730	3003	3276	3549	—	—	—	—
	kPa	115	115	115	115	115	—	—	—	—
	ft.WG	38.5	38.5	38.5	38.5	38.5	—	—	—	—
	Connection pipe	mm	300	300	350	350	350	—	—	—
Condenser	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	204.8	215.6	237.1	258.7	280.2	—	—	—
	GPM	3246	3417	3758	4100	4442	—	—	—	—
	kPa	100	100	105	105	105	—	—	—	—
	ft.WG	33.5	33.5	35.2	35.2	35.2	—	—	—	—
	Connection pipe	mm	350	350	350	350	350	—	—	—
	Sound pressure level (Max.)	dB(A)	≤92	≤92	≤95	≤95	≤95	—	—	—
Dimension	Outline(WxDxH)	mm	4750×2330×2750	4750×2330×2750	4750×2480×2750	4750×2480×2750	4750×2480×2750	—	—	—
	Package(WxDxH)	mm	5000×2340×2910	5000×2340×2910	5000×2490×2910	5000×2490×2910	5000×2490×2910	—	—	—
Net/Gross/Operating weight	kg	14800/15000/17000	15200/15400/17500	15800/16000/18000	16200/16400/18500	16600/16800/19000	—	—	—	—
Loading quantity	40GP/40HQ	set	0/0	0/0	0/0	0/0	0/0	—	—	—

## Two-stage

Model	LSBLX5600S-G		LSBLX6000S-G		LSBLX6400S-G		LSBLX6800S-G		LSBLX7200S-G	
	LSBLX5600S-G	LSBLX6000S-G	LSBLX6400S-G	LSBLX6800S-G	LSBLX7200S-G	LSBLX5600S-G	LSBLX6000S-G	LSBLX6400S-G	LSBLX6800S-G	LSBLX7200S-G
Cooling capacity	kW	5600	6000	6400	6800	7200				
	RT	1591	1706	1818	1934	2044				
Capacity adjustment range	%	10-100					—	—	—	—
EER	W/W	6.29	6.32	6.40	6.37	6.33	—	—	—	—
IPLV	W/W	7.10	7.13	7.22	7.20	7.15	—	—	—	—
Power supply	Ph/V/Hz	3Ph,10000V,50Hz					—	—	—	—
Power input	kW	890	949	1000	1068	1137	—	—	—	—
RLA/LRA	A	58.4	62.3	65.6	70.1	74.6	—	—	—	—
Compressor	Type	—	Semi-hermetic Centrifugal Compressor					—	—	—
	Starting mode	—	Direct start					—	—	—
	Quantity	—	1	1	1	1	1	—	—	—
Refrigerant charge volume	kg	1500	1600	1700	1800	1900	—	—	—	—
Refrigeration oil	Category	—	No.68 synthetic fatty oil					—	—	—
	Charge volume	L	125	125	125	125	125	—	—	—
Evaporator	Type	—	Flooded Shell and Tube					—	—	—
	Fouling factor	m <sup>2</sup> ·°C/kW	0.018	0.018	0.018	0.018	0.018	—	—	—
	Water flow volume	L/s	241.1	258.3	275.6	292.8	310.0	—	—	—
	GPM	3822	4095	4368	4641	4914	—	—	—	—
	kPa	125	125	125	125	125	—	—	—	—
	ft.WG	41.0	41.0	41.0	41.0	41.0	—	—	—	—
	Connection pipe	mm	350	350	400	400	400	—	—	—
Condenser	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	301.8	323.3	344.9	366.4	388.0	—	—	—
	GPM	4783	5125	5466	5808	6150	—	—	—	—
	Pressure drop	kPa	125	125	125	125	125	—	—	—
	ft.WG	41.0	41.0	41.0	41.0	41.0	—	—	—	—
	Connection pipe	mm	400	400	450	450	450	—	—	—
	Sound pressure level (Max.)	dB(A)	≤95	≤95	≤95	≤95	≤95	—	—	—
Dimension	Outline(WxDxH)	mm	5350×2620×3100	5350×2620×3100	5350×2820×3100	5350×2820×3100	5350×2820×3100	—	—	—
	Package(WxDxH)	mm	5800×2630×3260	5800×2630×3260	5800×2830×3260	5800×2830×3260	5800×2830×3260	—	—	—
Net/Gross/Operating weight	kg	22500/22700/25950	23800/24000/27500	25500/25700/29450	26100/26300/30200	26500/				

Model		LSBLX250SVE	LSBLX275SVE	LSBLX300SVE	LSBLX350SVE	LSBLX400SVE	LSBLX450SVE
Cooling capacity	kW	880	967	1055	1231	1406	1582
	RT	250	275	300	350	400	450
Capacity adjustment range	%	10~100	10~100	10~100	10~100	10~100	10~100
	EER	W/W	5.99	6.01	6.03	6.25	6.33
IPLV	W/W	9.94	9.98	10.01	10.38	10.51	10.94
	Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50
Power input	kW	147	161	175	197	222	240
	RLA	A	225.6	247.1	268.6	302.3	340.7
Compressor	Type	-	Semi-hermetic centrifugal compressor				
	Starting mode	-	Variable Frequency Drives				
Refrigerant charge volume	Quantity	-	1	1	1	1	1
	kg	350	375	400	425	450	550
Refrigeration oil	Type	-	No.68 synthetic fatty oil				
	Charge volume	L	25	25	30	30	45
Evaporator	Type	-	Flooded type evaporator				
	Fouling factor	m <sup>2</sup> .°C/kW	0.018	0.018	0.018	0.018	0.018
Condenser	Water flow volume	L/s	37.8	46.2	50.4	58.8	67.2
	GPM	599.8	659.1	719	839	958.3	1078.2
	Pressure drop	kPa	60	60	60	60	60
	ft.WG	20	20	20	20	20	20
	Connection pipe	-	DN200	DN200	DN200	DN200	DN250
	Type	-	Shell and tube				
Condenser	Fouling factor	m <sup>2</sup> .°C/kW	0.044	0.044	0.044	0.044	0.044
	Water flow volume	L/s	47.5	57.7	63	73.5	84
	Pressure drop	GPM	753.2	827.7	903	1053.6	1203.4
	ft.WG	kPa	55	55	55	55	55
	Connection pipe	-	DN200	DN200	DN200	DN200	DN200
Sound pressure level (Max.)	Dimension	Db(A)	80	80	80	82	82
	Outline(WxDxH)	mm	3770x1580x1840	3770x1580x1840	3770x1580x1840	3650x1810x2000	3650x1810x2000
Net/Gross/Operating weight	Package(WxDxH)	mm	3900x1700x2000	3900x1700x2000	3900x1700x2000	3700x1900x2200	3700x1900x2200
	Kg	5150/5600/5600	5250/5700/5700	5400/5850/6200	5500/5900/6400	5700/6100/6700	6100/6500/7200
Loading quantity	40'GP/40'HQ	set	0/0	0/0	0/0	0/0	0/0

Model		LSBLX800SVE	LSBLX850SVE	LSBLX900SVE	LSBLX950SVE	LSBLX1000SVE	LSBLX1100SVE
Cooling capacity	kW	2813	2989	3164	3340	3516	3868
	RT	800	850	900	950	1000	1100
Capacity adjustment range	%	10~100	10~100	10~100	10~100	10~100	10~100
	EER	W/W	6.79	6.75	6.88	6.89	7.03
IPLV	W/W	11.27	11.23	11.42	11.44	11.68	11.93
	Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50
Power input	kW	414	443	460	485	500	548
	RLA	A	635.4	679.9	706.0	744.3	767.4
Compressor	Type	-	Semi-hermetic centrifugal compressor				
	Starting mode	-	Variable Frequency Drives				
Refrigerant charge volume	Quantity	-	1	1	1	1	1
	kg	750	775	900	925	950	975
Refrigeration oil	Type	-	No.68 synthetic fatty oil				
	Charge volume	L	50	50	50	50	50
Evaporator	Type	-	Flooded type evaporator				
	Fouling factor	m <sup>2</sup> .°C/kW	0.018	0.018	0.018	0.018	0.018
Condenser	Water flow volume	L/s	134.4	142.8	151.2	159.6	168
	GPM	1917.2	2037.2	2156.5	2276.4	2396.4	2636.3
	Pressure drop	kPa	75	75	100	100	100
	ft.WG	25.1	25.1	33.5	33.5	33.5	38.5
	Connection pipe	-	DN250	DN250	DN300	DN300	DN300
	Type	-	Shell and tube				
Condenser	Fouling factor	m <sup>2</sup> .°C/kW	0.044	0.044	0.044	0.044	0.044
	Water flow volume	L/s	168	178.5	189	199.5	210
	Pressure drop	GPM	2407.7	2558.3	2708.1	2858.8	3009.4
	ft.WG	kPa	70	70	85	85	90
	Connection pipe	-	DN250	DN250	DN300	DN300	DN300
Sound pressure level (Max.)	Dimension	Db(A)	88	88	88	88	88
	Outline(WxDxH)	mm	4250x2020x2300	4250x2020x2300	4580x2210x2430	4580x2210x2430	4580x2210x2430
Net/Gross/Operating weight	Package(WxDxH)	mm	4370x2050x2410	4370x2050x2410	4700x2350x2550	4700x2350x2550	4700x2350x2550
	Kg	9500/10000/11000	9900/10400/11500	10000/10600/12000	10150/10750/12200	10500/111000/12700	11000/116000/13500
Loading quantity	40'GP/40'HQ	set	0/0	0/0	0/0	0/0	0/0

Model		LSBLX500SVE	LSBLX550SVE	LSBLX600SVE	LSBLX650SVE	LSBLX700SVE	LSBLX750SVE
Cooling capacity	kW	1758	1934	2110	2285	2461	2637
	RT	500	550	600	650	700	750
Capacity adjustment range	%	10~100	10~100	10~100	10~100	10~100	10~100
	EER	W/W	6.53	6.81	6.74	6.84	6.92
IPLV	W/W	10.84	11.30	11.19	11.35	11.22	11.49
	Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50
Power input	kW	269	284	313	334	365	381
	RLA	A	412.8	435.9	480.4	512.6	560.2
Compressor	Type	-	Semi-hermetic centrifugal compressor				
	Starting mode	-	Variable Frequency Drives				
Refrigerant charge volume	Quantity	-	1	1	1	1	1
	kg	575	600	625	650	675	725
Refrigeration oil	Type	-	No.68 synthetic fatty oil				
	Charge volume	L	45	45	45	45	50
Evaporator	Type	-	Flooded type evaporator				
	Fouling factor	m <sup>2</sup> .°C/kW	0.018	0.018</			

# CC Series Magnetic Suspension Inverter Centrifugal

R134a INVERTER

Gree CC series magnetic suspension inverter centrifugal chiller adopts the magnetic suspension 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.



130/150RT



250/275/300RT

- Quiet function
- Comprehensive protection
- Memory function
- Long-distance monitoring

- It adopts magnetic bearing to achieve oil-free operation and reduce the heat exchange influence of lubricant
- The system adopts flooded heat exchange design and build-in subcooler in condenser
- Impellers directly driven by the motor with gearless design, improving the reliability of the system
- With advanced and reliable microcomputer control system, powerful group control modules and building communication interface
- User-friendly touch screen is adopted for convenient operation, precise control and stable output
- Multiple protection function
- Noise of the entire unit is lower than 70dB(A)



Model		LSBLX130SCE	LSBLX150SCE	LSBLX250SCE	LSBLX275SCE	LSBLX300SCE
Cooling capacity	kW	457	528	879	967	1055
	RT	130	150	250	275	300
Capacity adjustment range	%			10~100		
EER	W/W	5.79	5.56	5.98	5.86	5.76
IPLV	W/W	10.3	10.16	10.5	10.42	10.2
Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50
Power input	kW	79	95	147	165	183
RLA	A	121.2	145.8	225.6	253.2	280.9
Compressor	Type	-	Semi-hermetic centrifugal compressor			
	Starting mode	-	Variable Frequency Drives			
	Quantity	-	1	1	2	2
Refrigerant charge volume	kg	235	260	255	280	305
Evaporator	Type	-	Flooded type evaporator			
	Fouling factor	m <sup>2</sup> .°C/kW	0.018	0.018	0.018	0.018
	Water flow volume	L/s	19.7	22.7	37.8	41.6
	GPM	311.5	359.9	599.1	659.1	719
	Pressure drop	kPa	65	65	75	75
	ft.WG	21.7	21.7	25.1	25.1	25.1
Condenser	Connection pipe	-	DN150	DN150	DN150	DN150
	Type	-	Shell and tube			
	Fouling factor	m <sup>2</sup> .°C/kW	0.044	0.044	0.044	0.044
	Waterflow volume	L/s	24.7	28.5	47.5	52.2
	GPM	391.2	451.9	752.4	827.7	903
	Pressure drop	kPa	60	60	70	70
	ft.WG	20	20	20	20	20
Sound pressure level (Max.)	Db(A)	70	70	70	70	70
Dimension	Outline(WxDxH)	mm	3000x1250x2000	3000x1250x2000	3800x1250x2000	3800x1250x2000
	Package(WxDxH)	mm	3100x1350x2100	3100x1350x2100	3900x1330x2080	3900x1330x2080
Net/Gross/Operating weight	Kg	2200/2500/2600	2200/2500/2600	3000/3250/3700	3000/3250/3700	3000/3250/3700
Loading quantity	40GP/40HQ	set	0/0	0/0	0/0	0/0

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	2.5~11	12~35	3.5~11

## Control System Lineup

Control system	Product series	Modular chiller			Screw chiller		Centrifugal chiller	Inverter Centrifugal Chiller	Magnetic suspension chiller(CC series)
		Split serirs	Integral series	D series	Air-cooled Screw chiller	Water-cooled screw chiller			
Chiller	Wired remote controller	Z16301							
		Z12301A							
	Display panel	Z26301C							
		Z2F3M*1							
		Z2G1DJ01*1							
Long-distance monitoring software	CM27-GM12/A2(M)								
	CM18-GM8/A2(M)								
BMS accessories*2 (modbus)	Gree AC Eudemon 2009*3	FE30-00/A(M)							
	Communication module	ME30-28/E(M)							
	Optoelectronic isolated converter	RS232-RS422/485							
Other modules	Patch board	RS-422/485							
	Optoelectronic isolated signal multiplier	Z103							

Note:

● means standard, ○ means optional.

\*1 With BMS(modbus) function.

\*2 BMS interface is equipped.

\*3 For air-cooled scroll chiller, if long-distance monitoring software Gree Eudemon 2009 is selected, the communication module ME30-28/E(M) shall be selected also.

The selection shall refer to actual models.

TERMINAL

# TERMINAL

## Fan Coil Unit 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

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



## 3 Rows\*

Model	FP-34WAS-R	FP-51WAS-R	FP-68WAS-R	FP-85WAS-R	FP-102WAS-R	FP-136WAS-R
Air flow volume(H/M/L)	CFM Pa	200/146/125 30	300/232/155 30	400/291/194 30	500/375/250 30	600/464/309 30
Capacity	Cooling/Heating kW	2.19/3.29 2.19/3.29	3.37/5.06 3.37/5.06	4.28/6.42 4.28/6.42	5.04/7.56 5.04/7.56	6.46/9.70 6.46/9.70
Power system	Type Ph/V/Hz	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50
Water system	Input Water flow volume Pressure drop	W l/s kPa Ft-WG	44 0.11 10 3.3	59 0.17 15 5	72 0.22 25 8.4	87 0.25 30 10
	Sound pressure level	dB(A)	38	40	42	44
Dimension	Outline (WxDxH)	mm	881x510x245 900x560x275	1011x510x245 1030x560x275	1131x510x245 1150x560x275	1211x510x245 1230x560x275
	Package	mm	900x560x275 1150x560x275	1030x560x275 1230x560x275	1150x560x275 1230x560x275	1371x510x245 1390x560x275
Net weight/Gross weight	kg	15/19	16/20.5	18/23	19.5/24.5	21/26
Connection pipe diameter	Water inlet & outlet (inner groove) Condensed water drain (outer groove)	inch(mm)			Rc3/4	
Loading quantity	40'GP/40'HQ	set	448/490	392/434	344/386	316/355
Options	Wired remote controller Plenum with filter Plenum without filter	— HF31 HF41	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0 HF32 HF42	HF33 HF43	HF34 HF44	HF35 HF45

Model	FP-170WAS-R	FP-204WAS-R	FP-238WAS-R <sup>1</sup>	FP-272WAS-R <sup>1</sup>	FP-306WAS-R <sup>1</sup>	FP-340WAS-R <sup>1</sup>
Air flow volume(H/M/L)	CFM Pa	1000/750/500 30	1200/926/618 30	1400/971/729 30	1600/1235/868 30	1800/1006/674 30
Capacity	Cooling/Heating kW	11.4/18.2 11.4/18.2	12.2/18.6 12.2/18.6	12.4/19.5 12.4/19.5	13.5/21.3 13.5/21.3	16.0/24.8 16.0/24.8
Power system	Type Ph/V/Hz	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50
Water system	Input Water flow volume Pressure drop	W l/s kPa Ft-WG	174 0.55 38 12.7	212 0.57 45 15	380 0.57 21.9 7.3	475 0.64 27.9 9.3
	Sound pressure level	dB(A)	49	52	56	59
Dimension	Outline (WxDxH)	mm	1921x510x245 1940x560x275	1921x510x245 1940x560x275	1671x595x354 1750x650x380	1671x595x354 1750x650x380
	Package	mm	1921x510x245 1940x560x275	1921x510x245 1940x560x275	1921x595x354 1950x650x380	1921x595x354 1950x650x380
Net weight/Gross weight	kg	33/38.5	24/39.5	48/55	48/55	52/60
Connection pipe diameter	Water inlet & outlet (inner groove) Condensed water drain (outer groove)	inch(mm)	Rc3/4	Rc1	Rc1	
Loading quantity	40'GP/40'HQ	set	196/220	196/220	140/166	130/153
Options	Wired remote controller Plenum with filter Plenum without filter	— HF37 HF47	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0 HF37 HF47	HF28 HF48	HF29 HF48	HF29 HF49

## 4 Rows

Model	FP-34WAF-R	FP-51WAF-R	FP-68WAF-R	FP-85WAF-R	FP-102WAF-R	FP-136WAF-R
Air flow volume(H/M/L)	CFM Pa	188/156/80 30	289/259/186 30	383/324/207 30	477/368/242 30	571/507/395 30
Capacity	Cooling/Heating kW	2.11/3.70 2.11/3.70	3.82/5.70 3.82/5.70	4.85/7.20 4.85/7.20	5.71/8.50 5.71/8.50	7.32/10.90 7.32/10.90
Power system	Type Ph/V/Hz	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50	1/220-240/50 1/220-240/50
Water system	Input Water flow volume Pressure drop	W l/s kPa Ft-WG	44 0.11 15 5	59 0.19 7.8 2.6	80 0.24 9.7 3.2	87 0.31 23.3 7.8
	Sound pressure level	dB(A)	40	42	44	47
Dimension	Outline (WxDxH)	mm	881x510x245 900x560x275	1011x510x245 1030x560x275	1131x510x245 1150x560x275	1211x510x245 1230x560x275
	Package	mm	900x560x275 1150x560x275	1030x560x275 1230x560x275	1150x560x275 1230x560x275	1371x510x245 1390x560x275
Net weight/Gross weight	kg	14.4/18.9	17.2/21.9	19.2/24.1	20.5/25.6	23.2/28.7
Connection pipe diameter	Water inlet & outlet (inner groove) Condensed water drain (outer groove)	inch(mm)			Rc3/4	
Loading quantity	40'GP/40'HQ	set	448/490	392/434	344/386	316/355
Options	Wired remote controller Plenum with filter Plenum without filter	— HF31 HF41	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0 HF32 HF42	HF33 HF43	HF34 HF44	HF35 HF45

\*Note: Horizontal fan coil unit with air return can be added for option choice.

\*1:This product model is not fit for EU.

## 2 Rows/High ESP Type\*

Model	FP-34WAH-K	FP-51WAH-K	FP-68WAH-K	FP-85WAH-K	FP-102WAH-K	FP-136WAH-K	FP-170WAH-K	FP-204WAH-K
Air flow volume(H/M/L)	CFM Pa	200/146/125 30	300/232/155 30	400/291/194 30	500/375/250 30	600/464/309 30	800/644/429 30	1000/750/500 30
Capacity	Cooling/Heating kW	1.8/3.05 2.8/4.4	3.6/5.5 4.5/7.0	5.5/8.9 7.35/11.0	9.2/14.0 9.2/14.0	11.0/17.0 11.0/17.0	12.2/18.6 12.2/18.6	14.0/21.3 14.0/21.3
Power system	Type Ph/V/Hz	1/220-240/50 1/220-240/50						
Water system	Input Water flow volume Pressure drop	W l/s kPa Ft-WG	42 0.1 12 4	55 0.14 21 7	68 0.17 16 5.3	80 0.21 23 7.7	102 0.27 36 4.5	140 0.6 38 44
	Sound pressure level	dB(A)	38	40	42	44	46	47
Dimension	Outline (WxDxH)	mm	881x510x245 900x560x275	1011x510x245 1030x560x275	1131x510x245 1150x560x275	1211x510x245 1230x560x275	1211x510x245 1230x560x275	1211x510x245 1230x560x275
	Package	mm	900x560x275 1150x560x275	1030x560x275 1230x560x275	1150x560x275 1230x560x275	1280x560x275 1780x560x275	1280x560x275 1780x560x275	1280x560x275 1780x560x275
Net weight/Gross weight	kg	14/17	15/19.5	16.5/21	18/22	19/24	28.5/35	34/39
Connection pipe diameter	Water inlet & outlet (inner groove) Condensed water drain (outer groove)	inch(mm)			Rc3/4			
Loading quantity	40'GP/40'HQ	set	448/490	447/482	344/386	316/355	220/247	220/247
Options	Wired remote controller Plenum with							

## 4 Rows

Model	FP-170WAF-R	FP-204WAF-R	FP-238WAF-R <sup>1</sup>	FP-272WAF-R <sup>1</sup>	FP-306WAF-R <sup>1</sup>	FP-340WAF-R <sup>1</sup>
Air flow volume(H/M/L)	CFM	948/750/500	1043/926/618	1400/971/729	1600/1235/868	1800/1006/674
ESP	Pa	30	30	30	30	30
Capacity	Cooling/Heating	kW	11.4/18.2	12.2/20.6	14.2/21.4	16.0/24.0
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Input	W	174	212	380	475	535
Water system	Water flow volume	l/s	0.51	0.58	0.78	0.89
	Pressure drop	kPa	23.9	31.5	29.2	21.7
	Ft-WG	8.0	10.5	9.7	7.2	8.7
Sound pressure level	dB(A)	51	52	56	58	60
Dimension (WxDxH)	Outline	mm	1921x510x245	1921x510x245	1671x595x354	1671x595x354
	Package	mm	1940x560x275	1940x560x275	1750x650x380	1750x650x380
Net weight/Gross weight	kg	37.5/44	37.5/44	52/60	52/60	59/66
Connection pipe diameter	Water inlet & outlet (inner groove)	inch(mm)	Rc3/4	Rc1		
	Condensed water drain (outer groove)	inch(mm)	Rc3/4	Rc1		
Loading quantity	40'GP/40'HQ	set	196/220	196/220	140/166	140/166
	Wired remote controller	—			Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	
Optionals	Plenum with filter	—	HF37	HF37	HF28	HF28
	Plenum without filter	—	HF47	HF47	HF48	HF48

## 3+1 Rows

Model	FP-34WAT-R	FP-51WAT-R	FP-68WAT-R	FP-85WAT-R	FP-102WAT-R	FP-136WAT-R
Air flow volume(H/M/L)	CFM	188/156/80	289/259/186	383/324/207	477/368/242	571/507/395
ESP	Pa	30	30	30	30	30
Capacity	Cooling/Heating	kW	1.95/1.76	3.07/2.49	3.88/3.17	4.55/3.83
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Input	W	44	59	80	87	108
Water system	Water flow volume	l/s	0.11	0.17	0.21	0.29
	Pressure drop	kPa	10.6	23.3	18.2	38
	Ft-WG	3.5	7.8	6.1	12.7	18.8
Sound pressure level	dB(A)	40	42	44	47	49
Dimension (WxDxH)	Outline	mm	881x510x245	1011x510x245	1131x510x245	1211x510x245
	Package	mm	900x560x275	1030x560x275	1150x560x275	1230x560x275
Net weight/Gross weight	kg	14.4/18.9	17.2/21.9	19.2/24.1	20.5/25.6	23.2/28.7
Connection pipe diameter	Water inlet & outlet (inner groove)	inch(mm)	Rc3/4	Rc1		
	Condensed water drain (outer groove)	inch(mm)	Rc3/4	Rc1		
Loading quantity	40'GP/40'HQ	set	448/490	392/434	344/386	316/355
	Wired remote controller	—			Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	
Optionals	Plenum with filter	—	HF31	HF32	HF33	HF34
	Plenum without filter	—	HF41	HF42	HF43	HF44

Model	FP-170WAT-R	FP-204WAT-R	FP-238WAT-R <sup>1</sup>	FP-272WAT-R <sup>1</sup>	FP-306WAT-R <sup>1</sup>	FP-340WAT-R <sup>1</sup>
Air flow volume(H/M/L)	CFM	948/836/645	1043/786/754	1400/970/729	1600/1235/867	1800/1006/674
ESP	Pa	30	30	30	30	30
Capacity	Cooling/Heating	kW	9.65/7.00	10.96/8.85	12.35/12.97	13.49/14.165
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Input	W	174	212	380	475	535
Water system	Water flow volume	l/s	0.50	0.52	0.59	0.65
	Pressure drop	kPa	28	29.4	21.8	26.6
	Ft-WG	9.3	9.8	7.3	8.9	14.0
Sound pressure level	dB(A)	51	52	56	58	60
Dimension (WxDxH)	Outline	mm	1921x510x245	1921x510x245	1671x595x354	1671x595x354
	Package	mm	1940x560x275	1940x560x275	1750x650x380	1750x650x380
Net weight/Gross weight	kg	37.5/44	37.5/44	52/60	52/60	59/66
Connection pipe diameter	Water inlet & outlet (inner groove)	inch(mm)	Rc3/4	Rc1		
	Condensed water drain (outer groove)	inch(mm)	Rc3/4	Rc1		
Loading quantity	40'GP/40'HQ	set	196/220	196/220	140/166	140/166
	Wired remote controller	—			Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	
Optionals	Plenum with filter	—	HF37	HF37	HF28	HF28
	Plenum without filter	—	HF47	HF47	HF48	HF48

\*1:This product model is not fit for EU.

## Fan Coil Unit

## Cassette Type



Classical panel



New panel



Inner groove copper



Built-in drain pump



Washable filter



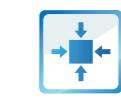
Anti-cold function



Quiet function



Multi fan speed



Compact design



Self-diagnosis

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

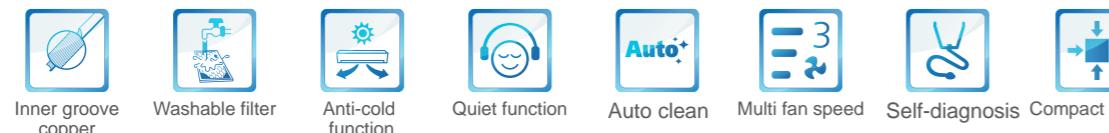


## 2 Pipe Type

Model	FP-85XD/B-T <sup>1</sup>	FP-102XD/B-T <sup>1</sup>	FP-125XD/B-T <sup>1</sup>	FP-140XD/B-T <sup>1</sup>	FP-160XD/B-T <sup>1</sup>	FP-180XD/B-T <sup>1</sup>	FP-200XD/B-T <sup>1</sup>
Air flow volume (H/M/L)	CFM	471/382/324	600/559/529	694/588/529	824/735/676	912/824/765	1059/853/794
Capacity	Cooling/Heating	kW	4.50/5.60	5.00/6.50	6.00/7.80	8.00/9.00	8.70/10.00
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Input	W	75	110	82	120	125	160
Water system	Water flow volume	l/s	0.21	0.24	0.29	0.38	0.42
	Pressure drop	kPa	24	36	24	30	34
	Ft-WG	7.872	11.871	7.872	9.840	9.840	11.221
Sound pressure level	dB(A)	39	49	43	50	51	55
Connection pipe size	Water inlet & outlet	inch(mm)	G3/4	G3/4	G3/4	G3/4	G3/4
	Condensed water drain	mm	33	33	33	33	33
Body	Dimension (WxDxH)	mm	840x840x190	840x840x190	840x840x240	840x840x240	840x840x320
	Outline Package	mm	960x960x257	960x960x257	960x960x310	960x960x310	960x960x394
Net weight/Gross weight	kg	25/33	25/33	27/34	27/35	27/35	32/41
Panel	Dimension (WxDxH)	mm	950x950x85	950x950x85	95		

# Fan Coil Unit

Floor Ceiling Type



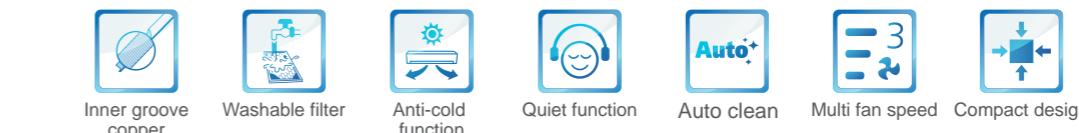
- Thanks to optimized air flue design that greatly improve the fan efficiency and lower the operation noise.
- The fan will be operated only if the chilled water inlet temperature is lower than the setting value to avoid warm air under cooling condition.



Item	Nominal test condition (temperature)			
	DB(°C)	DB(°C)	DB(°C)	DB(°C)
Cooling	27	19	7	12
Heating	21	—	70	60

# Fan Coil Unit

Wall Mounted Type



- Thanks to optimized air flue design that greatly improve the fan efficiency and lower the operation noise.
- Reasonable airflow that makes an even temperature and humidity distribution.
- The unit is with air valve for more reliable operation.



Item	Nominal test condition (temperature)			
	DB(°C)	WB(°C)	Inlet(°C)	Outlet(°C)
Cooling	27	19	7	12
Heating	21	—	60	—

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)	m <sup>3</sup> /h	400/292/250	510/395/264	680/450/430	720/615/410	1020/765/510	1100/880/550	1800/1276/850
	CFM	235/172/147	300/232/155	400/265/194	424/362/241	599/450/300	647/518/324	1059/751/500
Capacity	Cooling	kW	2.0	2.8	3.6	4.2	5.4	6.35
	Heating	kW	5.0	7.2	8.5	9.5	11.5	13.7
Power system	Type	Ph/V/Hz	1/230/50	1/230/50	1/230/50	1/230/50	1/230/50	1/230/50
	Input	W	45	58	72	80	86	78
Water system	Water flow volume	l/s	0.13	0.14	0.16	0.20	0.27	0.32
	Pressure drop	kPa	16.5	5	10	20	36	38
	Ft-WG	5.41	1.64	3.28	6.56	11.81	12.46	17.06
Sound pressure level	dB(A)	37	38	45	47	49	48	50
Connection pipe diameter	Water inlet & outlet	inch(mm)	φ3/4(19.05)	φ3/4(19.05)	φ3/4(19.05)	φ3/4(19.05)	φ3/4(19.05)	φ3/4(19.05)
	Condensed water drain	inch(mm)	φ5/8(15.60)	φ5/8(15.60)	φ5/8(15.60)	φ5/8(15.60)	φ5/8(15.60)	φ5/8(15.60)
Dimension (WxDxH)	Outline	mm	834x238x694	834x238x694	834x238x694	1300x188x600	1300x188x600	1590x238x695
	Package	mm	963x333x845	963x333x845	963x333x845	1417x251x739	1417x251x739	1717x333x845
Net weight/Gross weight	kg	26/33	26/33	27/34	27/34	34/40	48.5/57	48.5/57
Loading quantity	40'GP/40'HQ	set	224/267	224/267	224/267	220/267	220/244	220/244
Standard	Wireless remote controller	—	YB1FA	YB1FA	YB1FA	YB1FA	YB1FA	YB1FA
Optional	Wired remote controller	—	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B

Model	FP-34BA2/D-K	FP-51BA2/D-K	FP-68BA2/D-K	FP-85BA2/D-K
Air flow volume	High	CFM	212	324
	Medium	CFM	189	243
	Low	CFM	166	216
ESP	Pa	0	0	0
Capacity	Cooling	kW	2	2.5
	Heating	kW	2.7	3.2
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50
	Input	W	50	50
Water system	Water flow volume	l/s	0.111	0.125
	Pressure drop	kPa	20	36
	Ft-WG	6.56	11.81	17.38
Sound pressure level	dB(A)	35	40	43
Connection pipe diameter	Water inlet & outlet	inch(mm)	φ1/2(12.7)	φ1/2(12.7)
	Condensed water drain	inch(mm)	φ5/8(15.6)	φ5/8(15.6)
Dimension (WxDxH)	Outline	mm	845x180x275	845x180x275
	Package	mm	915x255x355	915x255x355
Net weight/Gross weight	kg	11/14	11/14	13/17
Loading quantity	40'GP/40'HQ	set	765/850	765/850
Standard	Wireless remote controller	—	YB1FA(XFAN)	YB1FA(XFAN)
Optional	Wired remote controller	—	Z4E351B	Z4E351B

# Air Curtain

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



Washable filter Quiet function Compact design Easier maintainability

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



Nominal test condition(temperature)		
Item	DB(℃)	WB(℃)
Cooling	27	19.5
Heating	21	-

Model	FM-1.25-9-K	FM-1.25-12-K	FM-1.25-15-K
Power supply	V/Hz	220-230/50	220-230/50
Power input	W	110	140
Air flow volume	m³/h	1200	1650
Sound pressure level (H/L)	dB (A)	59	61
Dimension (WxDxH)	Outline mm	900x215x193	1200x215x193
	Package mm	1015x270x256	1315x270x256
Net weight/gross weight	kg	16/18	20/22
Loading quantity	40'GP set	848	660
	40'HQ set	954	746
Setting height	m	2.3~3	2.3~3
Standard	Wired remote controller	ZY611	ZY611

## Control System Lineup

Control system	Product series		Cassette type	Floor ceiling type	Wall mounted type	Air curtain
	Wireless remote controller	YB1FA ZY611 <sup>*1</sup>				
Wired controller	Z4E351B		○	○	○	
Mechanical FCU controller	Z54352A1					
Digital thermostat	Luxury WK-010PA-K					
	WK-110PA0					
Long-distance monitoring software	Gree AC Eudemon 2009 <sup>*2</sup>	FE30-00/A(M) ME30-17/E2(M)	○	○	○	
BMS accessories	Communication module (modbus)	DQ34 <sup>*3</sup> ZJ0212				
	Optoelectronic isolated converter	RS232-RS422/485	○	○	○	
Other modules	Optoelectronic isolated signal multiplier	RS-422/485		○	○	
				○	○	

Note:

● means standard, ○ means optional.

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

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

The selection shall refer to actual models.

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

SPECIALIZED AC

# SPECIALIZED AC

**Marine Air Conditioner  
Elevator Air Conditioner  
Close Control Air Conditioner**

C  
M  
Y  
CM  
MY  
CY  
CMY  
K

C  
M  
Y  
CM  
MY  
CY  
CMY  
K



R410A

## Marine Air Conditioner

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

Display Panel  
Z5A35

Golden fin condenser, Inner groove copper, Washable filter, Quiet function, Self-diagnosis, Memory function, Compact design, °C/°F Switch

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



Model	Hump	CYR5/NaB-T	CYR9/NaB-T	CYR12/NaB-T	CYR16/NaB-T
Capacity	Cooling	W	1400	2350	3300
	BTU/h		4800	8000	11600
Heating	W	1700	2550	3500	3800
	BTU/h		5800	8700	11900
EER/COP	W/W	2.69/3.40	2.94/3.23	3.30/3.37	3.52/3.17
Power supply	Ph/V/Hz		1/220~240/50 & 1/230/60		
Power input	Cooling	kW	0.52	0.80	1.00
	Heating	kW	0.50	0.79	1.04
Input current	Cooling	A	2.9	4.2	5.1
	Heating	A	2.8	4.2	5.3
Sound pressure level	dB(A)	58	58	58	58
Refrigerant charge volume	kg	0.35	0.44	0.55	0.69
Air flow volume (H/M/L)	m³/h	320	470	466	600
	CFM	190	276	275	350
Dimension (WxDxH)	Outline	mm	447x308x311	410x446x311	410x459x346
	Package	mm	588x539x403	636x594x403	636x549x437
Net weight/Gross weight	kg	26/31	28/34	35/41	41/46
Fan motor supply air outlet diameter	inch	3.6	3.6	4.7	4.7
Condenser pipe diameter	inch	0.87	0.63	0.87	0.63
Loading quantity	40'GP	set	430	300	300
	40'HQ	set	516	360	360
					324

## Elevator Air Conditioner

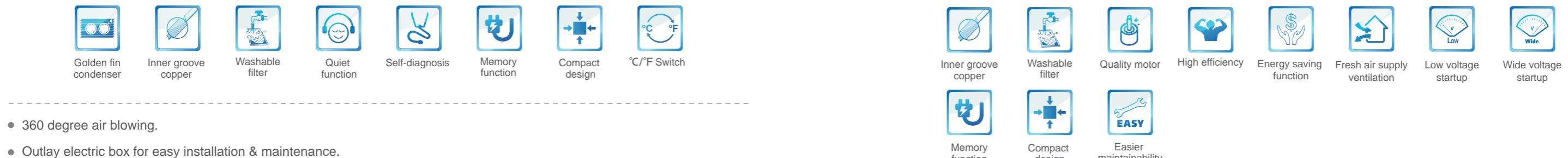
Elevator air conditioner is specially designed for temperature control of elevators in hotel, office building and residential building. The unit is with beautiful appearance, compact structure, complete functions and reliable performance, which can satisfy different customers' requirements.



2~3 kW



YB1FA(XFAN)



Inner groove copper, Washable filter, Quality motor, High efficiency, Energy saving function, Fresh air supply ventilation, Low voltage startup, Wide voltage startup

- Intelligent control according to the operation status of elevator.
- Compact structure.
- Innovative malfunction feedback function.
- With fresh air supply.
- With clock timer function.
- Adopt dual-side noise-silencing hose to decrease noise efficiently.
- Outer signal wire adopts AMP terminal connection, convenient and reliable.

Cooling operation temperature range(DB°C)					
22~43					
Model			GDT25	GDT35	
Capacity	Cooling	W	2000		3000
	BTU/h		6824		10236
EER/COP	W/W		2		2.5
Power supply	Ph/V/Hz		1/220/50		1/220/50
Power input	Cooling	kW	1		1.2
	Heating	A	4.6		5.7
Input current	Cooling	dB (A)	55		55
	Heating	CFM	0.55		0.85
Sound pressure level	kg	m³/h	360		450
Refrigerant charge volume		CFM	212		265
Air flow volume (H/M/L)	mm		350x600x400		450x700x450
Dimension (WxDxH)	Package	mm	483x783x495		572x890x542
Net weight/Gross weight	kg		46/52		59/66
Fan motor supply air outlet diameter	inch(mm)		7.244(184)		7.244(184)
Condenser pipe diameter	inch(mm)		0.276(7)		0.276(7)
Loading quantity	40'GP/40'HQ	set	276/345		208/208

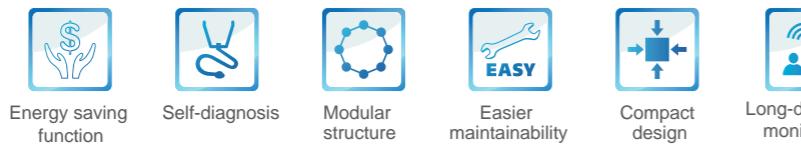


# Close Control Air Conditioner\*

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



Long-distance monitoring  
software (optional)  
FE30-00/A(M)



- Rapid and safe start-up.
- Flexible installation Several air outlet directions to meet different installation requirements.
- Modular design, up to 4 units could be freely integrated to get a max. capacity of 160kW.

Model	Normal		JKFD5DC/Na-E	JKFD5DQS/Na-E	JKFD7DC/Na-E	JKFD7DQS/Na-E	JKFD7C/Na-M	JKFD7QS/Na-M
Power supply	Ph/V/Hz		1/220/50		1/220/50		3/380/50	
	22°C/ 50%	kW	4.9/4.4		6.9/5.9		6.8/5.8	
Cooling capacity (total/sensible)	24°C/17°C	kW	5.1/4.6		7.2/6.5		7.2/6.5	
	24°C/45%	kW	5.0/4.5		7.0/6.4		7.0/6.3	
	26°C/50%	kW	5.3/4.8		7.3/6.5		7.3/6.6	
Rated input	Cooling/Heating	kW	2.05/3.2		2.8/3.6		2.5/3.4	
Rated current	Cooling/Heating	A	9.55/14.55		12.73/16.36		3.76/5.15	
Heating capacity		kW	3		3		3	
Humidifying	Rated capacity	kg/h	2		2		2	
	Power input	kW	1.5		1.5		1.5	
Range of temp. controlling and precision	°C		17~28°C±1°C		17~28°C±1°C		17~28°C±1°C	
Range of humidity and precision	%		40~60%±5%		40~60%±5%		40~60%±5%	
ESP	Pa	0	15	0	15	0	15	
	Model	Normal	JKFD5DC/Na-E(I)	JKFD5DQS/Na-E(I)	JKFD7DC/Na-E(I)	JKFD7DQS/Na-E(I)	JKFD7C/Na-E(I)	JKFD7QS/Na-E(I)
Indoor units	Air flow volume	m³/h	1850	1900	2000	2200	2000	2200
	Sound pressure level	dB(A)	61	62	61	62	61	62
	Dimension (WxDxH)	mm	800x690x2250	800x690x1950	800x690x2250	800x690x1950	800x690x2250	800x690x1950
	Package	mm	900x790x2370	900x790x2100	900x790x2370	900x790x2100	900x790x2370	900x790x2100
	Net weight/gross weight	kg	235/245	215/225	235/245	215/225	235/245	215/225
Outdoor units	Model	JKFD5/Na-E(O)	JKFD5/Na-E(O)	JKFD7/Na-E(O)	JKFD7/Na-E(O)	JKFD7/Na-E(O)	JKFD7/Na-E(O)	JKFD7/Na-E(O)
	Quantity	Set	1		1		1	
	Air flow volume	m³/h	6200		6200		6200	
	Sound pressure level	dB(A)	64		64		64	
	Dimension (WxDxH)	mm	890x980x1000		890x980x1000		890x980x1000	
	Package	mm	1060x930x560		1060x930x560		1060x930x560	
	Net weight/gross weight	kg	60/80		60/80		60/80	
Connecting pipe	Liquid/Gas	mm	φ9.52/12		φ9.52/12		φ9.52/12	
	Method of connection		Flared-fitting Joint		Flared-fitting Joint		Flared-fitting Joint	
Loading quantity	40'GP/40'HQ	set	0/20	20/20	0/20	20/20	0/20	20/20

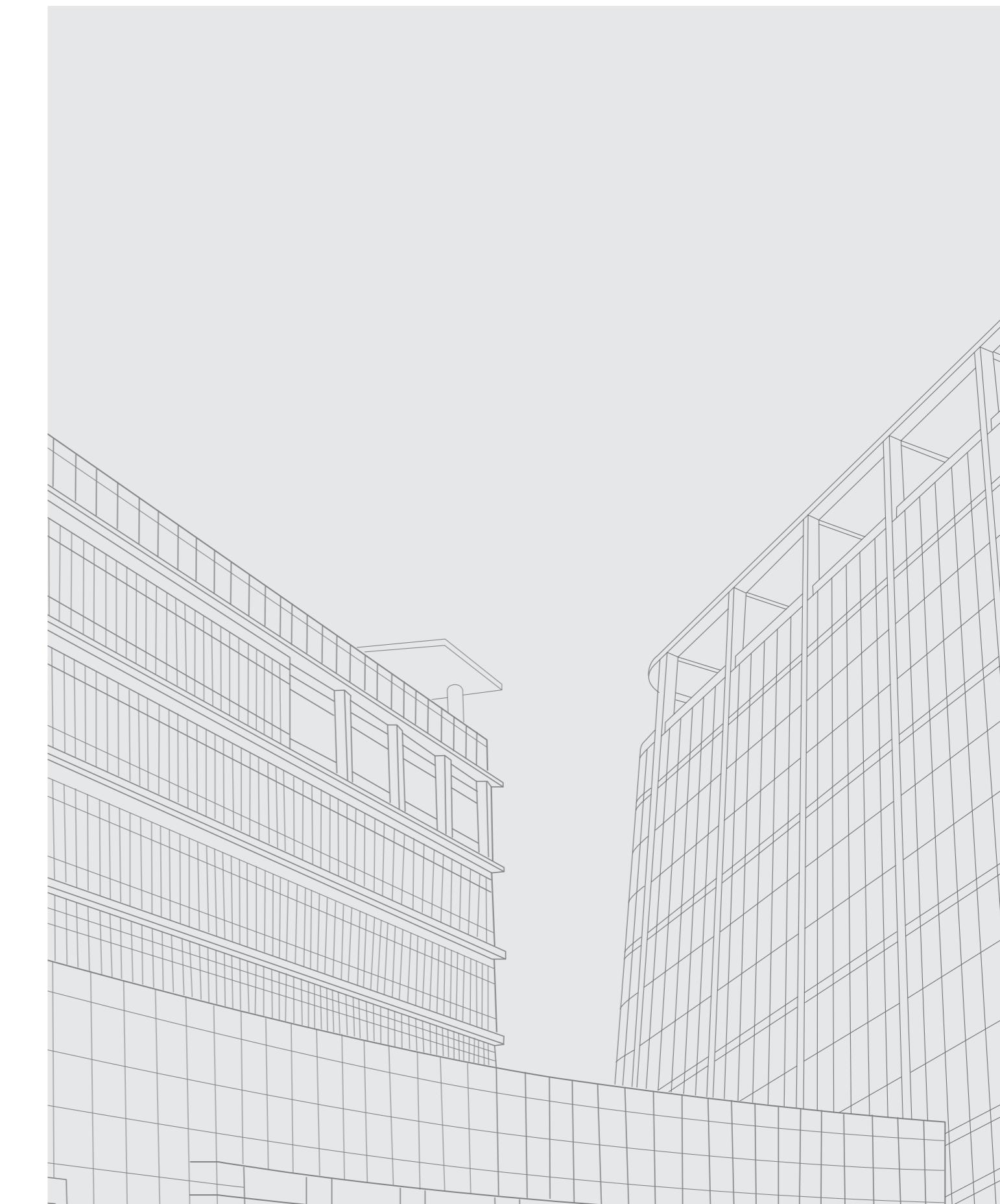
Notes:  
 1. The cooling capacity was tested when the outdoor temperature was as follows: Dry-bulb temperature was 35°C; Wet-bulb temperature was 24°C.  
 2. The noise value was tested in the semi-anechoic chamber but the actual value will be a little higher for the change of ambient temperature.  
 3. The temperature range of running environment is between -35°C~48°C

\*This product model is not fit for EU.

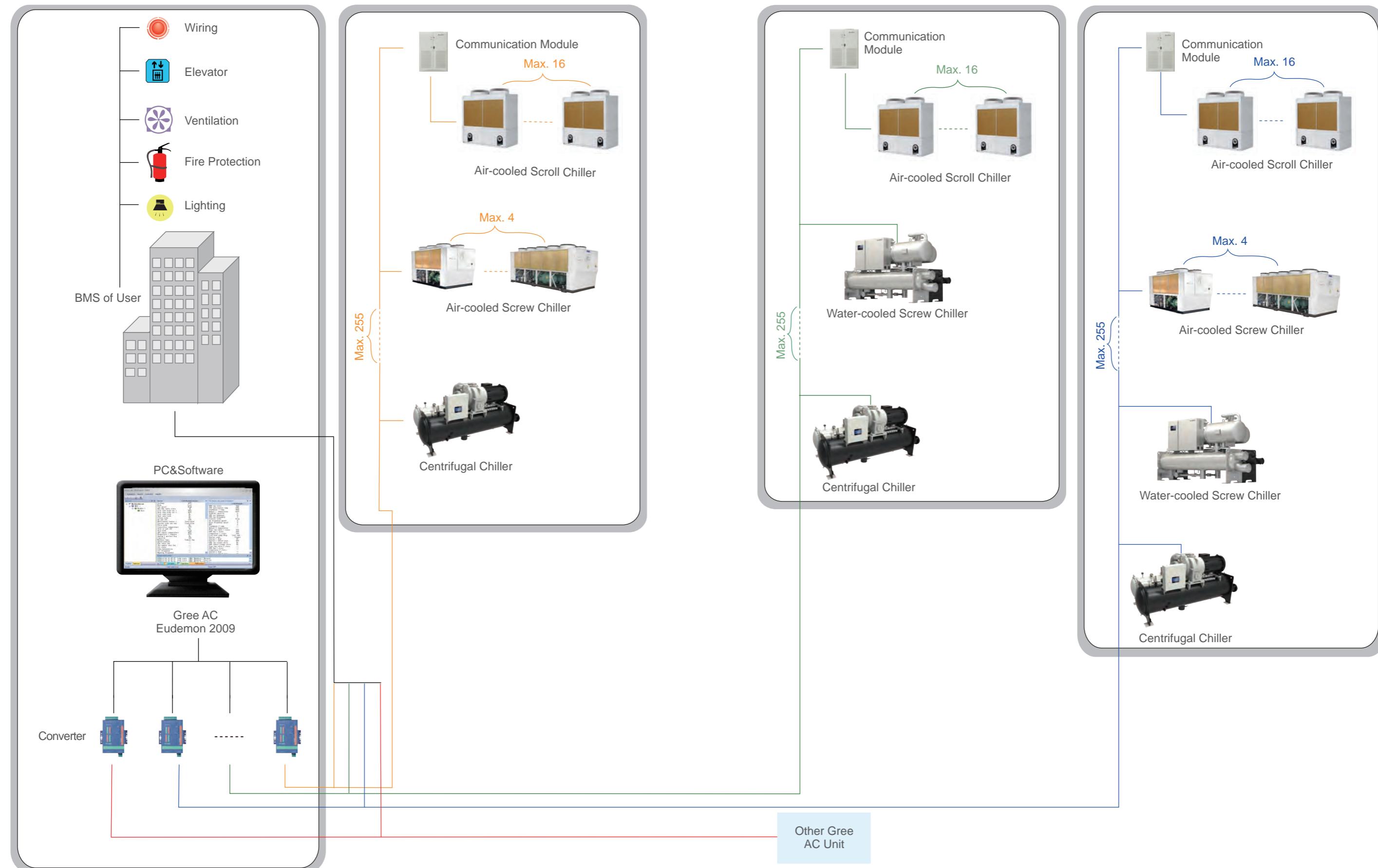
Model	Normal		JKFD13C/Na-M	JKFD13QS/Na-M	JKFD13SX/Na-M	JKFD19C/Na-M	JKFD19QS/Na-M	JKFD19SX/Na-M
Power supply	Ph/V/Hz		3/380/50				3/380/50	
	22°C/ 50%	kW		13.8/12.5				18.0/17.0
Cooling capacity (total/sensible)	24°C/17°C	kW		14.0/12.6				19.0/17.4
	24°C/45%	kW		13.9/12.8				18.8/17.8
	26°C/50%	kW		15.6/14.0				20.3/18.9
Rated input	Cooling/Heating	kW		6.0/7.1				7.9/10.5
Rated current	Cooling/Heating	A		9.10/10.77				11.97/15.91
Heating capacity		kW		6				9
Humidifying	Rated capacity	kg/h		4				4
	Power input	kW		3				3
Range of temp. controlling and precision	°C			17~28°C±1°C				17~28°C±1°C
Range of humidity and precision	%			40~60%±5%				40~60%±5%
ESP	Pa	0	50	50	0	100	100	100
	Model	Normal	JKFD13C/Na-M(I)	JKFD13QS/Na-M(I)	JKFD13SX/Na-M(I)	JKFD19C/Na-M(I)	JKFD19QS/Na-M(I)	JKFD19SX/Na-M(I)
Indoor units	Air flow volume	m³/h	4900	4800	4500	7200	6600	6600
	Sound pressure level	dB(A)	62	64	64	65	67	67
	Dimension (WxDxH)	mm	1100x810x2250	1100x810x1950	1100x810x1950	1380x810x2250	1380x810x1950	1380x810x1950
	Package	mm	1200x910x2370	1200x910x2100	1200x910x2100	1480x910x2370	1480x910x2100	1480x910x2070
	Net weight/gross weight	kg	355/370	325/340	325/340	435/450	395/410	430/445
Outdoor units	Model	JKFD13/Na-M(O)	JKFD13/Na-M(O)	JKFD13/Na-M(O)	JKFD19/Na-M(O)	JKFD19/Na-M(O)	JKFD19/Na-M(O)	JKFD19/Na-M(O)
	Quantity	Set	1					1
	Air flow volume	m³/h		9800				11900
	Sound pressure level	dB(A)		64				64
	Dimension (WxDxH)	mm		1080x1180x960				1080x1180x1040
	Package	mm		1262x1133x634				1262x1133x634
	Net weight/gross weight	kg		100/115				100/115
	Liquid/Gas	mm		φ12/16				φ16/19
	Method of connection			Flared-fitting Joint				Flared-fitting Joint
Loading quantity	40'GP/40'HQ	set	0/14	14/14	14/14	0/11	11/11	11/11

Model	Normal		JKFD25C2/Na-M	JKFD25QS2/Na-M	JKFD25SX2/Na-M	JKFD40C2/Na-M	JKFD40QS2/Na-M	JKFD40SX2/Na-M
Power supply	Ph/V/Hz		3/380/50				3/380/50	
	22°C/ 50%	kW		26.5/23.8				39.4/36.0
Cooling capacity (total/sensible)	24°C/17°C	kW		27.0/24.3				40.0/36.1
	24°C/45%	kW		26.8/24.0				39.2/37.5
	26°C/50%	kW		27.6/24.5				42.5/38.0
Rated input	Cooling/Heating	kW		11.2/13.8				16.5/21.0
Rated current	Cooling/Heating	A		16.97/20.91				24.24/31.82
Heating capacity		kW		12				18
Humidifying	Rated capacity	kg/h		8				8
	Power input	kW		6				6
Range of temp. controlling and precision	°C			17~28°C±1°C				17~28°C±1°C
Range of humidity and precision	%			40~60%±5%				40~60%±5%
ESP	Pa	0	100	100	0	100	100	100
	Model	Normal	JKFD25C2/Na-M(I)	JKFD25QS2/Na-M(I)	JKFD25SX2/Na-M(I)	JKFD40C2/Na-M(I)	JKFD40QS2/Na-M(I)	JKFD40SX2/Na-M(I)
Indoor units	Air flow volume	m³/h	7800	7500	7500	13000	12500	12500
	Sound pressure level	dB(A)	66	68	68	70	70	70
	Dimension (WxDxH)	mm	1900x810x2250	1900x810x1950	1900x810x1950	2480x810x2250	2480x810x1950	2480x810x1950
	Package	mm	2000x910x2					

Model	Normal	JKFD40C/Na-M	JKFD40QS/Na-M
Power supply	Ph/V/Hz	3/380/50	
	22°C/ 50%	kW	39.3/36.0
Cooling capacity (total/sensible)	24°C/17°C	kW	40.0/36.1
	24°C/45%	kW	39.4/37.4
	26°C/50%	kW	42.3/38.0
Rated input	Cooling/Heating	kW	16.5/21.0
Rated current	Cooling/Heating	A	34/38
Heating capacity		kW	18
Humidifying	Rated capacity	kg/h	8
	Power input	kW	6
Range of temp. controlling and precision	°C		17~28°C±1°C
Range of humidity and precision	%		40~60%±5%
ESP	Pa	0	100
Indoor units	Model	Normal	
		JKFD40C/Na-M(I)	JKFD40QS/Na-M(I)
	Air flow volume	m³/h	13000
	Sound pressure level	dB(A)	68
	Dimension (WxDxH)	mm	2480x810x2250
Outdoor units	Outline Package	mm	2560x910x2480
	Net weight/gross weight	kg	755/795
	Liquid/Gas	mm	240/280
	Connecting pipe	Method of connection	φ19/22 Soldering Joint
	Loading quantity	40'GP/40'HQ	—
		0/4	4/4



## LONG-DISTANCE CONTROL SYSTEM



## REFERENCE PROJECTS



CECMED National Drug Laboratory  
Water-cooled Screw Chiller Hydronic Air Handling Unit Fan Coil Unit  
Cuba



Bahcelievler Government Hospital  
GMV  
Turkey



B.N. Eltsin's Community Center  
GMV  
Russia



Trading Building  
Air Cooled Screw Chiller  
Oman



Conad Supermarket  
GMV  
Italy



Al-Bustan Hotel  
GMV  
Yemen



Bella Roma Hotel  
GMV  
Iraq



XCMG Brasil  
GMV  
Brazil

## Reference Projects Lineup

Country	Project Name	Installed Series
Panama	Panama De Universidad Technology	GMV
Cuba	CECMED National Drug Laboratory	Water-cooled Screw Chiller; Hydronic Air Handling Unit; Fan Coil Unit
India	The Research & Development Headquarters of Biocon	Air-cooled Screw Chiller; Water-cooled Screw Chiller
Laos	State Power Corporation of Laos	GMV
Bahrain	IBN School	Rooftop Package Unit
Kuwait	Substation for Ministry of Electricity and Water	Rooftop Package Unit
Libya	Rail Station	Air-cooled Screw Chiller
Turkey	Adana Sabanci Mosque	GMV
Turkey	Bahcelievler Government Hospital	GMV
Turkey	Nursery House	GMV
Russia	Arbitration Tribunal	GMV
Russia	Design and Construction Department	GMV
Russia	Court of Law	GMV
Russia	Design and Research Institute	GMV
Russia	Office of Russian Federal Tax Service	GMV
Russia	B.N. Eltsin's Community Center of Uralskiy region	GMV
Russia	Transport and Logistics Centre	Duct Split Unit
Laos	Lao Telecom	Air-cooled Screw Chiller; Closed Control Air Conditioner
Laos	Agriculture Promotion Bank	GMV
Bahrain	Millennium Tower	Fan Coil Unit
Oman	Trading Building	Air-cooled Screw Chiller
Turkey	Tepe Home Project	GMV
Turkey	Adiyaman Patisserie	GMV
Turkey	Suluntepe Sport Complex	GMV
Russia	Green Park Commercial Center	GMV
Iraq	NawRoz City	Super Free Match
Iraq	Lebanese Village	DC Inverter GMV; U-Match; Super Free Match; Air-cooled Screw Chiller
Iraq	New Eskan Project	Super Free Match
Libya	Land Registration Department	GMV
Turkey	Istanbul Kabataş Residence	GMV
Russia	Greenwood	GMV
Italy	Conad Supermarket	GMV
Russia	Furniture Trading centre	GMV
Russia	Tools Shop	U-Match
Ghana	Atlantic Hotel	GMV
Bahrain	Swiss Bell Hotel	GMV
Qatar	Hilton Garden Inn	Fan Coil Unit
Yemen	Al-Bustan	GMV
Turkey	Antakya Neccar Hotel	GMV
Russia	Lighthouse Hotel	GMV
Brazil	XCMG Brasil	GMV
Qatar	DVAC Factory	Rooftop Package Unit; Duct Split Unit
Turkey	OASIS Factory	GMV
Russia	TTS Tooltechnic Systems AG & Co	GMV
Russia	Aircraft Plant	U-Match
Russia	All-Russian Sectoral Textile Complex	Duct Split Unit
India	Biocon R&D Building	Water-cooled Screw Chiller
Jordan	Medical Clinics Building	U-Match
Greece	Armonia Rehabilitation Medical Center	GMV
Croatia	Ex. Dairy Put Murvice	Free Match
Iraq	Phoenix Hotel	Rooftop Package Unit
Macao, China	Nittobo Glass Weaving	Water-cooled Screw Chiller
Australia	SKF	Heat Recovery GMV

## Note

## Award and Certification



ISO 9001 Quality System Certificate



ISO 14001 Environment Management System Certificate



ISO 18001 Occupation Healthy Safety System Certificate



Canadian CSA Certificate



German TÜV Certificate



3C Certificate



European Communities CE Certificate



American UL Certificate



Russian Safety Certificate



EQM



SASO Certificate



Mexico NOM Safety Certificate



German GS Certificate



European EMC Certificate



Argentina Safe Certificate



China EMC Certificate



Hongkong Energy-saving Certificate



Hongkong Safety Certificate



Australian SAA Safe Certificate



Australia SAA Certificate



CQC Certificate



America ETL Certificate



Canadian ETL Certificate



Thailand TIS Certificate