

#### 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





AIR CONDITIONER

Multi

I VRF 5

# Gree GMV- History of Development

Gree Modular Heat Recovery DC Inverter Multi VRF System and DC Inverter Multi VRF System were included in 2010 National Torch Program and 2010 National New Products Program respectively.

2005.11

In Nov., the world's first Low Ambient Temperature Heat Pump Multi VRF System was developed in Gree, gaining 16 invention patents and being appraised by authorities as "World Leading". In 2006, Gree Digital Ultra-low Temperature Air Source Heat Pump Scroll VRF System was listed in the National New Products Program.

In order to meet consumers' growing demands on N comfortable air conditioners for larger space, Gree started developing the Modular DC Inverter Multi VRF System and finally made in 2006. The system is capable of free combination from several modules and becomes the star product in Gree central air conditioners after launching.

> Gree succeeded in developing GMV Digital 2002 Multi VRF System and DC Inverter Multi VRF System, breaking the monopoly of Japanese brands and conquering the high-end market of multi VRF system.

2012 Gree launched the 5th generation of inverter multi VRF system — GMV5 All DC Inverter Multi VRF. This system possesses the industry-leading EER and makes a breakthrough in comfort, intelligent control and design flexibility.

> Adhering to the philosophy of "Energy Saving and Environmental Protection" Gree bogon to and Environmental Protection", Gree began to develop the more environment-friendly and humanized GPDS DC Inverter Multi VRF Home-GMV and finally launched it in 2009. This system integrates air conditioning, water heating and flooring heating with IPLV up to 6.6.

2003 In order to develop more environmental air conditioners and improve energy utilization rate, Gree started independent research and development. In 2006, Gree launched the world's first Heat Recovery Digital Multi VRF System, which was listed in 2007 National Torch Program and marked Gree's grasp on high-end technology of multi VRF system. Currently, this system is sold to many countries abroad.

> Gree was among the first manufacturers in Chinese home appliances industry to enter the field of multi VRF system, and succeeded in developing the first generation of intelligent multi VRF system.

Gree entered high-end technology field of multi VRF system. Other than directly purchasing units and technologies from aboard like other Chinese brands, Gree always insisted on self-innovation.



**GMV5** DC Inverter Multi VRF System with its high-efficient inverter compressors has four exciting features which are different from those found on traditional inverter air conditioners: excellent energy-saving effect, more reliable and precise operation, smarter network control, providing users with best air conditioning experience.

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# GMV5



# **Key Features**

# All DC Inverter Technology to Improve Compression Efficiency

All DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.

### All DC Inverter Compressor

 All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.



- High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.
- Technology of Maximum Torque Control with Minimum Current

It can reduce energy loss caused by device winding so as to realize higher efficiency.



 Low-frequency Torque Control It can directly control motor torque, through which fan motor can run at a low speed. Users will feel more comfortable while requirements of the system are also met.





 180° Sine Wave DC Speed Varying Technology It can satisfy various places' demands for different temperature and is able to save a great deal of electricity and provide users with utmost comfort at the same time.



### Sensorless DC Inverter Fan Motor

• Stepless speed regulation ranges from 5Hz to 65Hz.Compared with traditional inverter motors, the operation is more energy-saving.



• Sensorless control technology guarantees lower noise, less vibration and steadier operation.



# Compact design

With compact design, the outdoor unit can be carried to the roof of building through elevator, with no need of crane. It is easier for delivery and installation.



## 88HP Max Capacity-The Largest Free Combination

Max capacity of single outdoor unit reaches 22HP and max combination capacity is even up to 88HP, in an industry leading level.

Max combination capacity is extended to 88HP



# Non-polar CAN Technology to Improve Communication Efficiency

• Gree is the first one to adopt non-polar CAN communication technology in the industry. CAN communication technology provides quicker system response speed, more convenient installation debugging and more reliable communication data.

Performance Index	Company A Multi-VRF Network
	Software check
Reliability	One unit's communication error may lead to a breakdown of the whole network
Communication Efficiency	Low utilization
	Communication speed is about 10Kbps.
Compatibility	One main network, difficult to add new equipment
Communication Distance	1000m

• The non-polar CAN communication technology is applied to support flexible wiring installation, greatly reducing construction difficulties.



GMV5 DC Inverter CAN Network	
Hardware check, more reliable	
If one unit has errors, it will exit from the network without any influence to other units.	
High utilization	
Communication speed is 20Kbps.	
Multiple main networks, easy to add new equipment.	
1500m	



GMV5 07/08

## Wide Range of Voltage and Operation Condition

 Working voltage range of GMV5 system has been improved to 320V~460V, which surpasses the national standard of 342V~420V. For places with unsteady voltage, this system can still be running well.





GMV5 can realize a combination of 4 outdoor unit modules connecting with as many as 80 indoor units. It's especially applicable for business building or hotels.







Max.IDU Connection: 80 sets

## **Refrigerant Storage and Distribution**

The GMV5 system is designed without liquid receiver and the excess refrigerant is stored in the piping, which can minimize the refrigerant charging volume and enhance the control accuracy of refrigerant.



# High Efficiency and More Energy Saving

Thanks to the advanced all DC inverter technology, optimized system design and accurate intelligent control technology, EER of GMV5 is up to 4.31 while COP is up to 4.55.



## New Generation of Energy-saving Operation Control Technology with Energy Saving Up to 20%

The GMV5 system has 2 modes for energy saving, which can be chosen to meet different electricity demands.

#### Mode 1:

In auto energy-saving mode, the system will self-adjust parameters according to the operation status, thus to lower the cost of electricity. Up to 15% of energy can be saved.

#### Mode 2:

In compulsory energy-saving mode, the system will limit power output forcibly. Up to 20% of energy can be saved.

## Intelligent defrosting control

During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness of frost, high pressure of system and blockage status of heat exchanger.



Traditional Defrosting Mode







#### Intelligent Defrosting Mode

GMV5 **G**09/10

# Accurate Intelligent Allocation Technology of Capacity and Output of Optimal Portion to Ensure Highest Efficiency

- When total load demands more than 75% of a running system's capacity, one more unit will automatically start;
- When total load demands less than 40% of a running system's capacity, one unit will automatically shut down:
- Therefore, each unit shares 40%-75% of the total load.
- Experiments show that an air conditioner costs the least energy when it's operating within 40%-75% of its capacity.

	Company A	Gree GMV
Allocation Method	10HP(full load) + 2HP(low load)	6HP(partial load) + 6HP(partial load)
Performance Compared	Unit costs more energy and may be soon damaged.	Unit costs less energy and can always be kept in good condition.

#### • Output of Optimal Portion to Ensure Highest Efficiency

The best heating or cooling performance can be realized in the most energy-saving way. DC inverter compressor and DC inverter fan will also be operating in this way to ensure high efficiency.



# Sub-cooling Control Technology to Ensure Optimal Cooling and Heating

• Heat exchange loop can control the first subcooling process of heat exchanger. Subcooling degree can reach 11 °C.



• Subcooling loop can realize 9 °C second subcooling to guarantee cooling and heating performance.



# Comfortable Design for A Better Life

The GMV5 system has a wide range of working conditions. Whether it's in a cool winter or a hot summer, normal operation is guaranteed with the least noise, making users feel more comfortable.

# Outdoor Unit Quiet Mode and Quiet Control

#### Quiet at night

The system can record the highest outdoor temperature. At night, the system will automatically turn to quiet mode. There are 9 quiet modes which can be set according to actual needs.

#### Quiet in compulsion

The system can also be set in this mode to ensure low noise as long as it is operating. Noise is as low as 45dB(A).



#### Quiet Control

# Temperature Controlled by Wired Controller with Higher Efficiency and More **Energy Saving**

Through setting temperature lower limit in cooling or dry mode, and setting temperature upper limit in heating, 3D heating or heat supply mode, the system is able to operate in a smaller temperature range so as to achieve energy saving.





## Quiet Indoor Unit

The indoor unit of the GMV5 system also adopts DC inverter motors to realize stepless regulation. According to indoor temperature or people's needs, users can set this mode through wired controller. Noise is as low as 22dB(A).



# **Excellent Performance Ensured** by Advanced Technology

# Two-stage Oil Separation Control Technology (Patented)

First-stage oil separator adopts a filtration expansion valve with separation efficiency of 98%; Second-stage oil separator will separate the remained 2% refrigerant oil with separation efficiency of 95%. General oil separation efficiency reaches 99.9%.

# Fast Start-up in Heating

DC Compressor is first started to avoid too much electric current. Inverter compressor can operate in high frequency once starts up, so as to produce more heat.



# **7** Speeds Indoor Fan

Indoor fan speed can be set in 7 levels by wired controller. They are auto, low speed, medium-low speed, medium speed, medium-high speed, high speed and turbo. When the wired controller is on, press "FAN" button to set indoor fan speed circularly as below:



# Vil Return Control Technology

#### New Oil Return Control

Gree new oil return control technology effectively controls system oil return and oil storage status of each compressor, which greatly improves the operation lifespan of compressor.



#### • Specialized Compressor Oil Storage Control

The system applies specialized compressor oil storage technology, which can control the lowest oil level for compressor operation.







# Oil Balance Control Technology

#### Oil Balance between Each Module

Based on the actual status of each module and compressor, the system can regulate compressor's operation and realize oil balance of each module.



#### Oil Balance between Each Compressor

Refrigerant is taken into the compressor by the suction pipe and then runs through the cooling system. It can control the oil level and minimum oil volume required by each compressor so as to realize oil balance between each compressor.



# Modules Rotation Operating to Maximize Lifespan

#### Modules 8h rotation operating

The operating priority sequence of the outdoor unit modules will be changed without restart when the system accumulatively operates for 8 hours, which can maximize the service life of the system.



8 Hours Rotation

## Intelligent Detection Control

#### Pressure Sensor Detection Control

Pressure sensor can precisely detect system high pressure and low pressure, and adjust output of fan and compressor, so as to make sure the system can work under the most energy-saving pressure condition.



#### • Temperature Sensor Detection Control

Various temperature sensors are equipped to detect ambient temperature, indoor temperature and refrigerant's evaporating temperature, from which the operation status can be measured.

## Multi Electronic Expansion Valves Control

Outdoor electronic expansion valve not only has throttling effect, but also control refrigerant flow. The system adopts multi electronic expansion valves control with total 960 grades regulated by two electronic expansion valves, so as to regulate refrigerant flow precisely and ensures reliable operation of system.



## Smaller Impact to Power Grid

The start-up frequency of inverter compressor is gradually increased from 0Hz to the appointed operation frequency. The start-up current of compressor rotor is decreased by reducing load torque, hence impact to power grid during start-up is reduced and electromagnetic impact to compressor is reduced too.



# Highly Anticorrosive Golden Fins

The primary material of Golden Fin is Al-Mn(Alumium-Manganese) anti-rust alloy, which is coated with the Golden Protection Layer(Components: Exoxy Resin & Modified Acrylic, Sillcon free), the anti-corrosice performance in salt-spray testing is 200%~300% higher than normal Blue Fin\*.

Note: Satt-spary testing result is from GREE materials chemistry testing laboratory.

# Emergency Auto-Off Control

The outdoor unit can be linked with a fire alarm signal. In case of emergency, unit can automatically turn off to avoid risk or further loss.

# Lower Power Consumption Operation Mode

As for the area with power consumption limited time period, the maximum power consumption can be set for the operation. Basing on the power consumption of unit and user's requirement, power consumption limitation can be set according to 100%, 90% or80% of the capacity of complete unit. In this case, user can have more selection at the power consumption limited time period.









Intelligent Power Consumption Limit



# Electricity Shortage Identification

The outdoor unit can receive a power signal of electricity shortage. In some places like first-class hotels, if diesel Normal Operatior generator is used temporarily for providing electricity, outdoor unit will send the electricity shortage signal to indoor unit. In this case, only VIP rooms can be provided with air conditioning service.



# Excellent Emergency Operation Function to Ensure Reliable Operation

#### • Emergency Function

The GMV 5 system can realize a combination of 4 outdoor unit modules. When error is occurred to one of the modules, the others will perform the emergency operation to sustain the air conditioning.



#### • Emergency Operation of Compressor

All the compressors in each single module are DC Inverter based, when one compressor has error, others will perform the emergency operation.



#### FRROR

## • Emergency Operation of Fan

Double-fan design fan ensures that one fan can still work even if the other one has error.



## SRL (Self-reaction Load) Self-adaptive Control

SRL (Self-reaction Load) can intelligently detect and control system parameters and automatically adapt to indoor cold/heat load requirement to reducing unit's power and improve the energy efficiency.



# ODU High Static Pressure Design

System has 4 levels of static pressure that can be set. Up to 82Pa pressure can be set for an outdoor unit. This design is especially useful when an outdoor unit needs to be placed indoor.

# 1000m Pipe Design for Flexible Installation

GMV5 system can be applied in different types of building construction. One of its advantages is the simple pipe design, which will simplify the installation and reduce installation cost.

- Max total pipe length reaches 1000m (with limitation)
- Actual pipe length between the outdoor unit and the farthest indoor unit: 165m
- Max height difference between indoor unit and outdoor unit: 90m

a: Distance between the first branch and the farthest indoor unit. b: Distance between the frist branch and the nearest indoor unit

# Engineering Debugging for **Convenient Construction**

#### 1) GMV5 has five auto debugging features:

- Automatic allocation of IDU and ODU addresses
- Automatic detection of IDU and ODU quantity
- Automatic detection of errors
- Automatic start-up of debugging
- Real-time judgment of pipe errors

### 2) Diversified debugging methods for satisfying different requirements and improving debugging efficiency:

①Button debugging of outdoor unit

②Special GMV debugging system

③CE41-24/F(C) debugger\* has functions of debugging of complete unit, independent debugging of indoor unit, malfunction display, data record and so on. It's no need to connect special software and PC. Moreover, it can connect external USB storage data





(1)Note:\* This debugger is under development.



# Auto-refrigerant Recovery for Easy Maintenance

When auto refrigerant recovery function is set and cut-off valve of liquid pipe is closed during maintenance, the system will automatically operate compressor, EXV, solenoid valve and fan, etc. Taking advantage of compressor power, the refrigerant is recovered at the condensing side of outdoor unit to achieve environmental effect. Meanwhile, system low pressure is displayed simultaneously during refrigerant recovery.



# Inspection Window for Convenient Checking

Inspection window is available for guick checking of system operation status. No need to open panel for checking, which will be more time-saving and easier for maintenance.



# **Flexible Wiring**

Common wire can meet the communication demand with no need of specialized communication wire. Common sheath twisted pair cable can be used as there is no polarity requirement.



COMPANY A





GMV5



Gree GMV5 provides hotels with unique season setting function and key-card control function.

# Season Setting

Cooling or heating mode can be deactivated during a certain season to avoid affecting unit's normal operation due to mode conflict.

# Key-card Control for Hotel Management

The unit can be turned on or off by inserting or removing the key-card. When the key-card is removed, the system can remember all the setting and stop operation. When the key-card is inserted back, the system will be under standby mode or operate according to the status before removing key-card. It is well suited to hotels, restaurants, etc.



# Auto Addressing of Outdoor and Indoor Unit

CAN network is adopted to achieve auto addressing of outdoor and indoor unit. It can allocate IDU and ODU addresses and detect IDU and ODU quantity, which greatly improves construction efficiency.





Screw termina

GMV5





# SPECIFICATIONS & PARAMETER OF OUTDOOR UNITS

# Voltdoor Units Lineup

Ν	NODEL	GMV-224WM/B-X (8HP)	GMV-280WM/B-X (10HP)	GMV-335WMB-X (12HP)	GMV-400WM/B-X (14HP)	GMV-450WM/B-X (16HP)	GMV-504WMB-X (18HP)	GMV-560WMB-X (20HP)	GMV-615WMB-X (22HP)
GM	IV-224WM/B-X								
GM	IV-280WM/B-X								
GM	IV-335WM/B-X								
GM	IV-400WM/B-X				٠				
GM	IV-450WM/B-X					۲			
GM	IV-504WM/B-X						۲		
GM	IV-560WM/B-X							٠	
GM	IV-615WM/B-X								
GM	IV-680WM/B-X								
GM	IV-730WM/B-X								
GM	IV-785WM/B-X								
GM	IV-850WM/B-X							۲	
GM	IV-900WM/B-X		٠						
GM	1V-960WM/B-X								
GM	V-1010WM/B-X								
GM	V-1065WM/B-X								
GM	V-1130WM/B-X								
GM	V-1180WM/B-X								
GM	V-1235WM/B-X								
GM	V-1300WM/B-X								
GM	V-1350WM/B-X							•	
GM	V-1410WM/B-X		•			•			
GM	V-1460WM/B-X					· ·			
GM	V-1515WM/B-X							•	
GM	V-1580WM/B-X								
GM	V-1630W/M/B-X			•					
GM	V-1685\W/M/B-X								
CM									
GIVI	V-1750VVIVI/B-A						-		
GIVI								•	
Givi	V-1643VVIV/B-A								
GM	V-1908VVIV/B-X					•			
GW	V-1902VVIVI/B-A						-		
GM	V-2016VVIM/B-X								
GM	V-2072WM/B-X							•	
GM	V-2184WM/B-X		-						
GM	V-2240WM/B-X								
GM	V-2295WM/B-X								
GM	V-2350WM/B-X								
GM	V-2405WM/B-X						-		
GM	V-2460WM/B-X							*	
				1			1		

# Specifications of Outdoor Units

## 380~415V,50/60Hz

Model		-	GMV- 224WM/B-X	GMV- 280WM/B-X	GMV- 335WM/B-X	GMV- 400WM/B-X	GMV- 450WM/B-X	GMV- 504WM/B-X	GMV- 560WM/B-X	GMV- 615WM/B-X
Capacity range		HP	8	10	12	14	16	18	20	22
Canacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
Capacity	Heating	kW	25	31.5	37.5	45	50	56.5	63	69
EER		kW/kW	4.31	4	3.98	3.76	3.56	3.55	3.50	3.32
COP		kW/kW	4.55	4.32	4.17	4.05	3.85	4.01	3.80	3.65
Power supply		V/Ph/Hz				380~415V-3	Ph-50/60Hz			
Max. Circuit/Fus	e Current	A	15.7/20	20.9/25	24.7/32	28.8/40	33.2/40	44.7/50	50/63	52/63
Power	Cooling	kW	5.2	7	8.41	10.65	12.65	14.2	16.0	18.5
comsumption	Heating	kW	5.5	7.3	9	11.1	13	14.1	16.6	18.9
Maximum drive	DU NO.	unit	13	16	19	23	26	29	32	35
Refrigerant Cha	ge volume	kg	5.9	6.7	8.2	9.8	10.3	11.3	14.3	14.3
Sound pressure	level	dB(A)	60	61	63	63	63	63	63	64
	Liquid	mm								
Connecting	Gas	mm								
pipe	Oil balance	mm								
Dimension	Outline	mm	930*76	5*1605		1340*765*1605			1340*765*1740	
(W*D*H)	Package	mm	1010*84	40*1775		1420*840*1775			1420*840*1910	
Net weight/Gros	s weight	kg	225/235	225/235	285/300	360/375	360/375	360/375	385/400	385/400
Loading	40' GP	set	24	24	16	16	16	16	16	16
quantity	40' HQ	set	24	24	16	16	16	16	16	16

#### 208/230V, 60Hz

Model			GMV-224 WM/B-F	GMV-280 WM/B-F	GMV-335 WM/B-F	GMV-400 WM/B-F	GMV-450 WM/B-F	GMV-504 WM/B-F <sup>-1</sup>	GMV-560 WM/B-F <sup>-1</sup>	GMV-615 WM/B-F <sup>*1</sup>
Capacity range		HP	8	10	12	14	16	18	20	22
Canacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
Oapaony	Heating	kW	25	31.5	37.5	45	50	56	63	69
EER		kW/kW	4.31	4	3.98	3.76	3.56	3.38	2.97	2.75
COP		kW/kW	4.55	4.32	4.17	4.05	3.85	3.84	3.6	3.16
Power supply	Cooling	V/Ph/Hz				208/230V-	-3Ph-60Hz			
MCA		A	36	38	43	60	65	68	74	80
MOP		A	60	60	60	80	90	93	103	112
Power	Cooling	kW	5.2	7	8.41	10.65	12.65	14.9	18.9	22.3
comsumption	Heating	kW	5.5	7.3	9.0	11.1	13	14.6	17.5	21.8
Maximum drive I	DU NO.	unit	13	16	19	23	26	31	34	38
Refrigerant Char	ge volume	kg	5.9	6.7	8.2	9.8	10.3	12.7	13	13.5
Sound pressure	level	dB(A)	60	61	63	63	63	65	66	66
Connecting	Liquid	mm								
pipe	Gas	mm								
	Oil balance	mm								
Dimension	Outline	mm	930*76	5*1605		1340*765*1605			1340*765*1740	
(W*D*H)	Package	mm	1010*84	10*1775		1420*840*1775			1420*840*1910	
Net weight/Gross	s weight	kg	225/235	225/235	285/300	360/375	360/375	400/415	400/415	400/415
Loading	40' GP	set	24	24	16	16	16	16	16	16
quantity	40' HQ	set	24	24	16	16	16	16	16	16

#### 440~460V,60Hz

Model			GMV-224 WM/B-U	GMV-280 WM/B-U	GMV-335 WM/B-U	GMV-400 WM/B-U	GMV-450 WM/B-U	GMV-504 WM/B-U <sup>⊶</sup>	GMV-560 WM/B-U <sup>-1</sup>	GMV-615 WM/B-F <sup>⊶</sup>
Capacity range		HP	8	10	12	14	16	18	20	22
Canacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
Odpacity	Heating	kW	25	31.5	37.5	45	50	56	63	69
EER		kW/kW	3.92	3.68	3.76	3.51	3.35	3.38	2.97	2.75
COP		kW/kW	4.17	3.91	3.91	3.91	3.68	3.84	3.6	3.16
Power supply	Cooling	V/Ph/Hz				440-460V	-3Ph-60Hz			
MCA		A	19	20	24	32	35	37	40	43
MOP		A	30	30	35	40	40	45	50	55
Power	Cooling	kW	5.71	7.61	8.92	11.4	13.45	14.9	18.9	22.3
comsumption	Heating	kW	6.0	8.05	9.60	11.5	13.60	14.6	17.5	21.8
Maximum drive I	DU NO.	unit	13	16	19	23	26	31	34	38
Refrigerant Char	ge volume	kg	6.5	6.7	8.2	9.8	10.3	12.7	13	13.5
Sound pressure	level	dB(A)	60	61	63	63	63	65	66	66
Connecting	Liquid	mm								
pipe	Gas	mm								
	Oil balance	mm								
Dimension	Outline	mm	930*76	5*1605		1340*765*1605			1340*765*1740	
(W*D*H)	Package	mm	1010*84	40*1775		1420*840*1775			1420*840*1910	
Net weight/Gros	s weight	kg	225/235	225/235	285/300	360/375	360/375	400/415	400/415	400/415
Loading	40' GP	set	24	24	16	16	16	16	16	16
quantity	40' HQ	set	24	24	16	16	16	16	16	16

Note: \*1: This product model is under development. Gree reserves the right to modify the specifications without prior notice. Please confirm the final specifications with sales representatives.



# Specifications of ODU Combination

#### 380~415V,50/60Hz

		Сар	acity	Power	r Input			Sound	Operation sound	Connec	ting pipe o	diameter	Min.	Max.	Weight	
Model	Power Supply	Cooling	Heating	Cooling	Heating	Dimension(w×D×H)	A ow volume		Level	pressure level at night	Liquid	Gas	Oil Balance	circuit current	fuse current	weight
		kW	kW	kW	kW	mm	m³/h	Ра	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-680WM/B-X		68	76.5	17.65	18.4	(930×765×1605) +(1340×765×1605)	11400+14000	82	65	43	Φ15.9	Ф28.6	Φ9.52	49.7	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	Ф31.8	Φ9.52	54.1	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	Ф31.8	Φ9.52	70.9	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	72.9	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	76.7	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	Ф38.1	Φ9.52	80.8	100	360+385
GMV-1065WM/B-X	1	106.5	119	31.15	31.9	(1340×765×1605) +(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Ф38.1	Φ9.52	85.2	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	96.7	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	102	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	104	125	385+385
GMV-1300WM/B-X		129	144.5	35.65	36.9	(930×765×1605)+(1340×765×1605) +(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	104.1	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	106.1	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	109.9	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	122.9	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	124.9	125	225+385×2
GMV-1580WM/B-X	380~415V- 3Ph-50/60Hz	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	128.7	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	132.8	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	137.2	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	148.7	160	360+385×2
GMV-1800WM/B-X		179	201	53	54.4	(1340×765×1740) ×3	16000×3	82	71	45	Φ19.05	Φ41.3	Φ9.52	154	160	385×3
GMV-1845WM/B-X		184.5	207	55.5	56.7	(1340×765×1740)×3	16000×3	82	71	45	Ф19.05	Φ41.3	Φ9.52	156	160	385×3
GMV-1908WM/B-X		190.5	213.5	54.15	55.8	(930×765×1605)+(1340×765×1605) +(1340×765×1740)×2	11400+14000+16000×2	82	72	47	Φ22.2	Φ44.5	Φ9.52	156.1	160	225+360+385×2
GMV-1962WM/B-X		195.9	220	55.7	56.9	(930×765×1605) +(1340×765×1740) ×3	11400+16000×3	82	73	47	Φ22.2	Φ44.5	Φ9.52	167.6	200	225+360+385×2
GMV-2016WM/B-X		201.5	226.5	57.5	59.4	(930×765×1605) +(1340×765×1740) ×3	11400+16000×3	82	73	47	Φ22.2	Φ44.5	Φ9.52	172.9	200	225+385×3
GMV-2072WM/B-X		207	232.5	60	61.7	(930×765×1605) +(1340×765×1740) ×3	11400+16000×3	82	73	47	Φ22.2	Ф44.5	Φ9.52	174.9	200	225+385×3
GMV-2128WM/B-X		212.5	238.5	62.5	64	(930×765×1605) +(1340×765×1740) ×3	11400+16000×3	82	73	47	Φ22.2	Φ44.5	Φ9.52	176.9	200	225+385×3
GMV-2184WM/B-X		218	244.5	63.91	65.7	(1340×765×1605) +(1340×765×1740) ×3	14000+16000×3	82	74	47	Φ22.2	Φ44.5	Φ9.52	180.7	200	285+385×3
GMV-2240WM/B-X		224.5	252	66.15	67.8	(1340×765×1605) +(1340×765×1740) ×3	14000+16000×3	82	74	47	Φ22.2	Φ44.5	Φ9.52	184.8	200	360+385×3
GMV-2295WM/B-X		229.5	257	68.15	69.7	(1340×765×1605) +(1340×765×1740) ×3	14000+16000×3	82	74	47	Φ22.2	Φ44.5	Φ9.52	189.2	200	360+385×3
GMV-2350WM/B-X		234.9	263.5	69.7	70.8	(1340×765×1740)×4	16000×4	82	75	47	Φ22.2	Φ44.5	Φ9.52	200.7	250	360+385×3
GMV-2405WM/B-X		240.5	270	71.5	73.3	(1340×765×1740)×4	16000×4	82	75	47	Φ22.2	Φ44.5	Φ9.52	206	250	385×4
GMV-2460WM/B-X		246	276	74	75.6	(1340×765×1740)×4	16000×4	82	75	47	Φ22.2	Φ44.5	Φ9.52	208	250	385×4

#### 208/230V, 60Hz

	Dever	Cooli Capa	ing city	Pow Inpu	er t	Dimension/(W*D*H)	Airflow	ESP	Noise	Noise at Night	Connec pipe dia	ting ameter	Oil Balance	MCA	MOP	Weight
Model	Supply	Cooling	Heating	Cooling	Heating		Volume			Operatior Noise	Liquid	Gas	Pipe			
		kW	kW	kW	kW	mm	m³ /h	Ра	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-504WM/B-F		50.4	56.5	12.2	12.8	2×(930×765×1605)	2×11400	0~82	64	45				69	90	225×2
GMV-560WM/B-F		56	63	14	14.6	2×(930×765×1605)	2×11400	0~82	64	45				71	90	225×2
GMV-615WM/B-F		61.5	69	15.41	16.3	(930×765×1605)+(1340×765×1605)	11400+14000	0~82	65	45				76	110	285+225
GMV-680WM/B-F		68	76.5	17.65	18.4	(930×765×1605)+(1340×765×1605)	11400+14000	0~82	65	45				92	110	225+360
GMV-730WM/B-F		73	81.5	19.65	20.3	(930×765×1605)+(1340×765×1605)	11400+14000	0~82	65	45				101	125	225+360
GMV-785WM/B-F		78.5	87.5	21.06	22	2×(1340×765×1605)	2×14000	0~82	66	45				114	125	285+360
GMV-850WM/B-F		85	95	23.3	24.1	2×(1340×765×1605)	2×14000	0~82	66	45				122	150	360×2
GMV-900WM/B-F		90	100	25.3	26	2×(1340×765×1605)	2×14000	0~82	66	45				130	150	360×2
GMV-960WM/B-F		96	108	24.65	25.7	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0~82	67	45				124	150	225×2+360
GMV-1010WM/B-F	000/	101	113	26.65	27.6	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0~82	67	45				133	150	225×2+360
GMV-1065WM/B-F	208/ 230V	106.5	119	28.06	29.3	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45				146	175	225+285+360
GMV-1130WM/B-F	-3Ph-	113	126.5	30.3	31.4	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45				154	175	225+360×2
GMV-1180WM/B-F	00112	118	131.5	32.3	33.3	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45				162	175	225+360×2
GMV-1235WM/B-F		123.5	137.5	33.71	35	3×(1340×765×1605)	3×14000	0~82	68	45				175	200	285+360×2
GMV-1300WM/B-F		130	145	35.95	37.1	3×(1340×765×1605)	3×14000	0~82	68	45				183	200	360×3
GMV-1350WM/B-F		135	150	37.95	39	3×(1340×765×1605)	3×14000	0~82	68	45				191	200	360×3
GMV-1410WM/B-F		141	158	37.3	38.7	2×(930×765×1605)+2×(1340×765×1605)	2×11400+2×14000	0~82	69	47				186	200	225×2+360×2
GMV-1460WM/B-F		146	163	39.3	40.6	2×(930×765×1605)+2×(1340×765×1605)	2×11400+2×14000	0~82	69	47				194	200	225×2+360×2
GMV-1515WM/B-F		151.5	169	40.71	42.3	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	47				207	200	225+285+360×2
GMV-1580WM/B-F		158	176.5	42.95	44.4	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	47				215	200	225+360×3
GMV-1630WM/B-F		163	181.5	44.95	46.3	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	49				223	250	225+360×3
GMV-1685WM/B-F		168.5	187.5	46.36	48	4×(1340×765×1605)	4×14000	0~82	70	49				237	250	285+360×3
GMV-1750WM/B-F		175	195	48.6	50.1	4×(1340×765×1605)	4×14000	0~82	70	49				244	250	360×4
GMV-1800WM/B-F		180	200	50.6	52	4×(1340×765×1605)	4×14000	0~82	70	49				252	250	360×4

#### 440~460V,60 Hz

Cooling Capacity Power	Pow Inpu	/er it	Dimension/W*D*H)	Airflow Volume ESP No		Noise	Noise at Night	Connec pipe dia	ting meter	Oil Balance	мса	MOP	Weight			
Model	Supply	Cooling	Heating	Cooling	Heating		Volume			Operation Noise	Liquid	Gas	Pipe			g.n
		kW	kW	kW	kW	mm	m³ /h	Ра	dB(A)	dB(A)	mm	mm	mm	Α	A	kg
GMV-504WM/B-U		50.4	56.5	13.32	14.05	2×(930×765×1605)	2×11400	0~82	64	43				36	40	225×2
GMV-560WM/B-U		56	63	15.22	16.1	2×(930×765×1605)	2×11400	0~82	64	43				37	40	225×2
GMV-615WM/B-U		61.5	69	16.53	17.65	(930×765×1605)+(1340×765×1605)	11400+14000	0~82	65	43				37	50	285+225
GMV-680WM/B-U		68	76.5	19.01	19.55	(930×765×1605)+(1340×765×1606)	11400+14000	0~82	65	43				49	50	225+360
GMV-730WM/B-U		73	81.5	21.06	21.65	(930×765×1605)+(1340×765×1607)	11400+14000	0~82	65	43				52	60	225+360
GMV-785WM/B-U		78.5	87.5	22.37	23.2	2×(1340×765×1605)	2×14000	0~82	66	43				55	60	285+360
GMV-850WM/B-U		85	95	24.85	25.1	2×(1340×765×1605)	2×14000	0~82	66	43				64	70	360×2
GMV-900WM/B-U		90	100	26.9	27.2	2×(1340×765×1605)	2×14000	0~82	66	43				66	70	360×2
GMV-960WM/B-U		96	108	26.62	27.6	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0~82	67	45				65	70	225×2+360
GMV-1010WM/B-U	440	101	113	28.67	29.7	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0~82	67	45				67	80	225×2+360
GMV-1065WM/B-U	440~ 460V-	106.5	119	29.98	31.25	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45				71	80	225+285+360
GMV-1130WM/B-U	3Ph-	113	126.5	32.46	33.15	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45				80	90	225+360×2
GMV-1180WM/B-U	00112	118	131.5	34.51	35.25	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45				83	90	225+360×2
GMV-1235WM/B-U		123.5	137.5	35.82	36.8	3×(1340×765×1605)	3×14000	0~82	68	45				86	90	285+360×2
GMV-1300WM/B-U		130	145	38.3	38.7	3×(1340×765×1605)	3×14000	0~82	68	45				95	100	360×3
GMV-1350WM/B-U		135	150	40.35	40.8	3×(1340×765×1605)	3×14000	0~82	68	45				97	110	360×3
GMV-1410WM/B-U		141	158	40.07	41.2	2×(930×765×1605)+2×(1340×765×1605)	2×11400+2×14000	0~82	69	47				96	110	225×2+360×2
GMV-1460WM/B-U		146	163	42.12	43.3	2×(930×765×1605)+2×(1340×765×1605)	2×11400+2×14000	0~82	69	47				99	110	225×2+360×2
GMV-1515WM/B-U		151.5	169	43.43	44.85	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	47				102	110	225+285+360×2
GMV-1580WM/B-U		158	176.5	45.91	46.75	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	47				111	110	225+360×3
GMV-1630WM/B-U		163	181.5	47.96	48.85	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	49				114	125	225+360×3
GMV-1685WM/B-U		168.5	187.5	49.27	50.4	4×(1340×765×1605)	4×14000	0~82	70	49				117	125	285+360×3
GMV-1750WM/B-U		175	195	51.75	52.3	4×(1340×765×1605)	4×14000	0~82	70	49				126	150	360×4
GMV-1800WM/B-U		180	200	53.8	54.4	4×(1340×765×1605)	4×14000	0~82	70	49				128	150	360×4

# GMV5 Mini & Slim



# **Key Features**

# All DC Inverter Technology to Improve Compression Efficiency

All DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.

## All DC Inverter Compressor

 All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.

- High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.
- Technology of Maximum Torque TControl with Minimum Current

It can reduce energy loss caused by device winding so as to realize higher efficiency.



• Low-frequency Torque Control It can directly control motor torque, through which fan motor can run at a low speed. Users will feel more comfortable while requirements of the system are also met.





 180° Sine Wave DC Speed Varying Technology It can satisfy various places' demands for different temperature and is able to save a great deal of electricity and provide users with utmost comfort at the same time.



## Sensorless DC Inverter Fan Motor

- Stepless speed regulation ranges from 5Hz to. 44Hz.Compared with traditional inverter motors, the operation is more energy-saving.
- Sensorless control technology guarantees lower noise, less vibration and steadier operation.



## Sensorless DC Inverter Fan Motor

The indoor unit adopts high-efficiency brushless DC motor. Compared with conventional motor, the efficiency of brushless DC motor is improved by more than 30%. Meanwhile, the design of evaporation capacity flow is optimized through emulation software of refrigeration system and the heat exchange amount of evaporator is greatly improved.

## High-efficiency Digital PFC Control \*

High-efficiency PFC control technology is adopted with efficiency improved by about 1% compared with conventional PFC. For the air conditioner with rated power of 5kW, **50W** of electricity can be saved every hour and 1.2kW of electricity can be saved every day.

\*This feature is applicable for GMV5 Mini only.

## Wider Operation Condition Range

The unit adopts DC motor with more accurate high pressure control, which effectively solves the high pressure control problem in low a mbient temperature cooling. So the operation range in cooling is wider.



# Comfortable and Ouiet Model

## Low Noise of Outdoor Unit

- The advanced sub-cooling control technology is applied to reduce the liquid flow noise of indoor unit in cooling operation.
- Noise of outdoor unit can be as low as 45dB thanks to noise optimized design or fan system and compressor system, and multiple kinds of quiet modes of outdoor unit.

# Low Noise of Indoor Unit

- The pioneering and patented high-efficiency centrifugal fan blade and low-noise volute are adopted. Meanwhile, the imported silent valve is adopted to reduce noise of entire unit as low as 22db(A).
- By adopting the optimal inlet angle of centrifugal fan blade and optimal diameter ratio between internal and external circles of impeller, the air volume is increased and fan noise is decreased greatly.
- The advanced supercooling control technology and the oil-return technology under heating mode has efficiently solved the problem of liquid flow noise of indoor unit, which improved the sound quality of indoor unit.

# Intelligent Temperature Control Technology

Intelligent temperature control technology is adopted for super fast cooling or heating, so that indoor temperature will reach set temperature more quickly.











# Comfortable Heating

Advanced intelligent defrosting mode is adopted. Gree advanced intelligent defrosting mode will choose the best defrosting way according to outdoor temperature and operation status to realize intelligent defrosting, effectively improving heating effect and performance. While in traditional defrosting mode, timing defrosting is adopted, which not only affects comfort but also reduces energy efficiency.





# Non-commutative Oil Return Technology in Heating

The unit can achieve non-commutative oil return in heating when outdoor ambient temperature is within 0~20°C. Thanks to this technology, indoor ambient temperature is more stable and comfort is improved in heating mode.



# **Reliable Operation**

# Compressor Closed-loop Startup Technology with More Reliable Startup

The self-innovative closed-loop startup control technology is adopted. Thanks to this technology, the startup current is small and startup is more reliable.



# High Anti-interference Ability

The latest CAN bus communication technology is adopted, with non-polar communication and high anti-interference ability. Common communication wire can meet the communication demand with no need of specialized shielded wire. The customers can buy the communication wire by themselves, greatly reducing installation difficulties.



# Advanced High-frequency Transformer with More Stable Voltage

- The advanced switching power supply is adopted with lower power consumption and higher power efficiency.
- Wide voltage-regulation range ensures stable voltage output when the voltage of grid fluctuates.
- Compared with conventional transformer, the size of high-frequency transformer is small and the weight is light.

# Refrigerant Cooling Technology

• Usually, air-cooled fins are adopted for heat radiation. Due to large size and passive radiation, heat radiating effect is unsatisfactory; with refrigerant cooling technology, heat radiating effect is much better because of compact structure and active radiation. Module temperature is dropped from 80 to 65 , which will increase module life and stability.







Linear power supply (Linear inverte Voltage-regulation chip)



(High-frequency inv Switching chip)



Common heat radiation



GMV5 7 29/30



# Easy Installation and Transportation

# ▼ Ultra-long Connection Pipe for More Convenient Connection

Under the subcooling control technology gained by adding subcooler, the indoor unit and outdoor unit ofGMV5 mini can operate reliably with longer connection pipe.

	Company A	Gree GMV5 Slim	Gree GMV5 Mini
Total piping length	150m	300m	300m
Equivalent piping length	70m	150m	150m

# Top Advanced Light and Compact Size

GMV5 slim adopts small and compact size design. The dimension of the unit is 1430(H)×940(W) ×320(D). Compared with the normal product with the same capacity, size and weight are reduced a lot.





940mm

# Easy Installation with Lower Construction Cost

The outdoor unit of GMV5 slim is with small size and light weight. No need fork lifter and crane for movement and installation



# Movement by Stairs and Elevator

The outdoor unit of GMV5 slim is with compact and small size for saving space and easy movement. It can be carried by elevator or stairs.



# GMV5 Mini & Slim LineUp



#### Mini 50/60 Lz

30/00 112													
Мо	del		GMV-120WL/ C-X	GMV-140WL/ C-X	GMV-160WL/ C-X	GMV-120WL/ C-T <sup>+2</sup>	GMV-140WL/ C-T <sup>+2</sup>	GMV-160WL/ C-T*2	GMV-80WL/ A-T <sup>⁺1</sup>	GMV-100WL/ A-T <sup>*1</sup>	GMV-121WL/ A-T <sup>*1</sup>		
Capacity range		HP	4	5	6	4	5	6	3	3.5	4		
Conceity	Cooling	kW	12.1	14	16	12.1	14	16	8	10	12.1		
Capacity	Heating	kW	14	16.5	18	14	16.5	18	9	11	13		
EER		W/W	3.99	3.9	3.37	3.99	3.9	3.37	3.48	3.4	3.27		
COP		W/W	4.28	4.18	3.87	4.28	4.18	3.87	4.1	4.07	3.71		
Power supply		V/Ph/Hz	380	-415/3/50&380-4	415/3/60	220-24	0/1/50 & 208-230	0/1/60	220~240V 1	Ph 50Hz&208~23	30V 1Ph 60Hz		
Max. Circuit/Fuse Cur	rent	A	16	16	16	32	40	40	23	23 25			
Dower computing	Cooling	kW	3.03	3.59	4.75	3.03	3.59	4.75	2300	2900	3700		
Fower comsumption	Heating	kW	3.27	3.95	4.65	3.27	3.95	4.65	2200	2700	3500		
Maximum drive IDU N	10.	unit	7	8	9	7	8	9	4	5	5		
Refrigerant Charge vo	olume	kg	3.3	3.3	3.3	3.3	3.3	3.3	2.5	2.5	2.7		
Sound pressure level		dB(A)	57	58	58	57	58	58	57	58	58		
Connecting pine	Liquid	mm											
Connecting pipe	Gas	mm											
Dimonoion (M/*D*U)	Outline	mm		900*340*1345			900*340*1345			980*360*790			
	Package	mm		1030*440*1380	)		1030*440*1380		1097*478*937				
Net weight/Gross weight	ght	kg	122/133	122/133	122/133	112/123	1102/123	112/123	83 85 85				
Looding quantity	40' GP	set	57	57	57	57	57	57	100	100	100		
Loading quantity	40' HQ	set	57	57	57	57	57	57	100	100	100		

Note f 6JKURTOFVEVKUWPFGTFGXGNOROGPV

6JKU O QFGNQWFQQT VPK/ECPPQ/O C/EJ Y KU HTGUI OKT RTCEGUURI VPK/CPF JK J ' 52 FVEVV[ RG VPK/

#### Slim 50/60 Hz

	LID		Model GMV-H224WL/A-X GMV-H280WL/A-X				
	ΠP	8	10	12			
Cooling kW		22.4	28.0	33.5			
Heating	kW	24	30	35			
	W/W	3.11	2.86	3.10			
-	W/W	3.69	3.41	3.43			
Power supply V/Ph/Hz		20	25	32			
e Current	380-415~3Ph~50/60Hz						
Cooling kW 7.2		9.8	10.8				
Heating	kW	6.5	6.5 8.8				
Maximum drive IDU NO. unit		13	17	20			
rge volume	kg	5.5	7.1	8.0			
level	dB(A)	60	62	63			
Liquid	mm						
Gas	mm						
Outline	mm	940*320*1430	940*460*1615	940*460*1615			
Package	mm	1038*438*1580	1038*578*1765	1038*578*1765			
s weight	kg	133/144	166/183	177/194			
40' GP	set	56	44	44			
40' HQ	set	56	44	44			
	Heating Current Cooling Heating DU NO. ge volume level Liquid Gas Outline Package s weight 40' GP 40' HQ	Heating     kW       W/W       W/W       V/Ph/Hz       > Current     A       Cooling     kW       Heating     kW       DU NO.     unit       ge volume     kg       level     dB(A)       Liquid     mm       Gas     mm       Package     mm       sweight     kg       40' GP     set       40' HQ     set	Heating         kW         24           W/W         3.11           W/W         3.69           V/Ph/Hz         20           ≥ Current         A           Cooling         kW           Heating         kW           0.5         0           DU NO.         unit           13         ge volume           kg         5.5           level         dB(A)           Gas         mm           Outline         mm           940*320*1430           Package         mm           1038*438*1580           sweight         kg           40° GP         set           56	Heating         kW         24         30           W/W         3.11         2.86         4           W/W         3.69         3.41         5           V/Ph/Hz         20         25         5           Cooling         kW         7.2         9.8         5           Heating         kW         6.5         8.8         7           DU NO.         unit         13         17         7           ge volume         kg         5.5         7.1         62           Liquid         mm         940*320*1430         940*460*1615         7           Outline         mm         1038*438*1580         1038*578*1765         5           Sweight         kg         133/144         166/183         40' GP         44			

) TGG TGUGTXGU VIG TIK J V VQ O GFKIJ VIG URGEHINEONOPU Y KU QAVIRTIKAT PQAEG 2 NGOLG EQPHKO VIG HIRONURGEHINEONOPU Y KU LONGU TGRTGUOPVCAKGU



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Slim Lineup										
HP	Model	Product Outlook								
8	GMV-H224WL/A-X	<b>•</b>								
10	GMV-H280WL/A-X									
12	GMV-H335WL/A-X	e.								

# GMV5C



# **Key Features**

# **DC Inverter Technology to Improve Compression Efficiency**

DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.

### **DC Inverter Compressor**

• High-performance high pressure chamber DC inverter compressor is adopted. High pressure chamber structure can directly reduce loss of overheat and improve compression efficiency, comparing with the compression efficiency of low pressure chamber.



• High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.

## High Efficiency and More Energy Saving

Thanks to the advanced DC inverter technology, optimized system design and accurate intelligent control technology, EER of GMV5C is up to 4.15 while COP is up to 4.39.



# Intelligent Defrosting Control

During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness of frost, high pressure of system and blockage status of heat exchanger.







# **Lower Power Consumption Operation Mode**

As for the area with power consumption limited time period, the maximum power consumption can be set for the operation. Basing on the power consumption of unit and user's requirement, power consumption limitation can be set according to 100%, 90% or 80% of the capacity of complete unit. In this case, user can have more selection at the power consumption limited time period.

11 E	100%
	90%
	80%

Intelligent Power Consumption Limit

#### 2) Diversified debugging methods for satisfying different requirements and improving debugging efficiency:

(1)Button debugging of outdoor unit <sup>(2)</sup>Special GMV debugging system ③CE41-24/F(C) debugger\* has functions of debugging of complete unit, independent debugging of indoor unit, malfunction display, data record and so on. It's no need to connect special software and PC. Moreover, it can connect external USB storage data.



Note:\* This debugger is under developme

# **Five-way Piping Connection**

Piping and wiring are availiable to the front and back, left and right, and bottom.

The five-waypiping connection reduces installation difficulty and cost, improves the installation efficiency.

# SRL (Self-reaction Load) Self-adaptive Control

SRL (Self-reaction Load) can intelligently detect and control system parameters and automatically adapt to indoor cold/heat load requirement to reducing unit's power and improve the energy efficiency.



# **Engineering Debugging for Convenient Construction**

#### 1) GMV5C has five auto debugging features:

- Automatic allocation of IDU and ODU addresses
- Automatic detection of IDU and ODU quantity
- Automatic detection of errors
- Automatic start-up of debugging
- Real-time judgment of pipe errors



# No Need Wired Controller for Debugging

When the project is not completed, debugging can be conducted for the system without wired controller to prevent damage to the wired controller during construction process. After the project is finished, install the wired controller, which can prevent unnecessary loss.



GMV5 7 35/36

# GMV5C LineUp

HP	Model	Product Outlook
8HP	GMV-224WM/A-M	
10HP	GMV-280WM/A-M	
12HP	GMV-335WM/A-M	
14HP	GMV-400WM/A-M	
16HP	GMV-450WM/A-M	

# **F** Specifications and Parameters

	Model		GMV-224WM/A-M	GMV-280WM/A-M	GMV-335WM/A-M	GMV-400WM/A-M	GMV-450WM/A-M	
Capacity range	Э	HP	8	10	12	14	16	
Conocity	Cooling k		22.4	28	33.5	40	45	
Capacity	Heating	kW	25	31.5	37.5	45	50	
EER		kW/kW	4.15	3.89	3.90	3.70	3.47	
COP		kW/kW	4.39	4.23	4.08	3.95	3.76	
Power supply		V/Ph/Hz			380-415V-3Ph-50Hz			
Max. Circuit/Fuse Current A		A	15.7/20	20.9/25	24.7/32	29.5/40	33.8/40	
Power Cooling		kW	5.40	7.20	8.60	10.80	12.95	
comsumption	Heating	kW	5.70	7.45	9.20	11.40	13.30	
Maximum drive	Maximum drive IDU NO. unit		13	16	16 19		26	
Refrigerant Charge	e volume	kg	5.9	6.7	8.2	9.8	10.3	
Sound pressur	e level	dB(A)	60	61	63	63	63	
Connecting	Liquid	mm	Ф9.52	Ф9.52	Φ12.7	Φ12.7	Φ12.7	
pipe	Gas	mm	Ф19.05	Ф22.2	Φ25.4	Φ25.4	Ф28.6	
Dimension	Outline	mm	930×76	5×1605		1340×765×1605		
(W*D*H)	Package	mm	1010×8-	40×1775		1420×840×1775		
Net weight/Gro	oss weight	kg	225/235	225/235	285/300	345/360	345/360	
Loading	40' GP	set	24	24	16	16	16	
quantity 40' HQ set		24	24	16	16	16		

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

# Specification of ODU Combination of GMV5C

		Capacity Power Input		Sound Sound Sound Sound	Operation sound	Conno pipe di	ecting ameter	Oil	Min.	Max.	)M/circh4					
Model	Power Supply	Cooling	Heating	Cooling	Heating	Dimension(w×D×H)	Arriow volume	EOP	Level	level at night	Liquid	Gas	Pipe	current	current	weight
		kW	kW	kW	kW	mm	m³/h	Ра	Pa dB(A) c		mm	mm	mm	А	А	kg
GMV-504WM/A-M		50.4	56.5	12.60	13.15	(930×765×1605) ×2	11400×2	82	64	45	Ф15.9	Ф28.6	Ф9.52	36.6	40	225×2
GMV-560WM/A-M		56	63.0	14.40	14.90	(930×765×1605) ×2	11400×2	82	64	45	Ф15.9	Ф28.6	Ф9.52	41.8	50	225×2
GMV-615WM/A-M		61.5	69.0	15.80	16.65	(930×765×1605) +(1340×765×1605)	11400+14000	82	65	45	Ф15.9	Ф28.6	Ф9.52	45.6	50	285+225
GMV-680WM/A-M		68	76.5	18.00	18.85	(930×765×1605) +(1340×765×1605)	11400+14000	82	65	45	Ф15.9	Ф28.6	Ф9.52	50.4	63	225+345
GMV-730WM/A-M		73	81.5	20.15	20.75	(930×765×1605) +(1340×765×1605)	11400+14000	82	65	45	Ф19.05	Ф31.8	Ф9.52	54.7	63	225+345
GMV-785WM/A-M		78.5	87.5	21.55	22.50	(1340×765×1605) ×2	14000×2	82	66	45	Ф19.05	Ф31.8	Ф9.52	58.5	80	285+345
GMV-850WM/A-M		85	95.0	23.75	24.70	(1340×765×1605) ×2	14000×2	82	66	45	Ф19.05	Ф31.8	Ф9.52	63.3	80	345×2
GMV-900WM/A-M		90	100.0	25.90	26.60	(1340×765×1605) ×2	14000×2	82	66	45	Ф19.05	Ф31.8	Ф9.52	67.6	80	345×2
GMV-960WM/A-M	96	96	108.0	25.20	26.30	(930×765×1605) ×2+(1340×765×1605)	11400×2+14000	82	67	45	Ф19.05	Ф31.8	Ф9.52	71.3	80	225×2+345
GMV-1010WW/A-M		101	113.0	27.35	28.20	(930×765×1605) ×2+(1340×765×1605)	11400×2+14000	82	67	45	Ф19.05	Ф38.1	Ф9.52	75.6	80	225×2+345
GMV-1065WM/A-M		106.5	119.0	28.75	29.95	(930×765×1605) +(1340×765×1605)×2	11400+14000×2	82	67	45	Ф19.05	Ф38.1	Ф9.52	79.4	100	225+285+345
GMV-1130WW/A-M	380~415V-3N-	113	126.5	30.95	32.15	(930×765×1605) +(1340×765×1605)×2	11400+14000×2	82	67	45	Ф19.05	Ф38.1	Ф9.52	84.2	100	225+345×2
GMV-1180WW/A-M	50Hz	118	131.5	33.10	34.05	(930×765×1605) +(1340×765×1605)×2	11400+14000×2	82	67	45	Ф19.05	Ф38.1	Ф9.52	88.5	100	225+345×2
GMV-1235WM/A-M		123.5	137.5	34.50	35.80	(1340×765×1605)×3	14000×3	82	68	45	Ф19.05	Ф38.1	Ф9.52	92.3	125	285+345×2
GMV-1300WM/A-M		130	145.0	36.70	38.00	(1340×765×1605)×3	14000×3	82	68	45	Ф19.05	Ф38.1	Ф9.52	97.1	125	345×3
GMV-1350WM/A-M		135	150.0	38.85	39.90	(1340×765×1605)×3	14000×3	82	68	47	Ф19.05	Ф38.1	Ф9.52	101.4	125	345×3
GMV-1410WM/A-M		141	158.0	38.15	39.60	(930×765×1605) ×2+(1340×765×1605)×2	11400×2+14000×2	82	69	47	Ф19.05	Ф41.3	Ф9.52	105.1	125	225×2+345×2
GMV-1460WM/A-M		146	163.0	40.30	41.50	(930×765×1605) ×2+(1340×765×1605)×2	11400×2+14000×2	82	69	47	Ф19.05	Ф41.3	Ф9.52	109.4	125	225x2+345x2
GMV-1515WW/A-M		151.5	169.0	41.70	43.25	(930×765×1605) +(1340×765×1605)×3	11400+14000×3	82	69	47	Ф19.05	Ф41.3	Ф9.52	113.2	125	225+285+345×2
GMV-1580WW/A-M		158	176.5	43.90	45.45	(930×765×1605) +(1340×765×1605)×3	11400+14000×3	82	69	47	Ф19.05	Ф41.3	Ф9.52	118.0	125	225+345×3
GMV-1630WW/A-M		163	181.5	46.05	47.35	(930×765×1605) +(1340×765×1605)×3	11400+14000×3	82	69	47	Ф19.05	Ф41.3	Ф9.52	122.3	160	225+345×3
GMV-1685WW/A-M		168.5	187.5	47.45	49.10	(1340×765×1605)×4	14000×4	82	70	47	Ф19.05	Ф41.3	Ф9.52	126.1	160	285+345×3
GMV-1750WW/A-M		175	195.0	49.65	51.30	(1340×765×1605)×4	14000×4	82	70	47	Ф19.05	Ф41.3	Ф9.52	130.9	160	345×4
GMV-1800WM/A-M		180	200.0	51.80	53.20	(1340×765×1605)×4	14000×4	82	70	47	Ф19.05	Ф41.3	Φ9.52	135.2	160	345×4



# GMV5 CP



# **Key Features**

# High Efficiency and More Energy Saving

Thanks to the advanced DC inverter technology, optimized system design and accurate intelligent control technology, EER of GMV5 CP is up to 4.31 while COP is up to 4.84.



# 88HP Max Capacity-The Largest Free Combination

Max capacity of single outdoor unit reaches 22HP and max combination capacity is even up to 88HP, in an industry leading level.

#### Max combination capacity is extended to 88HP



# **High Corrosion Resistant**

The GMV5 CP unit adopts corrosion-resistance materials on both metal and electronic parts make it can be installed near the sea.

> The plastic planting grille protects against salt . All panel parts are corrosion resistant to protect against brine.

Corrosion resistant heat-exchange fins are suitable for seaside areas and exposed to acidic substances.



All screws are anti-rust.

All PCB parts in the unit are coated with three proofing glue. The outer side of the control box metal cover is the spray-painted.











# Intelligent Defrosting Control

During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness of frost, high pressure of system and blockage status of heat exchanger.





Intelligent Defrosting Mode

## Lower Power Consumption Operation Mode

As for the area with power consumption limited time period, the maximum power consumption can be set for the operation. Basing on the power consumption of unit and user's requirement, power consumption limitation can be set according to 100%, 90% or 80% of the capacity of complete unit. In this case, user can have more selection at the power consumption, limited time period.



Intelligent Power Consumption Limit

# SRL (Self-reaction Load) Self-adaptive Control

SRL (Self-reaction Load) can intelligently detect and control system parameters and automatically adapt to indoor cold/heat load requirement to reducing unit's power and improve the energy efficiency.



# **Engineering Debugging for Convenient Construction**

- 1) GMV5 CP has five auto debugging features:
- Automatic allocation of IDU and ODU addresses
- Automatic detection of IDU and ODU quantity
- Automatic detection of errors
- Automatic start-up of debugging
- Real-time judgment of pipe errors

#### 2) Diversified debugging methods for satisfying different requirements and improving debugging efficiency:

- ①Button debugging of outdoor unit
- <sup>(2)</sup>Special GMV debugging system

③CE41-24/F(C) debugger\* has functions of debugging of complete unit, independent debugging of indoor unit, malfunction display, data record and so on. It's no need to connect special software and PC. Moreover, it can connect external USB storage data.





Note:\* This debugger is under development

(1)

## **Five-way Piping Connection**

Piping and wiring are available to the front and back, left and right, and bottom.

The five-waypiping connection reduces installation difficulty and cost, improves the installation efficiency.

#### No Need Wired Controller for Debugging \_\_\_\_\_

When the project is not completed, debugging can be conducted for the system without wired controller to prevent damage to the wired controller during construction process. After the project is finished, install the wired controller, which can prevent unnecessary loss.





(2)



# GMV5 CP LineUp

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

# **F** Specifications and Parameters

	Model		GMV-224WM/B1-X	GMV-280WM/B1-X	GMV-335WM/B1-X	GMV-400WM/B1-X	
Capacity range		HP	8	10	12	14	
Canacity	Cooling	kW	22.4	28	33.5	40	
Capacity	Heating		25	31.5	37.5	45	
EER		kW/kW	4.31	4.00	3.85	3.76	
COP		kW/kW	4.55	4.32	4.84	4.05	
Power supply		V/Ph/Hz		380-415V-3P	h-50Hz/60Hz		
Max. Circuit/Fuse 0	Current	A	15.7/20	20.9/25	22.5/32	28.8/40	
Power	Cooling kW		5.2	7	8.7	10.65	
comsumption Heating		kW	5.5	7.3	7.75	11.1	
Maximum drive IDU NO. unit		unit	13	16	19	23	
Refrigerant Charge volume kg		kg	5.9	6.7	9	9.8	
Sound pressure	e level	dB(A)	60	61	61	63	
	Liquid	mm	Ф9.52	Ф9.52	Φ12.7	Φ12.7	
Connecting	Gas	mm	Ф19.05	Φ22.2	Φ25.4	Φ25.4	
pipe	Oil balance	mm	Ф9.52	Ф9.52	Ф9.52	Ф9.52	
Dimension	Outline	mm	930×765×1605	930×765×1605	930×765×1605	1340×765×1605	
(W*D*H)	Package	mm	1010×840×1775	1010×840×1775	1010×840×1775	1420×840×1775	
Net weight/Gro	ss weight	kg	225/235	225/235	235/250	360/375	
Loading	40' GP	set	24	24	24	16	
quantity 40' HQ		set	24	24	24	16	

	Model		GMV-450WM/B1-X	GMV-504WM/B1-X	GMV-560WM/B1-X	GMV-615WM/B1-X	
Capacity range	e	HP	16	18	20	22	
Capacity	Cooling	kW	45	50.4	56	61.5	
Capacity	Heating	kW	50	56.5	63	69	
EER		kW/kW	3.56	3.55	3.50	3.32	
COP		kW/kW	3.85	4.01	3.80	3.65	
Power supply		V/Ph/Hz		380-415V/3	3Ph/50/60Hz		
Max. Circuit/Fuse	Current	A	33.2/40	45.4/50	51.1/63	59.2/63	
Power Cooling		kW	12.65	14.2	16	18.5	
comsumption	Heating	kW	13	13 14.1 16.6		18.9	
Maximum drive IDU NO. unit		unit	26	29	32	35	
Refrigerant Charge volume kg		kg	10.3	11.3	14.3	14.3	
Sound pressur	e level	dB(A)	63	63	63	64	
	Liquid	mm	Ф12.7	Φ15.9	Φ15.9	Φ15.9	
Connecting	Gas	mm	Ф28.6	Ф28.6	Ф28.6	Ф28.6	
pipe	Oil balance	mm	Ф9.52	Ф9.52	Ф9.52	Ф9.52	
Dimension	Outline	mm	1340×765×1605	1340×765×1740	1340×765×1740	1340×765×1740	
(W*D*H)	Package	mm	1420×840×1775	1420×840×1910	1420×840×1910	1420×840×1910	
Net weight/Gro	oss weight	kg	360/375	360/375	385/400	385/400	
Loading	40' GP	set	16	16	16	16	
quantity 40' HQ		set	16	16	16	16	

# Specification of ODU Combination of GMV5 CP

Model Powe		Сара	acity	Power Input		Dimension(W×D×H)	Airflow Volume	ESP	Sound Pressure	Operation sound pressure	Conne pipe dia	ecting ameter	Oil Balance Pine	Min. circuit	Max. fuse t current	Weight
	Supply	Cooling	Heating	Cooling	Heating				Levei	night	Liquid	Gas	гiре	current	current	
		kW	kW	kW	kW	mm	m³/h	Pa	dB(A)	dB(A)	mm	mm	mm	Α	А	kg
GMV-680WM/ B1-X		68.0	76.5	17.7	18.4	(930×765×1605) +(1340×765×1605)	11400+14000	82	65	43	Ф15.9	Ф28.6	Ф9.52	49.7	63	225+360
GMV-730WM/ B1-X		73.0	81.5	19.7	20.3	(930×765×1605) +(1340×765×1605)	11400+14000	82	65	43	Ф19.05	Ф31.8	Ф9.52	54.2	63	225+360
GMV-785WM/ B1-X		78.4	88.0	21.2	21.4	(930×765×1605) +(1340×765×1740)	11400+16000	82	66	43	Ф19.05	Ф31.8	Ф9.52	66.3	80	225+360
GMV-850WM/ B1-X		84.0	94.5	23.0	23.9	(930×765×1605) +(1340×765×1740)	11400+16000	82	67	43	Ф19.05	Ф31.8	Ф9.52	72.0	80	225+385
GMV-900WM/ B1-X		89.5	100.5	25.5	26.2	(930×765×1605) +(1340×765×1740)	11400+16000	82	67	43	Ф19.05	Ф31.8	Ф9.52	80.1	100	225+385
GMV-960WM/ B1-X		95.0	106.5	27.2	26.7	(1340×765×1605) +(1340×765×1740)	14000+16000	82	68	43	Ф19.05	Ф31.8	Ф9.52	81.7	100	235+385
GMV-1010WM/ B1-X		101.5	114.0	29.2	30.0	(1340×765×1605) +(1340×765×1740)	14000+16000	82	68	43	Ф19.05	Ф38.1	Ф9.52	87.9	100	360+385
GMV-1065WM/ B1-X		106.5	119.0	31.2	31.9	(1340×765×1605) +(1340×765×1740)	14000+16000	82	68	43	Ф19.05	Ф38.1	Ф9.52	92.4	100	360+385
GMV-1130WM/ B1-X		111.9	125.5	32.7	33.0	(1340×765×1740) ×2	16000×2	82	68	43	Ф19.05	Ф38.1	Ф9.52	104.6	125	360+385
GMV-1180WM/ B1-X		117.5	132.0	34.5	35.5	(1340×765×1740) ×2	16000×2	82	69	43	Ф19.05	Ф38.1	Ф9.52	110.3	125	385×2
GMV-1235WM/ B1-X		123.0	138.0	37.0	37.8	(1340×765×1740) ×2	16000×2	82	69	43	Ф19.05	Ф38.1	Ф9.52	118.3	125	385×2
GMV-1300WM/ B1-X		129.0	144.5	35.7	36.9	(930×765×1605)+(1340×76 5×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Ф19.05	Ф38.1	Ф9.52	105.3	125	225+360+385
GMV-1350WM/ B1-X		134.5	150.5	38.2	39.2	(930×765×1605)+(1340×76 5×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Ф19.05	Ф38.1	Ф9.52	113.3	125	225+360+385
GMV-1410WM/ B1-X		140.0	156.5	39.9	39.7	(930×765×1605)+(1340×76 5×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Ф19.05	Ф41.3	Ф9.52	114.9	125	235+360+385
GMV-1460WM/ B1-X		145.5	163.5	41.5	42.8	(930×765×1605) +(1340×765×1740) ×2	11400+16000×2	82	69	45	Ф19.05	Ф41.3	Ф9.52	131.2	160	225+385×2
GMV-1515WM/ B1-X	380	151.0	169.5	44.0	45.1	(930×765×1605) +(1340×765×1740) ×2	11400+16000×2	82	70	45	Ф19.05	Ф41.3	Ф9.52	139.3	160	225+385×2
GMV-1580WM/ B1-X	415V /3Ph	156.5	175.5	45.7	45.6	(930×765×1605) +(1340×765×1740) ×2	11400+16000×2	82	70	45	Ф19.05	Ф41.3	Ф9.52	140.9	160	235+385×2
GMV-1630WM/ B1-X	/50 /60Hz	163.0	183.0	47.7	48.9	(1340×765×1605) +(1340×765×1740) ×2	14000+16000×2	82	70	45	Ф19.05	Ф41.3	Ф9.52	147.1	160	360+385×2
GMV-1685WM/ B1-X		168.0	188.0	49.7	50.8	(1340×765×1605) +(1340×765×1740) ×2	14000+16000×2	82	70	45	Ф19.05	Ф41.3	Ф9.52	151.6	160	360+385×2
GMV-1750WM/ B1-X		173.4	194.5	51.2	51.9	(1340×765×1740) ×3	16000×3	82	70	45	Ф19.05	Ф41.3	Ф9.52	163.7	200	360+385×2
GMV-1800WM/ B1-X		179.0	201.0	53.0	54.4	(1340×765×1740) ×3	16000×3	82	71	45	Ф19.05	Ф41.3	Ф9.52	169.5	200	385×3
GMV-1854WM/ B1-X		184.5	207.0	55.5	56.7	(1340×765×1740) ×3	16000×3	82	71	45	Ф19.05	Ф41.3	Ф9.52	177.5	200	385×3
GMV-1908WM/ B1-X		190.5	213.5	54.2	55.8	(930×765×1605)+(1340×765× 1605)+(1340×765×1740) ×2	11400+14000+16000×2	82	72	47	Ф22.2	Ф44.5	Ф9.52	164.5	200	225+360+385×2
GMV-1962WM/ B1-X		195.9	220.0	55.7	56.9	(930×765×1605) +(1340×765×1740) ×3	11400+16000×3	82	73	47	Ф22.2	Ф44.5	Ф9.52	176.6	200	225+360+385×2
GMV-2016WM/ B1-X		201.5	226.5	57.5	59.4	(930×765×1605) +(1340×765×1740) ×3	11400+16000×3	82	73	47	Ф22.2	Ф44.5	Ф9.52	182.3	200	225+385×3
GMV-2072WM/ B1-X		207.0	232.5	60.0	61.7	(930×765×1605) +(1340×765×1740) ×3	11400+16000×3	82	73	47	Φ22.2	Ф44.5	Ф9.52	190.4	200	225+385×3
GMV-2128WM/ B1-X		212.5	238.5	62.5	64.0	(930×765×1605) +(1340×765×1740) ×3	11400+16000×3	82	73	47	Ф22.2	Ф44.5	Ф9.52	198.4	200	225+385×3
GMV-2184WM/ B1-X		218.0	244.5	64.2	64.5	(930×765×1605) +(1340×765×1740) ×3	11400+16000×3	82	74	47	Φ22.2	Ф44.5	Ф9.52	200.1	250	235+385×3
GMV-2240WM/ B1-X		224.5	252.0	66.2	67.8	(1340×765×1605) +(1340×765×1740) ×3	14000+16000×3	82	74	47	Ф22.2	Ф44.5	Ф9.52	206.3	250	360+385×3
GMV-2295WM/ B1-X		229.5	257.0	68.2	69.7	(1340×765×1605) +(1340×765×1740) ×3	14000+16000×3	82	74	47	Φ22.2	Ф44.5	Ф9.52	210.7	250	360+385×3
GMV-2350WM/ B1-X		234.9	263.5	69.7	70.8	(1340×765×1740) ×4	16000×4	82	75	47	Ф22.2	Ф44.5	Ф9.52	222.9	250	360+385×3
GMV-2405WM/ B1-X		240.5	270.0	71.5	73.3	(1340×765×1740) ×4	16000×4	82	75	47	Φ22.2	Ф44.5	Ф9.52	228.6	250	385×4
GMV-2460WM/ B1-X		246.0	276.0	74.0	75.6	(1340×765×1740) ×4	16000×4	82	75	47	Ф22.2	Ф44.5	Ф9.52	236.7	250	385×4

# GMV5 MAX



# **Key Features**

# **DC Inverter Technology to Improve Compression Efficiency**

DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.

### DC Inverter Compressor

- High-performance high pressure chamber DC inverter compressor is adopted. High pressure chamber structure can directly reduce loss of overheat and improve compression efficiency, comparing with the compression efficiency of low pressure chamber.
- High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.

#### Technology of Maximum Torque Control with Minimum Current

It can reduce energy loss caused by device winding so as to realize higher efficiency.



#### Low-frequency Torque Control

It can directly control motor torque, through which fan motor can run at a low speed. Users will feel more comfortable while requirements of the system are also met.





 180° Sine Wave DC Speed Varying Technology It can satisfy various places' demands for different temperature and is able to save a great deal of electricity and provide users with utmost comfort at the same time.



# Sensorless DC Inverter Fan Motor

- Stepless speed regulation ranges from 5Hz to 65Hz.Compared with traditional inverter motors, the operation is more energy-saving.
- Sensorless control technology guarantees lower noise, less vibration and steadier operation.





# Wide Range of Voltage and Operation Condition

- Working voltage range of GMV5 MAX system has been improved to 320V~460V, which surpasses the national standard of 342V~420V. For places with unsteady voltage, this system can still be running well.
- Outdoor operation temperature range is improved to -5 C ~ 52 C in cooling and -20 C ~ 24 C in heating.





### Sub-cooling Control Technology to Ensure Optimal Cooling and Heating

• Heat exchange loop can control the first subcoolingprocess of heat exchanger. Subcooling degree can reach 11 C.



• Subcooling loop can realize 9 C second subcooling to guarantee cooling and heating performance.



## **High Efficiency and More Energy Saving**

Thanks to the advanced DC inverter compressor and DC fan, optimized system design and accurate intelligent control technology, EER of GMV5 Max is up to 3.25 while COP is up to 3.82.



## **Energy-saving Operation Control Technology**

The GMV5 MAX system has 2 modes for energy saving, which can be chosen to meet different electricity demands.

When unit is set in auto energy-saving mode, it will automatically adjust the parameters of control targets according to running status so as to achieve lower power consumption.

When unit is set in compulsory energy-saving mode, it will limit system power output in a compulsory way.

### **G-type Heat Exchanger**

G-type heat exchanger fully utilizes the turning angle and vertical space to ensure sufficient heat exchange area. Stream heat exchange features high control precision and efficient heat exchange to guarantee satisfactory cooling and heating performance.

#### Intelligent Defrosting Control

During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness of frost, high pressure of system and blockage status of heat exchanger.











GMV5 47/48

# Oil Return Control Technology

#### New Oil Return Control

Gree new oil return control technology effectively controls system oil return and oil storage status of each compressor, which greatly improves the operation lifespan of compressor.



Oil storage status before oil return

#### • Specialized Compressor Oil Storage Control

The system applies specialized compressor oil storage technology, which can control the lowest oil level for compressor operation.



#### • Oil Circuit Malfunction Detection for Real-time Judgment and Protection

For GMV5 MAX, detection sensor is designed for the oil supply circuit of each compressor. This is to realize real-time judgment and detection for the oil supply circuit. When the compressor oil supply circuit is malfunctioning, shutdown protection will be enabled immediately to avoid further damage to the compressor. Maintenance cost for the system is reduced.



# Engineering Debugging for Convenient Construction

#### 1) GMV5 MAX has five auto debugging features:

- Automatic allocation of IDU and ODU addresses
- Automatic detection of IDU and ODU quantity
- Automatic detection of errors
- Automatic start-up of debugging
- Real-time judgment of pipe errors



#### 2) Diversified debugging methods for satisfying different requirements and improving debugging efficiency:

①Button debugging of outdoor unit

②Special GMV debugging system

③CE41-24/F(C) debugger\* has functions of debugging of complete unit, independent debugging of indoor unit, malfunction display, data record and so on. It's no need to connect special software and PC. Moreover, it can connect external USB storage data.



Note:\* This debugger is under development.

# Excellent Emergency Operation Function to Ensure Reliable Operation

#### • Emergency Operation of Compressor All the compressors in each single module are DC Inverter based, when one compressor has error, others will perform the emergency operation.



ERROR

#### • Emergency Operation of Fan

Double-fan design ensures that one fan can still work even if the other one has error.





# Outdoor Unit Quiet Mode and Quiet Control

#### • Quiet at night

The system can record the highest outdoor temperature. At night, the system will automatically turn to quiet mode. There are 9 quiet modes which can be set according to actual needs.



#### • Quiet in compulsion

The system can also be set in this mode to ensure low noise as long as it is operating. Noise is as low as 45dB(A).



### Quiet Control

1. Optimized Bossing Design

After many times of CFD tests, a new fan bossing structure has been developed to reduce vibration of fan during running. Noise can be reduced by 3dB(A).





2. Aerodynamics 3D Axial Fan Compared with conventional fan, it can increase air volume by 12%, improving efficiency as well as lowering noise.



# GMV5 MAX Lineup



# Specifications and Parameters

Model			GMV-785W/A-M	GMV-900W/A-M		
Capacity range		HP	28	32		
Conocity	Cooling	kW	78.5	90		
Сарасну	Heating	kW	87.5	100		
EER		kW/kW	3.22	3.25		
COP		kW/kW	3.74	3.82		
Power supply		V/Ph/Hz	380-415V-	3Ph-50Hz		
Max. Circuit/Fuse Current		A	57.2/63	71.5/80		
Cooling		kW	24.4	27.7		
-ower comsumption	Heating	kW	23.4	26.2		
Maximum drive IDU NO.		unit	46	53		
Refrigerant Charge volume		kg	18.9	24		
Sound pressure level		dB(A)	65	65		
	Liquid	mm	Ф19.05	Ф19.05		
Connecting hipe	Gas	mm	Ф31.8	Ф31.8		
Dimension	Outline	mm	2200x88	0x1675		
(WxDxH)	Package	mm	2267x95	2x1867		
Net weight/Gross weight		kg	557/592	600/635		
	40'GP	set	12	12		
Loading quantity	40'HQ	set	12	12		

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



# **GMV5** Heat Recovery



# **Key Features**

# **High Efficiency**

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.

• Five Efficient Operation Modes



Heatling Heating Heating Heating





Condensing operation Evaporating operation High pressure gas flow direction

Conpressor full loading High pressure gas flow direction 🍈 Partial loading Low pressure gas flow direction (1) Compressor unloading



## All DC Inverter Technology to Improve Compression Efficiency

• All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.



• High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.



#### • High Pressure Chamber Design

#### What's high pressure chamber?

The low-temperature and low-pressure refrigerant gas inhaled from the suction inlet of compressor will change to high-temperature and high-pressure gas after compression by scroll plate. Then the gas will go out from the exhaust at the center of fixed scroll and get into the lower chamber of compressor, so that the chamber of compressor is in high temperature and high pressure.

#### What's the benefits of high pressure chamber?

High pressure chamber compressor inhales directly to reduce overheat suction loss and improve compression efficiency.





#### • Sensorless DC Inverter Fan Motor

Stepless speed regulation ranges from 5Hz to 65Hz.Compared with traditional inverter motors, the operation is more energy-saving.



Sensorless control technology guarantees lower noise, less vibration and steadier operation.



# Wide Range of Voltage to Ensure a Steady System Running

Working voltage range of GMV5 system has been improved to 320V-460V, which surpasses the national standard of 342V-420V. For places with unsteady voltage, this system can still be running well.

### Wider Applicable Location

GMV5 HR can realize a combination of 4 outdoor unit modules connecting with as many as 80 indoor units. It's especially applicable for business building or hotels.





Max. IDU Connection: 80 sets





# Comfortable Design for A Better Life

# Intelligent Quiet Function at Night

#### • Quiet at night

Intelligently adjustment of outdoor fan control can minimize the noise during night time. Up to 8dB(A) can be reduced and operation noise at night is as low as 50dB(A).



#### • Low noise design

HP Chamber compressor has lower exhaust pressure fluctuation so that noise is lower.



The optimized design of condensing fan blade reduces the air flow turbulence among blades, so that the noise is lower.



# Wide Operation Range

The unit can operates in wide range, greatly reducing the ambient temperature limitation.

Note: If the required capacity of indoor units is 50% higher than outdoor unit, cooling range may be lower to -15 $^{\circ}$ C.

If the required capacity of indoor units is 50% higher than outdoor unit,cooling range may be up to -5°C

### Comfortable Heating

Advanced intelligent defrosting mode is adopted. Gree advanced intelligent defrosting mode will choose the best defrosting way according to outdoor temperature and operation status to realize intelligent defrosting, effectively improving heating effect and performance. While in traditional defrosting mode, timing defrosting is adopted, which not only affects comfort but also reduces energy efficiency.



## Individual Control for More Energy Saving

The set temperature of each room may vary by the individual thermostat control of each indoor unit. The cooling and heating operation can be performed at the same time.





#### Gree Intelligent Defrosting Mode





# **Excellent Performance Ensured by** Advanced Technologyn

## Modules Rotation Operating to Maximize Lifespan

#### Modules 8h rotation operating

The operating priority sequence of the outdoor unit modules will be changed without restart when the system accumulatively operates for 8 hours, which can maximize the service life of the system.



# Excellent Emergency Operation Function to Ensure Reliable Operation

#### Emergency Function

The GMV5 HR system can realize a combination of 4 outdoor unit modules. When error is occurred to one of the modules, the others will perform the emergency operation to sustain the air conditioning.

# ERROF

#### • Emergency Operation of Compressor

All the compressors in each single module are DC Inverter based, when one compressor has error, others will perform the emergency operation.

• Emergency Operation of Fan

Double-fan design ensures that one fan can still work even if the other one has error.





# Highly Anticorrosive Golden Fins

The primary material of Golden Finis Al-Mn(Alumium-Manganese) anti-rust alloy, which is coated with the Golden Protection Laver(Components: Exoxy Resin & Modified Acrylic, Sillcon free), the anti-corrosice performance in salt-spray testing is 200%~300% higher than normal Blue Fin\*.

# Vil Return Control Technology

#### New Oil Return Control

Gree new oil return control technology effectively controls system oil return and oil storage status of each compressor, which greatly improves the operation lifespan of compressor.



• Specialized Compressor Oil Storage Control The system applies specialized compressor oil storage technology, which can control the lowest oil level for compressor operation.

# Without External Oil-balanced Pipe Design

The unit is without external oil-balanced pipe design, reducing system pipeline connection and easy for engineering installation. The system will allocate lubricating oil of each module according to its demand, which is more intelligent, more efficient and more equal.









# Easy Installation and Maintenance

# Compact Design

With compact design, the outdoor unit can be carried to the roof of building through elevator, with no need of crane. It is easier for delivery and installation.





GMV5 HR

# Easy Maintenance

• Inspection window is available for quick checking of system operation status. No need to open panel for checking, which will be more time-saving and easier for maintenance.



• Error Display & Self-diagnostic Function Through LED display(different combinations of ON, OFF, or BLINK) on the main board, the malfunction can be judged.

# Easy Transportation

#### • Optimized base frame

Optimized base frame, the locating and fixing of the outdoor unit during installation is more convenient and reliable.



• Transportable by forklift



#### • Five-way piping connection

Piping and wiring are available to the front and back, left and right, and bottom.

The five-waypiping connection reduces installation difficulty and cost, improves the installation efficiency.









# GMV5 HR LineUp

# 🚩 HR Lineup

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	



# Specifications and Parameters

	Model		GMV-Q224WM/B-X	GMV-Q280WM/B-X	GMV-Q335WM/B-X	GMV-Q400WM/B-X	GMV-Q450WM/B-X
Capacity range	e	HP	8	10	12	14	16
Capacity	Cooling	kW	22.4	28	33.5	40	45
Capacity	Heating	kW	25	31.5	37.5	45	50
EER		W/W	4.31	4.06	4.09	3.77	3.72
COP	·	W/W	4.72	4.32	4.31	4.17	4.00
IPLV	Cooling	kW/kW	1	1	1	1	1
Power Supply		V/Ph/Hz		380	0~415V-3Ph-50/60Hz		
Max. circuit/fus	se current	A	16.3/20	20.9/25	24.7/32	28.8/40	33.2/40
Power	Cooling	kW	5.2	6.9	8.2	10.6	13.5
comsumption	Heating	kW	5.3	7.3	8.7	10.8	12.5
Maximum drive	e IDU NO.	unit	13	16	19	23	26
Refrigerant Ch	arge volume	kg	6.2	7.1	9.6	11.1	11.6
Sound pressur	e level	dB(A)	60	61	63	63	63
Connecting	Liquid	mm					
nine	Gas(Low pressure	mm					
pipe	Gas(High pressure	mm					
Dimension	Outline	mm	930*76	5*1605		1340*765*1605	
(W*D*H)	Package	mm	1010*84	10*1775		1420*840*1775	
Net weight/0	Gross weight	kg	233/243	233/243	302/317	346/361	346/361
Loading	40' GP	set	24	24	16	16	16
quantity	40' HQ	set	24	24	16	16	16

#### 50/60 Hz

Mod	el		NCHS1B	NCHS2B	NCHS4B	NCHS8B					
Max.IDU Branches		unit	1	2	4	8					
No. of connectable IE	OU of each branch	unit	8	8	8	8					
Total Connectable IE	U	unit	8	16	32	64					
Max. Capacity of each branch		kW/kW	14	14	14	14					
Max. Capacity of connectable IDU		kW/kW	14	28	45	65					
Power supply		V/Ph/Hz		220-240V-1Ph-50/60Hz							
Power comsumption		W	8	20	44	80					
Maximum drive IDU I	NO.	unit	1	2	4	8					
Outdoor Lipit	Liquid	mm									
Diving Connection	Gas(Low pressure)	mm									
Gas(High pressure)		mm									
Indoor Unit Piping Liquid		mm									
Connection Gas		mm									

# 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	۲				
GMV-Q280WM/B-X		٠			
GMV-Q335WM/B-X			۲		
GMV-Q400WM/B-X				٠	
GMV-Q450WM/B-X					۲
GMV-Q504WM/B-X	۲	۲			
GMV-Q560WM/B-X		••			
GMV-Q615WM/B-X		۲	٠		
GMV-Q680WM/B-X		۲		۲	
GMV-Q730WM/B-X		۲			۲
GMV-Q785WM/B-X			۲		۲
GMV-Q850WM/B-X				۲	•
GMV-Q900WM/B-X					••
GMV-Q960WM/B-X		••		۲	
GMV-Q1010WM/B-X		••			۲
GMV-Q1065WM/B-X		٠	۲		۲
GMV-Q1130WM/B-X		٠		۲	۲
GMV-Q1180WM/B-X		٠		••	
GMV-Q1235WM/B-X			۲		••
GMV-Q1300WM/B-X				۲	••
GMV-Q1350WM/B-X					•••
GMV-Q1410WM/B-X		••		٠	٠
GMV-Q1460WM/B-X		••			••
GMV-Q1515WM/B-X		•		••	•
GMV-Q1580WM/B-X		٠		٠	••
GMV-Q1630WM/B-X		٠			
GMV-Q1685WM/B-X				••	••
GMV-Q1750WM/B-X				٠	
GMV-Q1800WM/B-X					••••

## Specification of ODU Combination of GMV5 HR

		Сар	acity	Power	r Input	Dimension	Airflow	ESD	Sound	Operation sound	on Connecting pipe diameter re		Min.circuit	Max. fuse	Woight	
Model	Power Supply	Cooling	Heating	Cooling	Heating	(W×D×H)	Volume	201	Level	level at night	Liquid	HP Gas	LP Gas	current	current	Weight
		kW	kW	kW	kW	mm	m³/h	Ра	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-Q224WM/B-X		22.40	25.00	5.20	5.30	930×765×1605	11400	82	60	40				16.3	20	233.0
GMV-Q280WM/B-X		28.00	31.50	6.90	7.30	930×765×1605	11400	82	61	40				20.9	25	233.0
GMV-Q335WM/B-X		33.50	37.50	8.20	8.70	1340×765×1605	14000	82	63	40				24.7	32	302.0
GMV-Q400WM/B-X		40.00	45.00	10.60	10.80	1340×765×1605	14000	82	63	40				28.8	40	346.0
GMV-Q450WM/B-X		45.00	50.00	12.10	12.50	1340×765×1605	14000	82	63	40				33.2	40	346.0
GMV-Q504WM/B-X		50.40	56.50	12.10	12.60	2×(930×765 ×1605)	22800	82	64	43				37.2	40	233+233
GMV-Q560WM/B-X		56.00	62.50	13.80	14.60	2×(930×765 ×1605)	22800	82	64	43				41.8	50	233+233
GMV-Q615WM/B-X		61.50	69.00	15.10	16.00	(930×765 ×1605)+ (1340×765×1605)	25400	82	65	43				45.6	50	233+302
GMV-Q680WM/B-X		68.00	76.50	17.50	18.10	(930×765 ×1605)+ (1340×765×1605)	25400	82	65	43				49.7	63	233+346
GMV-Q730WM/B-X		73.00	81.50	19.00	19.80	(930×765×1605)+ (1340×765×1605)	25400	82	65	43				54.1	63	233+346
GMV-Q785WM/B-X		78.50	87.50	20.30	21.20	2×(1340×765×1605)	28000	82	66	43				57.9	80	302+346
GMV-Q850WM/B-X		85.00	95.00	22.70	23.30	2×(1340×765×1605)	28000	82	66	43				62	80	346+346
GMV-Q900WM/B-X	380-415V	90.00	100.00	24.20	25.00	2×(1340×765×1605)	28000	82	66	43				66.4	80	346+346
GMV-Q960WM/B-X	50/60Hz	96.00	108.00	24.40	25.40	2×(930×765 ×1605) +(1340×765×1605)	36800	82	67	43				70.6	80	233x2+346
GMV-Q1010WM/B-X		101.00	113.00	25.90	27.10	2×(930×765 ×1605) +(1340×765×1605)	36800	82	67	43				75	80	233x2+346
GMV-Q1065WM/B-X		106.50	119.00	27.20	28.50	(930×765 ×1605)+2 ×(1340×765×1605)	39400	82	67	43				78.8	100	233+302+346
GMV-Q1130WM/B-X		113.00	126.50	29.60	30.60	(930×765 ×1605)+2 ×(1340×765×1605)	39400	82	67	45				82.9	100	233+346x2
GMV-Q1180WM/B-X		118.00	131.50	31.10	32.30	(930×765 ×1605)+2 ×(1340×765×1605)	39400	82	67	45				87.3	100	233+346x2
GMV-Q1235WM/B-X		123.50	137.50	32.40	33.70	3×(1340×765×1605)	42000	82	68	45				91.1	125	302+346x2
GMV-Q1300WM/B-X		130.00	145.00	34.80	35.80	3×(1340×765×1605)	42000	82	68	45				95.2	125	346x3
GMV-Q1350WM/B-X		135.00	150.00	36.30	37.50	3×(1340×765×1605)	42000	82	68	45				99.6	125	346x3
GMV-Q1410WM/B-X		141.00	158.00	36.50	37.90	2×(930×765×1605)+ 2×(1340×765×1605)	50800	82	69	45				103.8	125	233x2+346x2
GMV-Q1460WM/B-X		146.00	163.00	38.00	39.60	2×(930×765×1605)+ 2×(1340×765×1605)	50800	82	69	45				108.2	125	233x2+346x2
GMV-Q1515WM/B-X		151.50	169.00	39.30	41.00	(930×765 ×1605)+3 ×(1340×765×1605)	53400	82	69	45				112	125	233+346x3
GMV-Q1580WM/B-X		158.00	176.50	41.70	43.10	(930×765 ×1605)+3 ×(1340×765×1605)	53400	82	69	45				116.1	125	233+346x3
GMV-Q1630WM/B-X		163.00	181.50	43.20	44.80	(930×765 ×1605)+3 ×(1340×765×1605)	53400	82	69	45				120.5	160	233+346x3
GMV-Q1685WM/B-X		168.50	187.50	44.50	46.20	4×(1340×765×1605)	56000	82	70	45				124.3	160	346x4
GMV-Q1750WM/B-X		175.00	195.00	46.90	48.30	4×(1340×765×1605)	56000	82	70	47				128.4	160	346x4
GMV-Q1800WM/B-X		180.00	200.00	48.40	50.00	4×(1340×765×1605)	56000	82	70	47				132.8	160	346x4

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

# Key Features of Indoor Units

# ▼ High Static Pressure Duct Type Indoor Unit



#### • High static pressure design

Static pressure can be up to 150Pa, especially suitable for places in need of long distance airflow.

#### • Easy maintenance

The system has maintenance port for easy maintenance.

#### • Convenient installation

You can choose circular air duct or rectangular air duct according to actual needs. Or you can choose different ways of air return.

#### • Protection function

Anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection.



## Low Static Pressure Duct Type Indoor Unit



#### • Low static pressure, low noise

Especially suitable for rooms of compact structure or small installation space. Also, it provides you with a comfortable and quiet living environment.

#### • Intelligent drainage device

Water height difference up to 1.0m, which can effectively drain out condensing water and save space.

Note: Please specify if you need this function.

#### Convenient installation

Tab type plastic filter, detachable fan motor, independent water pump assembly and electric box assembly, all for convenient maintenance.

#### • Protection function

Water overflow protection, anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection.

# Slim Ducted Type Indoor Unit



#### • Highly Efficient & Energy-saving

High-efficiency DC brushless motor is used. Its efficiency is improved by over 30% compared with common motor. Evaporator flow path adopts simulating optimized design via the refrigeration system simulation software, which has greatly increased the heat exchange capacity of evaporator.

#### • Slim & Small

The unit is only 200mm's thick and 450mm's deep. Suspended ceiling doesn't have to be very high. It is suitable for ordinary rooms.

#### • Wiring of Electric Control Box

Mounting board of electric control box elements are arranged at both sides of the mounting board of fan motor. There is a wire-cross notch on each side so that wiring at both sides of the mounting board of fan motor is convenient and efficient. Strong and weak current are also separated to ensure the effectiveness of weak current signal transmission.

#### • Protection Functions

Anti-freezing protection, fan motor built-in overload protection, temperature sensor error protection

#### • Ultra-quiet

High-efficiency centrifugal fan and ultralow noise volute are developed with ANSYS and Fluent. They have also gained national patents. Meanwhile, inlet mute valve is adopted so that noise of the complete unit is greatly reduced.

#### • Fast & Strong

Intelligent temperature control technology is adopted. Cooling/ Heating function is fast and strong so that room temperature can quickly reach set temperature.

#### • Flexible Installation

Based on the requirements of building and utilization, different ways of air return and different air supply static pressure can be selected.

#### • CAN Bus Communication Technology

System response speed is faster and communication is more reliable. Auto addressing, non-polar communication, free wire matching

#### Convenient Operation & Maintenance

Electric control box is attached independently so that it can be detached as a whole, which is convenient for maintenance. The installation and maintenance of fan and motor is also convenient.



# ▼ 4-way Cassette Indoor Unit



### • Strong and balanced airflow

Unit features auto operation, 4-way airflow, 7 fan speeds and strong circulating airflow.

#### • Ultra-low noise operation

DC inverter motor can realize stepless speed regulation to lower noise. Indoor unit can be set to work under auto quiet mode via wired controller.

#### • Intelligent drainage device

Water height difference up to 1.0m, which can effectively drain out condensing water and save space.

## • DC inverter motor

With good speed regulation performance, motor efficiency improved by 30% v.s. normal motor.

#### • Protection function

Water overflow protection, anti-freezing protection, temperature sensor malfunction protection, fan motor overload protection.

# Compact 4-way Cassette Indoor Unit



#### • Compact Design for Easy Installation Units maintain the uniform length and width with consistent ceiling opening and panel dimension, convenient for design and installation;

#### • Ultra-low noise operation

DC inverter motor can realize stepless speed regulation to lower noise. Indoor unit can be set to work under auto quiet mode via wired controller.

#### • Intelligent drainage device

Water height difference up to 1.0m, which can effectively drain out condensing water and save space.



# 2-way Cassette Indoor Unit



#### Beautiful Appearance

With beautiful and elegant front panel, it is congenial to the indoor surroundings.

#### • Intelligent drainage device

Water height difference up to 1.0m, which can effectively drain out condensing water and save space.

#### • Two-way air flow design Two-way air outlet, to stretch air outlet distance and solve air supply problem of elongated room

#### • Multiple protections

Anti-freezing protection, temperature malfunction protection, fan motor overload and humidity sensor protection.

# 1-way Cassette Indoor Unit



#### • Small installation space With 185mm ultrathin design, unit can be installed in the ceiling of 19cm deep.

#### • Detachable grille and long life filter Grille is detachable for easy cleaning. With durable filter, cleaning cycle is 20 times longer.

#### • High drain pump lift

Drain pump lift reaches 1.0m, which can effectively drain out water.

#### • Protection function

Water overflow protection, anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection.



## Wall-mounted Indoor Unit



#### • Comfortable and balanced airflow, up&down air outlet

Up air outlet: In cooling, cool air blows out horizontally and then gradually drops. Down air swing: In heating, warm air blows downward and then gradually climbs up.

• Triple defenders for better purification Mildew-proof filter, electrostatic fibre and anti-biotic fibre adopted to remove dust, smell, bacteria and mildew.

#### • Cold air prevention design

During heating in winter, cold air prevention function is enabled so that air won't be blown out until it's warm.

#### • Multiple protections

Anti-freezing protection, temperature sensor malfunction protection, fan motor overload protection.

# Floor Ceiling Type Indoor Unit



#### • Hoisted or seated, flexible installation Unit can be hoisted or seated. When seated, suspended ceiling is not needed.

#### • Beautiful appearance

With beautiful and elegant front panel, it is congenial to the indoor surroundings.

#### • Protection function

Anti-freezing protection, temperature sensor malfunction protection, fan motor overload protection.

#### • Horizontal and vertical air swing

Wider air swing range for your comfortable working and living environment.



# Console Indoor Unit



different air flow volume requirements.

• Detachable grille and long life filter Grille is detachable for easy cleaning. With long life filter, cleaning cycle is 20 times longer.

# Floor Standing Indoor Unit



• Wide Application It can be widely adopted in hotels, restaurants, office, etc.

• Auto clean to ensure a healthy life After turning off the unit, the indoor fan will keep running in low speed for a moment to dry the inner components and parts, in order to prevent mildew and keep user healthy.



## Fresh Air Processing Indoor Unit

Airflow volume: 1200~4000m3/h Applicable range: Residential houses, villas, business buildings, hotels, apartments, etc.



#### One system, two functions

• Adopted with DC inverter technology, Fresh Air DC Inverter Multi VRF System features air conditioning function and fresh air function.



#### Enjoy fresh air

- Airflow volume: 1200~4000m<sup>3</sup>/h, cooling capacity: 14-45kW Applicable for all kinds of structure.
- Direct evaporative cooling adopted, air conditioning+fresh air can be realized accurately and precisely.
- DC inverter technology adopted, constant humidity is enabled with less power consumption.
- Integrated system control with Gree GMV Multi VRF System.



#### Air conditioning and fresh air, two in one

#### • Less investment

Fresh Air DC Inverter Multi VRF System can be combined with Gree GMV5. For a same room, if the same amount of fresh air is to be taken, then the cost of GMV5+Fresh air unit is equivalent to the cost of GMV+Air exchange fan.

#### Less operation cost

Unit can control refrigerant output according to actual needs to ensure constant airflow temperature. By adjusting power output, light-load but high power operation can be avoided. Thus, operation cost can be greatly reduced.

#### • Less installation space

Save installation space for outdoor units. Especially suitable for places that have restricted installation space.



## Air Handler

#### • Highly Flexible Installation

The unit is designed for outdoor installation and less indoor space taking, allowing easy installation and maintenance. The unit can be installed on the ground or on the roof of the building, which means the installation is totally flexible depending on the project requirement.

#### • Cold Air Prevention Design

When heating in winter, cold air prevention function is enabled so that air won't be blown out until it's warm.

#### Long life and Washable Filter

The filter is easy to be dismantled and installed. You can use dust collector or water to clear away the dust.

# AHU KIT

- Maximum capacity Capacity of single unit reaches 20HP.
- Convenient for installation EXV is separated from control box, flexible for installation.
- Adjustable capacity Adjust capacity by DIP switch code, flexible and convenient.









# Indoor Units Lineup Specifications of Indoor Units

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	280	450	560
High Static Pressure Duct Type Unit		•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•		
Low Static Pressure Duct Type Unit		•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•					
Slim Ducted Type Indoor Unit	4	•	•	•	•	•	•	•	•	•	•		•											
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																			•		•	•		
Air handler													•		•	•	•		•					
AHU KIT						•						•							•			•		•

# ► High Static Pressure Duct Type Indoor Unit

	Model		GMV-ND56PHS/A-T	GMV-ND63PHS/A-T	GMV-ND71PHS/A-T	GMV-ND80PHS/A-T	GMV-ND90PHS/A-T
Conocity	Cooling	kW	5.6	6.3	7.1	8.0	9.0
Capacity	Heating	kW	6.3	7.1	8.0	9.0	10.0
Power supply		V/Ph/Hz		220~240/1/50 &	208~230/1/60		
Power consum	ption	W	120	120	130	130	200
Airflow volumo		m <sup>3</sup> /h	1000/800/600	1000/800/600	1100/900/700	1100/900/700	1700/1450/1100
AIIIIOW VOlume	(H/W/L)	CFM	590/471/355	590/471/355	650/530/410	650/530/410	1000/853/650
	Cooling	A	0.6	0.6	0.6	0.6	1.0
Rated Current <sup>2</sup>	Heating	A	0.6	0.6	0.6	0.6	1.0
	Water Heating	A	/	/	/	/	/
ESP		Pa		70/0~	100		
Sound pressure	e level(H/M/L)	dB(A)	44/40/36	44/40/36	45/41/37	45/41/37	46//44/42
Connecting pipe	Liquid	mm	Ф9.52	Ф9.52	Ф9.52	Ф9.52	Ф9.52
diameter	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain nine	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
Dianipipo	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm		1271x55	58x268		1229x775x290
(WxDxH)	Package	mm		1348x59	97x283		1338x877x305
Net weight/Gro	ss weight	kg	35/40	35/40	35/40	35/40	47/54
Loading	40' GP	set	192	192	192	192	128
Louding	40' HQ	set	216	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
Conocitu	Cooling	kW	10.0	11.2	12.5	14.0	16.00	22.4	28.0
Capacity	Heating	kW	11.2	12.5	14.0	16.0	18.00	25.0	31.0
Power supply		V/Ph/Hz		220~240/1/50 8	& 208~230/1/60		220~240/1/50/60	220~240/1/50 &	208~230/1/60
Power consump	ption	W	200	200	220	220	560	800	900
Airflow volume(		m³/h	1700/1450/1100	1700/1450/1100	2000/1550/1200	2000/1700/1400	3100	4000	4400
AIIIIOW VOIUIIIe(	□/IVI/L)	CFM	1000/853/650	1000/853/650	1175/912/706	1175/1000/824	1824	2355	2590
	Cooling	A	1.0	1.0	1.0	1.0	4	4.1	4.6
Rated Current <sup>2</sup>	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	e level(H/M/L)	dB(A)	46//44/42	46//44/42	48/45/42	48/46/44	55.0	54.0	55.0
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	φ9.52	Φ9.52	Φ9.52
diameter	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	φ19	Φ22.2	Φ22.2
Drain nine	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Ф30	Ф30	Ф30
Dianipipo	Thickness	mm	2.5	2.5	2.5	2.5	1.5	1.5	1.5
Dimension	Outline	mm		1229x7	75x290		1497x799x389	1483×791×385	1686x870x450
(WxDxH)	Package	mm		1338x8	77x305		1578x883x400	1758×883×470	1788x988x580
Net weight/Gros	ss weight	kg	47/54	47/54	47/54	47/54	79/103	82/104	105/140
Loading	40' GP	set	128	128	128	128	75	65	52
Loading	40' HQ	set	128	128	128	128	75	65	52

	Model		GMV-ND22PHS/B-T <sup>™</sup>	GMV-ND25PHS/B-T <sup>*1</sup>	GMV-ND28PHS/B-T <sup>*1</sup>	GMV-ND32PHS/B-T <sup>*1</sup>	GMV-ND36PHS/B-T <sup>11</sup>	GMV-ND40PHS/B-T*1
Conocity	Cooling	kW	2.2	2.5	2.8	3.2	3.6	4.0
Capacity	Heating	kW	2.5	2.8	3.2	3.6	4.0	4.5
Power supp	bly	V/Ph/Hz			220~240/1/50 8	& 208~230/1/60		
Power cons	sumption	W	85	85	85	100	100	150
Airflourvolu	ma (11/M/L)	m³/h	550/480/400	550/480/400	550/480/400	600/500/420	600/500/420	850/700/600
All low volu	me (H/W/L)	CFM	324/282/235	324/282/235	324/282/235	353/294/247	353/294/247	500/412/353
Rated	Cooling	A	0.4	0.4	0.4	0.5	0.5	0.7
Current <sup>2</sup>	Heating	A	0.4	0.4	0.4	0.5	0.5	0.7
ESP		Pa	$60/0 \sim 150$	$60/0 \sim 150$	$60/0 \sim 150$	$60/0 \sim 150$	$60/0 \sim 150$	$60/0 \sim 150$
Sound pressur	re level(H/M/L)	dB(A)	35/33/31	35/33/31	35/33/31	36/34/32	36/34/32	40/37/34
Connectingpipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
diameter	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Drain pipe	Externaldia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
Dialit pipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm	700×700×300	700×700×300	700×700×300	700×700×300	700×700×300	700×700×300
(WxDxH)	Package	mm	897×808×362	897×808×362	897×808×362	897×808×362	897×808×362	897×808×362
Net weight/G	iross weight	kg	32/38	32/38	32/38	32/38	32/38	34/40
Loading	40'GP	set	168	168	168	168	168	168
quantity	40'HQ	set	196	196	196	196	196	196



	Model		GMV-ND45PHS/B-T <sup>*1</sup>	GMV-ND50PHS/B-T <sup>*1</sup>	GMV-ND56PHS/B-T <sup>*1</sup>	GMV-ND63PHS/B-T <sup>*1</sup>	GMV-ND71PHS/B-T <sup>*1</sup>	GMV-ND80PHS/B-T <sup>*1</sup>
Consoitu	Cooling	kW	4.5	5.0	5.6	6.3	7.1	8.0
Capacity	Heating	kW	5.0	5.6	6.3	7.1	8.0	9.0
Power supp	bly	V/Ph/Hz			220~240/1/50 8	k 208~230/1/60		
Power cons	umption	W	150	150	210	210	230	230
A :		m³/h	850/700/600	850/700/600	1000/800/700	1000/800/700	1250/1050/950	1250/1050/950
AITTIOW VOIU	me (H/IVI/L)	CFM	500/412/353	500/412/353	589/471/412	589/471/412	736/618/559	736/618/559
Rated	Cooling	A	0.7	0.7	1.0	1.0	1.1	1.1
Current <sup>2</sup>	Heating	A	0.7	0.7	1.0	1.0	1.1	1.1
ESP		Pa	$60/0 \sim 150$	$60/0 \sim 150$	90/0 ~ 200	$90/0\sim 200$	$90/0\sim 200$	$90/0\sim 200$
Sound pressur	re level(H/M/L)	dB(A)	40/37/34	40/37/34	42/38/35	42/38/35	43/39/35	43/39/35
Connectingpipe	Liquid	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52
diameter	Gas	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Droin nine	Externaldia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
Drain pipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm	700×700×300	700×700×300	1000×700×300	1000×700×300	1000×700×300	1000×700×300
(WxDxH)	Package	mm	897×808×362	897×808×362	1205×813×360	1205×813×360	1205×813×360	1205×813×360
Net weight/G	ross weight	kg	34/40	34/40	43/49	43/49	43/49	43/49
Loading	40'GP	set	168	168	138	138	138	138
quantity	40'HQ	set	196	196	161	161	161	161

	Model		GMV-ND40PLS/A-T	GMV-ND45PLS/A-T	GMV-ND50PLS/A-T	GMV-ND56PLS/A-T	GMV-ND63PLS/A-T
Ormerity	Cooling	kW	4.0	4.5	5.0	5.6	6.3
Capacity	Heating	kW	4.5	5.0	5.6	6.3	7.1
Power supply		V/Ph/Hz			220~240/1/50 & 208~230/1/60	)	
Power consum	ption	W	52	52	52	99	99
Airflow volume		m <sup>3</sup> /h	700/600/450	700/600/450	700/600/450	1000/800/600	1000/800/600
Allilow volume	(H/IVI/L)	CFM	410/355/265	410/355/265	410/355/265	590/471/355	590/471/355
	Cooling	A	0.3	0.3	0.3	0.5	0.5
Rated Current <sup>2</sup>	Heating	A	0.3	0.3	0.3	0.5	0.5
	Water Heating	A	/	/	/	/	/
ESP		Pa			15/0~30		
Sound pressure	e level(H/M/L)	dB(A)	33/31/28	33/31/28	33/31/28	35/33/30	35/33/30
Connecting pipe	e Liquid	mm	Φ6.35	Φ6.35	Ф6.35	Ф9.52	Ф9.52
diameter	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9
Drain nine	External dia.	mm	25	25	25	25	25
Diani pipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm		900 x 615 x 200		1100 x 6	615 x 200
(WxDxH)	Package	mm		1123x743x305		1323x7	743x305
Net weight/Gro	ss weight	kg	27/33	27/33	27/33	31/38	31/38
Loading	40' GP	set	192	192	192	162	162
Loading	40' HQ	set	192	192	192	162	162

	Model		GMV-ND90PHS/B-T <sup>™</sup>	GMV-ND100PHS/B-T <sup>*1</sup>	GMV-ND112PHS/B-T <sup>*1</sup>	GMV-ND125PHS/B-T <sup>-1</sup>	GMV-ND140PHS/B-T <sup>*1</sup>	GMV-ND160PHS/B-T <sup>*1</sup>
Concoity	Cooling	kW	9.0	10.0	11.2	12.5	14.0	16.0
Capacity	Heating	kW	10.0	11.2	12.5	14.0	16.0	18.0
Power supp	ly	V/Ph/Hz			220~240/1/50 &	208~230/1/60		
Power cons	umption	W	280	280	350	350	400	450
Airflouruslu	ma (11/M/L)	m³/h	1800/1450/1250	1800/1450/1250	2000/1600/1400	2000/1600/1400	2350/1900/1650	2500/2000/1750
AITIOW VOIU		CFM	1059/853/736	1059/853/736	1177/942/824	1177/942/824	1383/1118/971	1471/1177/1030
Rated	Cooling	A	1.3	1.3	1.6	1.6	1.9	2.1
Current <sup>2</sup>	Heating	A	1.3	1.3	1.6	1.6	1.9	2.1
ESP		Pa	90/0 ~ 200	90/0 ~ 200	90/0 ~ 200	90/0 ~ 200	90/0 ~ 200	90/0 ~ 200
Sound pressur	e level(H/M/L)	dB(A)	44/41/38	44/41/38	45/42/40	45/42/40	46/43/41	47/44/42
Connectingpipe	Liquid	mm	Φ9.52	Ф9.52	Ф9.52	Φ9.52	Φ9.52	Φ9.52
diameter	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Droin nine	Externaldia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
Drain pipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm	1400×700×300	1400×700×300	1400×700×300	1400×700×300	1400×700×300	1400×700×300
(WxDxH)	Package	mm	1601×813×360	1601×813×360	1601×813×360	1601×813×360	1678×808×365	1678×808×365
Net weight/G	ross weight	kg	57/64	57/64	57/64	57/64	58/67	58/67
Loading	40'GP	set	84	84	84	84	84	84
quantity	40'HQ	set	98	98	98	98	98	98

Note : \*1.This product model is under development. Gree reserves the right to modify the specifications without prior notice. Please confirm the final specifications with sales .

# Low Static Pressure Duct Type Indoor Unit

30/00 112	0/00112										
	Model		GMV-ND22PLS/A-T	GMV-ND25PLS/A-T	GMV-ND28PLS/A-T	GMV-ND32PLS/A-T	GMV-ND36PLS/A-T				
Canacity	Cooling	kW	2.2	2.5	2.8	3.2	3.6				
Capacity	Heating	kW	2.5	2.8	3.2	3.6	4.0				
Power supply		V/Ph/Hz			220~240/1/50 & 208~230/1/60						
Power consum	Power consumption		35	35 35		43	43				
Airflow volumo		m <sup>3</sup> /h	450/350/250	450/350/250	450/350/250	550/450/350	550/450/350				
AITTIOW VOIUMe(H/IVI/L)		CFM	265/206/147	265/206/147	265/206/147	325/265/206	325/265/206				
	Cooling	A	0.2	0.2	0.2	0.2	0.2				
Rated Current <sup>2</sup>	Heating	A	0.2	0.2	0.2	0.2	0.2				
	Water Heating	A	/	/	/	/	/				
ESP		Pa			15/0~30						
Sound pressure	e 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	Ф9.52	Φ9.52	Ф9.52	Φ12.7	Φ12.7				
Drain nine	External dia.	mm	25	25	25	25	25				
Drain pipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5				
Dimension	Outline	mm			700 x 615 x 200						
(WxDxH) 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				
Localing	40' HQ	set	192	192	192	192	192				

	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
Conocity	Cooling	kW	7.1	8.0	9.0	10.0	11.2	12.5	14.0
Capacity	Heating	kW	8.0	9.0	10.0	11.2	12.5	14.0	16.0
Power supply		V/Ph/Hz			220~	240/1/50 & 208~230/*	1/60		
Power consum	ption	W	105	140	209	209	209	230	230
Airflow volume		m³/h	1000/800/600	1100/1000/800	1500/1250/950	1500/1350/1000	1700/1500/1100	2000/1500/1150	2000/1500/1150
Almow volume	(Π/IVI/L)	CFM	590/471/355	650/590/471	885/736/599	885/795/590	1000/885/650	1175/885/677	1175/885/677
	Cooling	A	0.5	0.7	1.0	1.0	1.0	1.1	1.1
Rated Current <sup>2</sup>	Heating	A	0.5	0.7	1.0	1.0	1.0	1.1	1.1
	Water Heating	A	/	/	/	/	/	/	/
ESP		Pa				30/0~50			
Sound pressure	e level(H/M/L)	dB(A)	35/33/30	36/34/31	40/36/32	40/36/32	40/36/32	42/40/37	42/40/37
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Ф9.52
diameter	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain nine	External dia.	mm	25	25	25	25	25	25	25
Dianippe	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm	1200 x 6	55 x 260			1340 x 65	55 x 260	
(WxDxH) Package		mm	1448x8	58x315			1591x86	61x330	
Net weight/Gro	ss weight	kg	40/47	40/47	46/55	46/55	46/55	47/56	47/56
Loading	40' GP	set	96	96	78	78	78	78	78
Loading	40' HQ	set	96	96	78	78	78	78	78

# 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*
Conocity	Cooling	kW	2.2	2.5	2.8	3.2	3.6
Capacity	Heating	kW	2.5	2.8	3.2	3.6	4.0
Power supply		V/Ph/Hz			220~240/1/50 & 208~230/1/60	)	
Power consumption		W	25 25 25		25	30	30
Airflow volume(H/M/L)		m <sup>3</sup> /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
	Cooling	A	0.2	0.2	0.2	0.3	0.3
Rated Current <sup>2</sup>	Heating	A	0.2	0.2	0.2	0.3	0.3
	Water Heating	A	/	/	/	/	/
ESP		Pa			0/15		
Sound pressure	e level(H/M/L)	dB(A)	30/28/22	30/28/22	30/28/22	31/29/25	31/29/25
Connecting pipe	e Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Ф6.35	Φ6.35
diameter	Gas	mm	Φ9.52	Φ9.52	Ф9.52	Ф9.52	Φ12.7
Drain nine	External dia.	mm	25	25	25	25	25
Dianipipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm			710x450x200		
(WxDxH) Package mr		mm			1003x551x285		
Net weight/Gro	Net weight/Gross weight		18.5/22	18.5/22	18.5/22	19.5/23	19.5/23
Loading	40' GP	set	352	352	352	352	352
Loading	40' HQ	set	352	352	352	352	352



	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*
Ossasitu	Cooling	kW	4.0	4.5	5.0	5.6	6.3	7.2
Capacity	Heating	kW	4.5	5.0	5.6	6.3	7.0	8.0
Power supply V/Ph/Hz					220~240/1/50	& 208~230/1/60		
Power consump	otion	W	35	35	35	45	45	50
Airflouriselumer		m <sup>3</sup> /h	750/660/540	750/660/540	750/660/540	850/700/610	850/700/610	1100/800/640
Almow volume(	m/ivi/L)	CFM	441/388/318	441/388/318	441/388/318	500/412/359	500/412/359	647/471/377
	Cooling	A	0.3	0.3	0.3	0.3	0.3	0.5
Rated Current <sup>2</sup>	Heating	A	0.3	0.3	0.3	0.3	0.3	0.5
	Water Heating	A	/	/	/	/	/	/
ESP		Pa			0/	15		
Sound pressure	e 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	Ф9.52	Φ9.52	Φ9.52
diameter	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain nine	External dia.	mm	25	25	25	25	25	25
Dialitipipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm		1010x4	50x200		1010x450x200	1310x450x200
(WxDxH) Package mm				1303x5	51x285		1303x551x285	1603x551x285
Net weight/Gross weight kg		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
Luaung	40' HQ	set	288	288	288	288	288	224

Note : \* This series is without water pump.

# 4-way Cassette Indoor Unit

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		
Conositu		Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3	7.1		
Capacity		Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1	8.0		
Power supp	oly		V/Ph/Hz		220-240/1/50 & 208-230/1/60							
Power cons	sumption	-	W	48	48	48	50	59	59	68		
Airflow volu			m <sup>3</sup> /h	750/650/550	750/650/550	750/650/550	830/650/550	1000/900/750	1000/900/750	1180/950/850		
AIIIIOW VOIC			CFM	440/383/325	440/383/325	440/383/325	490/383/325	590/530/440	590/530/440	695/559/550		
		Cooling	A	0.2	0.2	0.2	0.2	0.3	0.3	0.3		
Rated Curre	ent <sup>2</sup>	Heating	A	0.2	0.2	0.2	0.2	0.3	0.3	0.3		
		Water Heating	A	/	/	/	/	/	/	/		
Sound pres	sure 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	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52		
diameter		Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9		
Drain nine		External dia.	mm	25	25	25	25	25	25	25		
Dianippe		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5		
	Dimension	Outline	mm	840x840x190	840x840x190	840x840x190	840x840x190	840x840x240	840x840x240	840x840x240		
Main Body	(WxDxH)	Package	mm	963x963x272	963x963x272	963x963x272	963x963x272	963x963x325	963x963x325	963x963x325		
	Net weight/G	ross 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		
	Dimension	Outline	mm	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65		
Panel	(WxDxH)	Package	mm	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133		
Net weight/Gro		ross weight	kg	7/11	7/11	7/11	7/11	7/11	7/11	7/11		
Loading quantity 40		40'GP	set	167	167	167	167	140	140	140		
Loading quantity		40'HQ	set	171	171	171	171	156	156	156		

	Mo	del		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		
Canaaitu		Cooling	kW	8.0	9.0	10.0	11.2	12.5	14.0	16.0		
Capacity		Heating	kW	9.0	10.0	11.2	12.5	14.0	16.0	17.5		
Power supp	oly		V/Ph/Hz		220~240/1/50 & 208~230/1/60							
Power cons	sumption		W	68	98	98	110	110	110	130		
Airflow volu	mo(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		
AITIOW VOIL	ime(H/W/L)		CFM	695/559/550	880/795/650	880/795/650	1000/824/650	1095/880/677	1095/880/677	1235/1000/824		
		Cooling	A	0.3	0.4	0.4	0.5	0.5	0.5	0.6		
Rated Curre	ent <sup>2</sup>	Heating	A	0.3	0.4	0.4	0.5	0.5	0.5	0.6		
		Water Heating	A	/	/	/	/	/	/	/		
Sound pres	sure 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	Liquid	mm	Ф9.52	Ф9.52	Φ9.52	Φ9.52	Φ9.52	Ф9.52	Φ9.52		
diameter		Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Ф19.05		
Drain nine		External dia.	mm	25	25	25	25	25	25	25		
Drain pipe		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5		
	Dimension	Outline	mm	840x840x240	840x840x320	840x840x320	840x840x320	840x840x320	840x840x320	910×910×293		
Main Body	(WxDxH)	Package	mm	963x963x325	963x963x409	963x963x409	963x963x409	963x963x409	963x963x409	1023×993×375		
	Net weight/G	ross weight	kg	26.5/34.5	32.5/40.0	32.5/40.0	32.5/40.0	32.5/40.0	32.5/40.0	46.5/56.5		
	Dimension	Outline	mm	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	1040x1040x65		
Panel	(WxDxH)	Package	mm	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1137x1137x140		
Net weight/Gr		ross weight	kg	7/11	7/11	7/11	7/11	7/11	7/11	7.5/11.5		
Loading gu	Loading quantity 40'0		set	140	104	104	104	104	104	144		
		40'HQ	set	156	119	119	119	119	119	144		

# Compact 4-way Cassette Indoor Unit

	Mc	odel		GMV-ND22T/B-T	GMV-ND28T/B-T	GMV-ND36T/B-T	GMV-ND45T/B-T	GMV-ND50T/B-T	GMV-ND56T/B-T		
Conositu		Cooling	kW	2.2	2.8	3.6	4.5	5	5.6		
Capacity		Heating	kW	2.5	3.2	4	5	5.6	6.3		
Power supp	Power supply V/Ph/Hz			220~240/1/50 & 208~230/1/60							
Power cons	sumption		W	35	35	35	45	45	45		
Airflowwolu	mo(H/M/L)		m <sup>3</sup> /h	600/500/400	600/500/400	600/500/400	700/600/500	700/600/500	700/600/500		
AIIIIOW VOIL	IIIe(H/IVI/L)		CFM	355/295/235	355/295/235	355/295/235	410/355/295	410/355/295	410/355/295		
		Cooling	A	0.4	0.4	0.4	0.5	0.5	0.5		
Rated Curre	ent <sup>2</sup>	Heating	A	0.4	0.4	0.4	0.5	0.5	0.5		
		Water Heating	A	/	/	/	/	/	/		
Sound pres	ssure level(H/M/	L)	dB(A)	46/39/35	46/39/35	46/39/35	47/43/38	47/43/38	47/43/38		
Connecting	pipe	Liquid	mm	Φ6.35	Ф6.35	Ф6.35	Ф6.35	Φ6.35	Φ9.52		
diameter		Gas	mm	Φ9.52	Ф9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9		
Drain nine		External dia.	mm	25	25	25	25	25	25		
Diani pipe		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5		
	Dimension	Outline	mm	596x596x240	596x596x240	596x596x240	596x596x240	596x596x240	596x596x240		
Main Body	(WxDxH)	Package	mm	773×733×300	773×733×300	733x733x300	733x733x300	733x733x300	733x733x300		
	Net weight/G	ross 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		
	Dimension	Outline	mm	650x650x50	650x650x50	650x650x50	650x650x50	650x650x50	650x650x50		
Panel	(WxDxH)	Package	mm	763x763x105	763x763x105	763x763x105	763x763x105	763x763x105	763x763x105		
	Net weight/G	ross 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 gu	antity	40'GP	set	267	267	267	267	267	267		
Localing qu	Loading quantity		set	288	288	288	288	288	288		

# 2-way Cassette Indoor Unit

	Mo	del		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		
Consoity		Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3	7.1		
Capacity		Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1	8.0		
Power supply V/Ph/H:			V/Ph/Hz		220~240/1/50 & 208~230/1/60							
Power cons	sumption		W	55.0	55.0	55.0	55.0	103.0	103.0	103.0		
Airflow volu	umo(H/M/L)		m³/h	830/660/580	830/660/580	830/660/580	830/660/580	1100/900/750	1100/900/750	1100/900/750		
AIIIIOW VOIU	IIIIe(H/IVI/L)		CFM	490/388/341	490/388/341	490/388/341	490/388/341	650/530/441	650/530/441	650/530/441		
		Cooling	A	0.3	0.3	0.3	0.3	0.7	0.7	0.7		
Rated Curre	ent <sup>2</sup>	Heating	A	0.3	0.3	0.3	0.3	0.7	0.7	0.7		
		Water Heating	A	/	/	/	/	/	/	/		
Sound pres	sure level(H/M/I	_)	dB(A)	35/32/29	35/32/29	35/32/29	35/32/29	39/36/33	39/36/33	39/36/33		
Connecting	pipe	Liquid	mm	Ф6.35	Ф6.35	Φ6.35	Ф6.35	Ф9.52	Ф9.52	Ф9.52		
diameter		Gas	mm	Ф9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9		
Drain nine		External dia.	mm	25	25	25	25	25	25	25		
Dianippo		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5		
	Dimension	Outline	mm	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315		
Main Body	(WxDxH)	Package	mm	1520x655x415	1520x655x415	1520x655x415	1520x655x415	1520x655x415	1520x655x415	1520x655x415		
	Net weight/G	ross weight	kg	43/54	43/54	43/54	43/54	46/56	46/56	46/56		
	Dimension	Outline	mm	1443x630x33	1443x630x33	1443x630x33	1443x630x33	1443x630x33	1443x630x33	1443x630x33		
Panel	(WxDxH)	Package	mm	1575x765x105	1575x765x105	1575x765x105	1575x765x105	1575x765x105	1575x765x105	1575x765x105		
Net weight/Gr		ross weight	kg	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0		
Loading quantity		40'GP	set	101	101	101	101	101	101	101		
Loading quantity		40'HQ	set	115	115	115	115	115	115	115		

# 1-way Cassette Indoor Unit

	Mc	del		GMV-ND22TD/A-T	GMV-ND28TD/A-T	GMV-ND36TD/A-T	GMV-ND45TD/A-T	GMV-ND50TD/A-T				
Canaaitu		Cooling	kW	2.2	2.8	3.6	4.5	5.0				
Capacity		Heating	kW	2.5	3.2	4.0	5.0	5.6				
Power supply V/Ph/Hz					220~240/1/50 & 208~230/1/60							
Power cons	sumption		W	30	30	30	45	45				
Airflow volu	mo(H/M/L)		m³/h	600/500/450	600/500/450	600/500/450	830/600/500	830/600/500				
AIIIIOW VOIU	IIIe(H/IVI/L)		CFM	355/295/265	355/295/265	355/295/265	490/355/295	490/355/295				
Cooling		Cooling	A	0.2	0.2	0.2	0.3	0.3				
Rated Curre	ent <sup>2</sup>	Heating	A	0.2	0.2	0.2	0.3	0.3				
		Water Heating	A	/	/	/	/	/				
Sound pres	sure level(H/M/	L)	dB(A)	36/32/28	36/32/28	36/32/28	40/35/30	40/35/30				
Connecting	pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35				
diameter		Gas	mm	Ф9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7				
Drain pipo		External dia.	mm	25	25	25	25	25				
Dialitipipe		Thickness	mm	2.5	2.5	2.5	2.5	2.5				
	Dimension	Outline	mm	987x385x178	987x385x178	987x385x178	987x385x178	987x385x178				
Main Body	(WxDxH)	Package	mm	1307x501x310	1307x501x310	1307x501x310	1307x501x310	1307x501x310				
	Net weight/G	ross weight	kg	20.0/27.0	20.0/27.0	20.0/27.0	21.0/28.5	21.0/28.5				
	Dimension	Outline	mm	1200x460x55	1200x460x55	1200x460x55	1200x460x55	1200x460x55				
Panel	(WxDxH)	Package	mm	1265x536x118	1265x536x118	1265x536x118	1265x536x118	1265x536x118				
	Net weight/G		kg	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0				
Loading gu	antity	40'GP	set	138	138	138	138	138				
Localing qu	Loading quantity		set	138	138	138	138	138				



# Wall-mounted Type Indoor Unit

00112										
	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 *
Conocity	Cooling	kW	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1
Capacity	Heating	kW	2.5	3.2	4.0	5.0	5.8	6.3	7.0	7.5
Power supply		V/Ph/Hz				220~2	240/1/50			
Power consum	ption	W	50	50	60	60	60	70	70	70
Airflouriselung		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
Almow volume	(H/IVI/L)	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
	Cooling	A	0.2	0.2	0.31	0.31	0.31	0.31	0.31	0.31
Rated Current <sup>2</sup>	Heating	A	0.2	0.2	0.31	0.31	0.31	0.31	0.31	0.31
	Water Heating	A	/	/	/	/	/	/	/	/
Sound pressure	e 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
Connecting pipe	e Liquid	mm	Φ6.35	Φ6.35	Ф6.35	Φ6.35	Ф6.35	Ф9.52	Φ9.52	Φ9.52
diameter	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain nine	External dia.	mm	Φ20	Ф20	Ф20	Ф20	Ф20	Ф30	Ф30	Ф30
Drain pipe	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dimension	Outline	mm	843x1	80x275		940x200x298			1008x221x319	
(WxDxH) Package		mm	973x2	58x370		1068x288x395			1131x398x328	
Net weight/Gro	ss 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
Loading	40' GP	set	702	702	557	557	557	441	441	441
Loading	40' HQ	set	819	819	624	624	624	503	503	503

#### 60 Hz

	Model		GMV- N22G/A3A-D*	GMV- N28G/A3A-D*	GMV- N36G/A3A-D*	GMV- N45G/A3A-D*	GMV- N50G/A3A-D*	GMV- N56G/A3A-D*	GMV- N63G/A3A-D*	GMV- N71G/A3A-D*
Conceitu	Cooling	kW	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1
Capacity	Heating	kW	2.5	3.2	4.0	5.0	5.8	6.3	7.0	7.5
Power supply V/Ph/Hz						208~2	230/1/60			
Power consump	tion	W	50	50	60	60	60	70	70	70
Airfleur rehumen (	1/6.4/1.)	m <sup>3</sup> /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
Almow volume(F	⊓/IVI/L)	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
	Cooling	A	0.2	0.2	0.21	0.21	0.21	0.31	0.31	0.31
Rated Current2	Heating	A	0.2	0.2	0.21	0.21	0.21	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
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Ф9.52
diameter	Gas	mm	Ф9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Ф15.9
Drain nine	External dia.	mm	Ф20	Ф20	Ф20	Ф20	Ф20	Ф30	Ф30	Ф30
Dialitipipe	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dimension	Dimension Outline		843x18	30x275		940x200x298		1008x221x319		
(WxDxH)	Package	mm	973x28	35x370		1068x288x395			1131x398x328	
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
Loading	40' GP	set	702	702	557	557	557	441	441	441
Locionig	40' HQ	set	819	819	624	624	624	503	503	503

Note : \* This series is without water pump.

# Floor Standing Type

	Model		GMV-ND100L/A-T	GMV-ND140L/A-T				
Conneitu	Cooling	kW	10	14				
Capacity	Heating	kW	11	15				
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60					
Power consum	Power consumption		185	185				
Airflourialumaa	(11/64/1.)	m <sup>3</sup> /h	1850/1600/1400	1850/1600/1400				
Almow volume	(H/IVI/L)	CFM	1089/942/824	1089/942/824				
	Cooling	A	1.5	1.5				
Rated Current <sup>2</sup>	Heating	A	1.5	1.5				
	Water Heating	A	/	/				
ESP		Pa	0	0				
Sound pressure	e level(H/M/L)	dB(A)	50/48/46	50/48/46				
Connecting pipe	Liquid	mm	Ф9.52	Ф9.52				
diameter	Gas	mm	Φ15.9	Φ15.9				
Drain nine	External dia.	mm	31	31				
Drain pipe	Thickness	mm	4.5	4.5				
Dimension	Outline	mm	1870x580x400	1870x580x400				
(WxDxH)	Package	mm	2083/738/545	2083/738/545				
Net weight/Gro	ss weight	kg	54/74	57/77				
Loading	40' GP	set	67	67				
Loading	40' HQ	set	67	67				

# Console Indoor Unit 50/60 Hz

	Model		GMV-ND22C/A-T	GMV-ND28C/A-T	GMV-ND36C/A-T	GMV-ND45C/A-T	GMV-ND50C/A-T
Consoity	Cooling	kW	2.2	2.8	3.6	4.5	5.0
Capacity	Heating	kW	2.5	3.2	4.0	5.0	5.5
Power supply		V/Ph/Hz			220-240/1/50 & 208-230/1/60		
Power consump	otion	W	15	15	20	40	40
Airflourieluneo/		m³/h	400/320/270	400/320/270	480/400/310	680/600/500	680/600/500
Annow volume(	⊓/IVI/L)	CFM	235/188/159	235/188/159	282/235/182	400/353/294	400/353/294
	Cooling	A	0.17	0.17	0.25	0.4	0.4
Rated Current <sup>2</sup>	Heating	A	0.17	0.17	0.25	0.4	0.4
	Water Heating	A	/	/	/	/	/
ESP		Pa	0	0	0	0	0
Sound pressure	e level(H/M/L)	dB(A)	38/33/27	38/33/27	40/37/32	46/43/39	46/43/39
Connecting pipe	Liquid	mm	6.35	6.35	6.35	6.35	6.35
diameter	Gas	mm	9.52	9.52	12.7	12.7	12.7
Drain nine	External dia.	mm	28	28	28	28	28
Drain pipe	Thickness	mm	1	1	1	1	1
Dimension	Outline	mm	700/215/600	700/215/600	700/215/600	700/215/600	700/215/600
(WxDxH)	Package	mm	788x283x777	788x283x777	788x283x777	788x283x777	788x283x777
Net weight/Gros	s weight	kg	16/19	16/19	16/19	16/19	16/19
Loading	40' GP	set	348	348	348	348	348
Loading	40' HQ	set	348	348	348	348	348

# Fresh Air Processing Indoor Unit

	Model		GMV-NX140P/A (X1.2)-K *	GMV-NX450P/A (X4.0)-M *	GMV-NDX224P/A-T*	GMV-NDX280P/A-T*
Canacity	Cooling	kW	14.0	4.5	22.4	28.0
Capacity	Heating	kW	10.0	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	otion	W	360	1240	760	860
Airflow volume		m <sup>3</sup> /h	1200	4000	2000/2000~3500	2500/2000~3500
AIIIIOw volume(	⊓/IVI/∟)	CFM	705	2355	1177/1177~2060	1471/1177~2060
	Cooling	A	1.82	2.22	4.3	4.9
Rated Current <sup>2</sup>	Heating	A	1.82	2.22	4.3	4.9
	Water Heating	A	/	/	/	/
ESP		Pa	150	200	200/50~270	200/50~280
Sound pressure	e level(H/M/L)	dB(A)	42	58	50	51
Connecting pipe	Liquid	mm	Φ9.52	Φ12.7	Ф9.52	Ф9.52
diameter	Gas	mm	Φ15.9	Φ28.6	Ф19.05	Φ22.2
Drain nine	External dia.	mm	30	33	Ф30	Ф30
Dianipipo	Thickness	mm	1.5	3	1.5	1.5
Dimension	Outline	mm	1463x756x300	1700x1100x650	1483×791×385	1483×791×385
(WxDxH)	Package	mm	1514x785x360	1890x1460x835	1578×883×472	1578×883×472
Net weight/Gros	ss weight	kg	63.5/71	208/266	82/104	82/104
Loading	40' GP	set	84.0	16.0	65	65
Loading	40' HQ	set	98.0	16.0	65	65

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

# AHU KIT 50/60 Hz

	Model		GMV-N36U/A-T	GMV-N71U/A-T	GMV-N140U/A-T	GMV-N280U/A-T	GMV-N560U/A-T
Power		V/Ph/Hz		1	220~240/1/50 & 208~230/1/60	)	
Defaulted capacity	Cooling	kW	3.6	7.1	14	28	56
of ex-factory	Heating	kW	4	8	16	31.5	62.5
Adjustable	Cooling	kW	2.8/3.6	4.5/5.6/7.1	9/11.2/14	22.4/28	45/50.4/56
capacity	Heating	kW	3.2/4.0	5.0/6.3/8.0	10/12.5/16	25/31.5	50.0/56.5/62.5
Power		W	5	5	5	5	5
Size of connection	Liquid pipe	mm	Φ6.35/Φ6.35	Φ6.35/Φ9.52/Φ9.52	Ф9.52/Ф9.52/Ф9.52	Φ9.52/Φ9.52	Φ12.7/Φ15.9/Φ15.9
pipe	Gas pipe	mm	Φ9.52/Φ9.52	Φ12.7/Φ15.9/Φ15.9	Ф15.9/Ф15.9/Ф15.9	Ф19.05/Ф22.2	Φ28.6/Φ28.6/Φ28.6
Connection met	hod	_	Brazing Connection	Brazing Connection	Brazing Connection	Brazing Connection	Brazing Connection
Outlinedimension	Electronicexpansion valve box	mm	203×326×85	203×326×85	203×326×85	203×326×85	246×500×120
(WxDxH)	Control box	mm	334×284×111	334×284×111	334×284×111	334×284×111	334×284×111
Packing size ()	WxDxH)	mm	539×461×247	539×461×247	539×461×247	539×461×247	759×645×180
Net weight/gros	s weight	kg	8.6/11.5	8.6/11.5	8.6/11.5	8.6/11.5	11.8/15.5
L	40'GP	set	981	981	981	981	702
Loading	40'HQ	set	1090	1090	1090	1090	756



						1	
	Model		GMV-NR71A/A-D	GMV-NR90A/A-D	GMV-NR100A/A-D	GMV-NR112A/A-D	GMV-NR140A/A-D
Conceitu	Cooling	kW	7.1	9.0	10.0	11.2	14.0
Capacity	Heating	kW	7.1	10.0	11.0	12.5	15.0
Power supply		V/Ph/Hz			208~230/1/60		
Power consum	ption	W	140	170	245	245	368
Airflow volume(H/M/L)		m3/h	1400	1660	1940	2210	2380
		CFM	825	980	1140	1300	1400
	Cooling	A	1.52	1.35	2.00	2.00	2.50
Rated Current <sup>2</sup>	Heating	A	1.52	1.35	2.00	2.00	2.50
	Water Heating	A	/	/	/	/	/
ESP		Pa	25	37	37	37	50
Sound pressure	e level(H/M/L)	dB(A)	48	50	52	53	54
Connecting pipe	Liquid	mm	φ9.52	φ9.52	φ9.52	φ9.52	φ9.52
diameter	Gas	mm	Φ15.9	φ15.9	φ15.9	φ15.9	φ15.9
Drainage Conne (Outer Diameter×W	ection Size Vall Thickness)	mm	φ19	φ19	φ19	φ19	φ19
Dimension	Outline	mm	460*540*1105	460*540*1105	540*540*1224	540*540*1224	630*540*1224
(WxDxH)	Package	kg	514*617*1155	514*617*1155	594*617*1274	594*617*1274	684*618*1280
Net weight/Gro	ss weight	set	53/57	55.5/59	65/70	67/72	79/84
Loading	40' GP	set	164	164	85	85	85
Loading	40' HQ		172	172	114	114	114

# Floor Ceiling Type Indoor Unit

	Model		GMV-ND28ZD/A-T	GMV-ND36ZD/A-T	GMV-ND50ZD/A-T	GMV-ND56ZD/A-T	GMV-ND63ZD/A-T
Conseitu	Cooling	kW	2.8	3.6	5.0	5.6	6.3
Capacity	Heating	kW	3.2	4.0	5.6	6.3	7.1
Power supply		V/Ph/Hz			220~240/1/50 & 208~230/1/60		
Power consump	otion	W	40	40	50	50	75
Airflow volume		m³/h	650/580/500	650/580/500	950/850/700	950/850/700	1400/1150/1000
AIIIIOW VOIUIIIe(	□/ IVI/ L)	CFM	380/341/294	380/341/294	560/500/410	560/500/410	825/677/590
	Cooling	A	0.2	0.2	0.25	0.4	0.38
Rated Current <sup>2</sup>	Heating	A	0.2	0.2	0.25	0.4	0.38
	Water Heating	A	/	/	/	/	/
Sound pressure	e level(H/M/L)	dB(A)	36/34/32	36/34/32	42/38/33	42/38/33	44/42/39
Connecting pipe	Liquid	mm	Ф6.35	Φ6.35	Ф6.35	Φ9.52	Ф9.52
diameter	Gas	mm	Ф9.52	Φ12.7	Φ12.7	Φ15.9	Ф15.9
Drain nine	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17
Drain pipe	Thickness	mm	1.75	1.75	1.75	1.75	1.75
Dimension	Outline	mm		1220x7	00x225		1420x700x245
(WxDxH)	Package	mm		1343x8	23x315		1548x828x345
Net weight/Gros	ss weight	kg	40/49	40/49	40/49	40/49	50/58
Loading	40' GP	set	145	145	145	145	90
Lociality	40' HQ	set	158	158	158	158	98

	Model		GMV-ND71ZD/A-T	GMV-ND90ZD/A-T	GMV-ND112ZD/A-T	GMV-ND125ZD/A-T	GMV-ND140ZD/A-T
Conocity	Cooling	kW	7.1	9.0	11.2	12.5	14.0
Capacity	Heating	kW	8.0	10.0	12.5	14.0	16.0
Power supply		V/Ph/Hz		220~240/1/50 & 208~230/1/60			
Power consum	ption	W	75	140	160	160	160
Airflow volume		m³/h	1400/1150/1000	1600/1400/1200	2000/1800/1450	2000/1800/1450	2000/1800/1450
AIIIIOW VOIUIIIe(	[FI/ IVI/ L]	CFM	825/677/590	940/824/706	1175/1059/853	1175/1059/853	1175/1059/853
	Cooling	A	0.38	0.7	0.95	0.95	0.95
Rated Current <sup>2</sup>	Heating	A	0.38	0.7	0.95	0.95	0.95
	Water Heating	g A	/	/	/	/	/
Sound pressure	e level(H/M/L)	dB(A)	44/42/39	50/47/43	51/46/42	52/49/45	52/49/45
Connecting pipe	e Liquid	mm	Φ9.52	Φ9.52	Ф9.52	Φ9.52	Φ9.52
diameter	Gas	mm	Φ15.9	Φ15.9	Ф15.9	Φ15.9	Φ15.9
Drain nine	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17
Diampipo	Thickness	mm	1.75	1.75	1.75	1.75	1.75
Dimension	Outline	mm	1420x7	00x245		1700x700x245	
(WxDxH)	Package	mm	1548x8	28x345		1828x828x345	
Net weight/Gro	ss weight	kg	50/58	50/58	60/68	60/68	60/68
Loading	40' GP	set	90	90	84	84	84
Loading	40' HQ	set	98	98	98	98	98

# **Branching Joint** (FOR GMV5 units)

Model	Indoor unit total capacity X (kW)	
FQ01A/A	X<20	
FQ01B/A	20≤X≤30	
FQ02/A	30 < X≤ 70	
FQ03/A	70 < X≤ 135	
FQ04/A	135 < X	

	Outdoor unit total conceity	
Model	X (kW)	
ML01/A	20≤ X≤ 56	







# **Branching Joint** (FOR GMV HR)

For Indoor Units				
to do uno a dat	Indoor unit total		Appearance	
Indoor model	capacity X (kW)	High-pressure gas pipe	Low-pressure gas pipe	Liquid pipe
FQ01Na/A	X≤5.6			
FQ02Na/A	5.6 ≤ X≤ 22			
FQ03Na/A	22 < X ≤ 30			
FQ04Na/A	30 < X ≤ 68			
FQ05Na/A	68 < X ≤ 96			
FQ06Na/A	96 <x≤135< td=""><td></td><td></td><td></td></x≤135<>			
FQ07Na/A	135 < X			

For Outdoor Uni	ts			
Model	odel Indoor unit total Appearance			
	capacity X (kW)	High-pressure gas pipe	Low-pressure gas pipe	Liquid pipe
ML01R	22.4 ≤ X ≤ 96			
ML02R	96 < X			

Model	Sort		
	Gas pipe		192016-1 19213-4 19213-4 19213-8 19213-8 00231.8
FQ14/H1	Liquid pipe		
5049/14	Gas pipe	1791 201	10519.2 10525.6 10528.6 00078.59
FQ18/H1	Liquid pipe		
E018/H2	Gas pipe		19222.4 19223.5 19233.3 19233.3
FQ10/HZ	Liquid pipe		1024.1 10011.1 10011.1 10011.1 10011.2 
Total rated capacit	y of downstream in	door units X(kW)	Upstream conr Gas pipe(mm)
	X≤40.0		≤Ф25.4
Total rated capacit	y of downstream in	door units X(kW)	Gas pipe(mm)
	∧≥00.0		2Ψ20.0



≥Ф19.05



# **Control System**

# Smart Model Selection Software and Debugging Software

# Model Selection Software

Gree multi VRF selection software is a kind of advanced computer program for selecting models automatically in sales and project bidding. It integrates multi VRF selection logic and computer software to provide a user-friendly interactive interface, which is able to automatically recommend suitable models to user according to ambient condition of project and user's demand. It is applicable for GMV5.

### New Project Setting and Project Design Conditions

After setting up a new model selection project, input the information of project, customer and designer, and select the function type, power supply, design conditions and other information of outdoor unit.

Project name Default	Location
Design time 2016-08-29	Contract No
Customer information	
Name	Job
Company	Address
Phone	Fax
	Save customer
Designer information	
Name	Job
Company	Address
Phone	Fax
	Save designer information
Remark	

Project Setting

Confirm information	
Designer Information	-
Name	
doc	
Company Address	
Phone	
Filone	
r dA	
ProjectName Default	
Frequency 50Hz	
Type Office building	
Allocation Rate 1	
CheckAntu	
Room Num 1	
Design Load Cool	
Indoor Cool	
Dry bulb 27°C	
Wet bulb 19°C	
Relative humidity 45.77%	
Outdor Cool	
Dry bulb 34.99°C	
	1

Confirmation



DU Function	HeatPump	HeatPump *									
Power	380~415V 3N~,50H	łz	Contraction of the second s								
Building type	Office building	-	<ul> <li>IDU and ODU cap</li> </ul>		100 🚖						
Design loa	d										
Cooling	load 💿 Heatin	ng load 🤅	Both cool le	oad and heat loa	d						
Total coolin	g capacity/sensible c	cooling capacity									
Total co	oling capacity	C	Sensible o	ooling capacity							
Project des	ign condition										
Cooling		Heati	ng								
Indoor		- Ind	100								
Dry b	ulb 27.00 🚔 *0	3	Dry bulb 20.00 *C								
Wet t	ulb 19.00 🚖 °C										
Hum	dity 45.77 4	Qu	Outdoor								
			Dry buib	7.00	C						
Outdoor			Wet build	4.50	°C						
Dry	bulb 35.00 🚖 •	c	Humidity	63.41 🚔	%						
Check met	hod	Other	information								
<ul> <li>Auto</li> </ul>	🔘 Manual		Room 1								

Project Design Conditions



### Model Selection of Indoor Unit and Outdoor Unit

After selecting room type, the software will recommend the suitable indoor unit series automatically. You can also select indoor unit series manually. After inputting the room area or the required air conditioning load, elbows, drop from ODU, etc., the software will recommend the suitable indoor unit model automatically. Select branch and then input its piping length, drop from ODU and other information to connect the branches with indoor unit and outdoor unit. Select the outdoor unit series and the software will recommend the suitable outdoor unit model automatically.

Room		16 D
Room name [System1_Room_1	Room type Other	Des.
Floor FI	IDU List	
Room calculation	IDU I	
Room cooling I to state	Selected IDU System1_Room_1_IDU_1	
the state of the s	Total rated cooling 10.00 KW	
	Total rated heating 11.20 kW	
Edit IDU Room design condition Controlle	r selection   ParameterList	
Select Room Bystem1_Room_1	IDU Series Low ESP Duct Type	
Local name System1_Room_1	_IDU_1 Recommend IDU OMV-ND100PLSIA-T	
Single unit cooling load 10 KW	Select Model GMV-ND100PLSI/+T	
	Cooling(Rated/Actual) 10.00/10.00 KW	
Static pressure 0 Pa	Heating(Rated/Actual) 11.20/ WW	
Pipe length(branch to IDU) 5 m	Recommend Manual	
Elbows(branch to IDU) 2		
Drop from ODU  10 m		
the contraction of the second address		
P Start recommend IDU restriction for the roor S	m OK Cancel	ODU
Starf recommend IDU restriction for the roor     S	m OK Cancel	The ODU
Starf recommend IDU restriction for the roor      S      Presex      D      D      Cook     Prest      Cook     Prest      Cook     Prest      Cook     Prest      Prest      Cook     Prest	m OK Cancel	ODU Cotal ra
Start recommend IDU restriction for the roor      Starts      Determined     DU restriction for the roor      Source      Doto: Paciety lange     Source     Sou	m OK Cancel	ODU Total ra Total ra
Start recommend IDU restriction for the roor      Sector      Conc. Frances     Totols frances     Totols frances	m Concel	ODU O Total ra Total ra
Start recommend IDU restriction for the roor      S      Concernent     Concernent     Concernent	m OK Cancel Select IDU	ODU C Total ra Total ra Stabi
Start recommend IDU restriction for the roor      S      Concer      Conc	m OK Cancel	CDU C Total ra Total ra Stati
Start recommend IDU restriction for the roor      S      Dents      Dent	m OK Cancel	Total ra Stab
Start recommend IDU restriction for the roor      S      functor      Concer Function      Concer Function      Torrent      Torent      Torrent      Torret	m OK Cancel Select IDU	CODU C Total ra Total ra Stati
Blarf recommend IDU restriction for the roor     S	m OK Cancel Select IDU	Couu Total ra Total ra Stati
Start recommend IDU restriction for the roor      S      Forest      Concentration     Total Total Total Total Total Total Total     S      S	m OK Cancel select IDU	CDU Total ra Total ra Stab
Start recommend IDU restriction for the roor      S      Concertance	m OK Cancel select IDU	Coolingd Coolingd
Start recommend IDU restriction for the roor      S      Force      Concertment IDU restriction for the roor      S      Concertment IDU restriction      Concertment	m celect IDU	CODU Total ra Total ra Stab Parameb Coolingt
Bladrecommend IDU restriction for the roor     S      Description     Des	m Select IDU	Cooling( Heating()
	m OK Cance select IDU	CDU Total ra Total ra Stati Paramete Cooling Heating0 Link ID
Blart recommend IDU restriction for the roor     S	m OK Cancel select IDU	ODU Total ra Total ra Stati Paramet Cooling Heating( Link ID
Bladrecommend IDU restriction for the roor     S      Connection	m CK CHARGE	Cooling Cooling Heating
Bladrecommend IDU restriction for the roor     S      Due to the the roor     S      S	m	ODU Total ra Total ra Stab Parametu Cooling( Heating() Link IDI

<ul> <li>Branch information</li> </ul>	lion	
Piping length Elbow quantity	20 m	
Subsystem mark	System1	
Branch mark	System1 Branch4	
Branch model		
Edit B	arand Information	
ODU Information		×
ODU series GMV5C Heat Pump.	380~415\43ph-50Hz	
Total rated heating 67.6/- KW	IDU and ODU actual capacity rate 91	~
Static pressure 0 Pa	ODU model GMV-880VMMA-M	
	Selected model GMV4680WM/A-M	
Parameters Parameters list	Recommend Manual	1
in the second second	Basic module	1
Cooling(Rated/Actual) 68.00/61.24	K/V GMV-280WM/A-M GMV-400WM/A-M	
Heating(Rated/Actual) 76.50/72.80	KW	
Link IDUs in maximum 39		
Length to first branch 20 m	Subsystem mark Default	
Elbow quantity 10	Local mark Default_ODU	1
	OK Cancel	
:	Select ODU	

#### Check

After finishing the model selection of indoor unit and outdoor, select the check method to check each system in the project and adjust IDU and ODU models.



### **Electric Configuration and Unit Configuration**

After checking, the electric configuration of indoor unit and outdoor unit shall be confirmed. During model selection, metric unit or British unit can be set.



Confirm Electric Configuration

#### **Output Report**

After finishing the project settings, the report can be output in excel or CAD format.

3.1 Cinit Output					
Indoor/Outdoor Capacit	ty Ratio	_			
Solal capecity of ODU		Tylat cap	with the	Indus Outdoor Caperilly Natio	
12,000	sil.town		NAME .	81%	
-	Conting Capecity	Neuting Capecity	Cooling Type Power Retwolfervised	Heating lead Power	
Model		*#	18	10	
		00.00	14 44 75 17	18.85	1
0x3/402/M81-M	88,006124		10000		
Osti-480/MSI-M Tanbol" mass the adua sthurica, etc.	EE.008124	entert according to	The designed length all	ne langti oʻpqatina, maamum haqti	]
Ostveton/spinst Tantosif means he actual sthere ca. etc.	ELCORT24	entered according to	te popetienje d	on langti oʻpqulina, masmuni haqiti	]

Report in Excel Format

# Intelligent Debugging Software

GMV5 offers an intelligent debugging software to the end-users for faster construction needs.

#### **Monitoring Functions**

- Fully control the operation status of each device of the system;
- Hover the mouse over the parameter to display its remarks.
- The online devices will be displayed in a tree structure:
- Display the information of air conditioner in divided regions;
- Each display region can be moved or concealed;
- Display updated status of units in real time;

Tomporature		- Longth
• °C	C °F	© m C ft
Capacity —		Pipe dimension
€ KW	C kBtu/h	• mm C inch
Weight		Pressure
€ kg	C Lbs.	€ Pa C inWG

Unit Configuration



Report in CAD Format

200 200 200 200 200 200 200 200 200 200	System Cost of Cost of	Rodel at Hodes dias Otto ine Status may talve down Trans or Status my Status to Status	JARNSS CROTHERE L 20 20 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	an orter and a state of a state o	Anne Televi Facted Cap Eart-Clave 1 Outdoor Operation Operation Biodu Biodu Disothary sep0 Thell Of Disothary sep0 Thell Of Di	(1000) 42117 22.4 5210 Jarto 5217 22.4 5217 22.4 5		Compil C null Busher Compil 17 Famil 0 1 Boster 1 Panil 17 Compil 0 Busher 1 Panil 19 Panil 19 Panil 19	Arrent I. 2 Volta, IV W Taap III Arrent I. 2 Volta, IV W Taap III Arrent I. 2 Volta, IV W Taap III Arrent I. 2 Volta, IV W Taap III		Contene 3 Rates - 27 Congo Capo Congo Congo Capo Congo Capo Congo	Velocit UDC 4 Capacity 14 Cap	22.4 Rather 13.7 0 0 0 13.9 123.4 12
Gerap Sanker 0 Bartur Role Sprine De Bartur Derjert Sanker 0 Sprim Sanker 0 Sprim Sanker 24 all Gartus Capacity 22 4 all Capacity 21 (and 120 % Jack Danage Seriag-Canfort	201 mm	teles	Jacol		Compil 5 Compil 5 Strong 7 Heasture	tatus Dfr tatus Dfr alve3 Dfr Valve Dfr		Teep	Entroy A	dentes Pie	Con Gor Bri	ngl Status ng2 Status ngy Ualtel Indone	Ne Contra
Defroating Cycle E.30 Bin	Toster.		Capacity	and un	Status	-054	an open	Setting	Temp	Temp	Tipe Teep	Parties An	1 210
Researchington Researching in		Investor (LT)	le'a	PLANE	1000	Provising	ren 31ap	10.0	100.0	Par. 4	100.0		-
Distribution Sate 125 S	4						ange Chas	1220.0	100.0	220.0	100110	10	14
Distribution Sate 125 % Energency Mode 0	3	Den (M.)	2.2	279.04	1111			100.0	10.0	100.0	-		
Distribution Asts 125 % Energency Mode:0 100 Node Prior Stage:NaN	4	Dect (PL) Dect (PL)	2.2	Slave	DEL	Cooling	Fan Stop	60.8	80.6	89.4	89.6	0	0
Distribution Rate 125 % Energency Mode:0 100 Mode Prior Stage NaN Fan Energency No Energency	4	Duct (HL) Duct (HL) Duct (HL)	2.2 2.5 2.8	Slave Slave	DEL	Cooling	Fan Stop Fan Stop	60.5 60.8	80, 6 28, 8	89.6	89.6	0	0



# **Control Functions**

- Control the operation of unit as you like;
- Comprehensive control of outdoor unit, indoor unit, water tank, hydro box, etc.;
- Real-time display of current status or status after being controlled;
- Both single control and group control are available.



### **Project Debugging Functions**

- One-click and automatic project debugging;
- Project debugging is arranged step by step from left to right;
- Manual intervention and skipping of some debugging phases are available.
- Green icons will be displayed for the items finishing debugging; red icons will be displayed for the items having debug exception; light yellow icons display debugging information;

1 Rater Dit Setting Check				😝 (f IW Valore Clark Salore During	inter state
🚰 <sup>2</sup> Unit Address Assignment				11 Reprod	
3 Centres III Sector Robile III	1 mile			12 Cention Startag Salagging	100
of Centires 200 ND.	28 units	100		12 Reserved	
3 Base Mobiles Inner Committeetion On	eù -		•	18 Reserved	
💕 d Base Roduler inner Components Check				15 Second Charging In Cooling	
27 IE Coperate Cash			•	16 Neural Charping In Secting	
🔏 O Corps: Probant Configuration	1.5	100		Perjort Debug Completion	
2) Sefrigerant Check Before Starrag					

## Auto Data-Saving Function

Data will be saved automatically. Database saving path can be changed or data document can be generated repeatedly.



### **USB** Data Converter

Users can use USB data converter to freely convert CAN/HBS/RS485 data into USB data, achieving data interchange between computer and air conditioner.



### Auto Direction of Connection Way

The wiring diagram will direct connection way automatically, so that the user can get the connection way quickly.









GMV5 75/96

# Multiple Intelligent Remote Control Management

Gree GMV5 provides multiple intelligent controls in order to satisfy all demands. It can control both a room and a building at the same time.



# Visualized Management

- System has a map that can display air conditioners' locations in rooms and buildings.
- System is able to measure the status and number of air conditioners in different levels

# Everyday Management

#### • Setting for daily operation

a.Management in days/weeks/months/years b.Management in each unit c.Simple display for management

• Other functions

a.Power on/off, modes, humidity, fan speed b.Waste of energy that may be caused by forgetting to turn off the air conditioner can be avoided



# Group Management

• Central management in groups a.Free choices of dividing groups b.Central control over power on/off c.Central control over temperature d.Central control over modes e.Central control over user authority



# Authority Management

#### • Only for indoor units

a.Limited control over power on/off b.Limited control over temperature c.Limited control over modes



# **VIP** Management

System can provide independent and unique service to VIP users.



# BACnet Gateway

Gree BAC net gate way kit ME30-24/D2(B) is intended to realize the data exchange between the air conditioning unit and BAS system, and providing standard BAC net/IP building interface and 10 I/Os (five inputs are DI1, DI2, DI3, DI4, DI5 and five outputs are DO1, DO2, DO3, DO4, DO5). DI1 is the fire alarm interface. The status of other I/Os are mapped to the specific objects of the BAC net/IP bus and are defined by the user.

Applicable Gree air conditioner models for this gateway are GMV5 DC inverter multi VRF unit and GMV5S full-DC inverter multi VRF unit.



- International standard BACnet/IP interface;
- Real-time monitoring of unit operation status, e.g. on/off, mode, temperature;
- Real-time response to the control of unit (on/off, mode setting and speed setting, etc.) by monitoring software;
- Monitor unit errors;



- Lock unit operation statuses, directing at all control functions of unit itself or a certain setting function;
- Achieve cooling and heating temperature limitation functions;
- 5DI &5DO interfaces for receiving fire alarm signal and user's definition logic;
- Up to 255 IDU units can be centrally controlled.

GMV5 **7**99/100

# Wired Controller and Remote Controller

There are two kinds of controllers: wired controller and remote controller. The system provides various controls for users, such as cooling, heating, dehumidifying and fan etc., users can select it flexibly according to their own using methods.

### Wired controller XK46



- LCD with black background and white words; touch buttons;
- Clock can be displayed and set; 24 hours timer setting for on/off;
- 7 levels of fan speed, up & down swing and left&right swing;
- Can be switched in auto, cooling, dehumidifying, fan, heating, floor heating, 3D heating and space heating operation modes;
- Master and slave wired controllers can be set; simultaneous control over several IDUs is available;
- Available functions: sleep, ventilation, quiet/auto quiet, light, energy saving, auxiliary heating, drying, memory, low-temperature dehumidifying, absence in heating, controllable auxiliary heating in dehumidifying, filter cleaning reminder, etc.;
- Detect ambient temperature; receive infrared remote controller signal;
- With project parameters viewing and setting functions.

### Remote Controller YAP1F



### Remote Controller YV1L1

#### Wired Controller XK79 (For hotel)



- Small and fashionable appearance with thickness only of 12mm and back lighting LCD with black background and white words;
- Eight touch buttons;
- Clock can be displayed and set in countdown and clock timer;
- Besides normal functions, other functions such as low-temperature dehumidifying, absence in heating, controllable auxiliary heating in dehumidifying and filter cleaning reminder can also be set;
- Door control system can be connected.



- Can be switched in auto, cooling, dehumidifying, fan and heating operation modes;
- Besides turbo,6 levels of fan speed can be set;
- Available functions: child lock, drying, health, ventilation, turbo, sleep, light, absence, I-feel and timer;
- Clock display and indoor/outdoor ambient temperature viewing functions;
- Up & down swing and left & right swing.

- Back lighting LCD;
- Can be switched in auto, cooling, dehumidifying, fan, heating, floor heating, 3D heating and space heating operation modes;
- 7 levels of fan speed, up&down swing and left&right swing;
- Available functions: child lock, energy saving, drying, health, ventilation, quiet/auto quiet, sleep, light, absence, low-temperature dehumidifying, l-feel and timer;
- With clock display, system parameters viewing and setting functions.

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### Wired Controller XK86



- Elegant appearance;
- High-resolution color LCD;
- Capacitive touch control; receive infrared remote controller signal;
- Various timing functions: three weekly timers and one countdown timer can be set simultaneously; mode, temperature and fan speed can be preset in weekly timer;
- Complete system functions; each function will be implemented in an individual page with interactive and humanized interface;
- Various personalized functions, e.g. setting brightness and backlight time;
- Sufficient viewing functions, e.g. viewing on/off status and after-sales service hot line.

- Single control of one unit
- Each indoor unit has an independent controller.



One indoor unit can be controlled by several wired controllers at different places.

#### Elegant and concise appearance;

- Touch buttons with back lighting LCD;
- Chinese and English display can be switched;
- With weekly timer function;
- Complete system functions with each function implemented in an individual page;
- Refreshing, auto dehumidifying, absence and other modes can be set;
- Detect ambient temperature preciously;
- With electricity consumption inquiry function (Unit with electricity measurement function shall be connected);
- With service hotline inquiry and after-sales phone number record functions;

#### • Central control of several indoor units One wired controller can control as many as 16 indoor units.



# • Joint control of remote controller and wired controller

Users can control one unit with two types of controllers: a remote controller which is convenient and flexible; or a wired controller which includes every function of an air conditioner.











# Smart Zone Controller and Central Controller

# Smart zone controller CE53-24/F(C)



- High-resolution color LCD;
- 7" capacitive touch screen for easy operation;
- Shielding function of single unit, group and all IDUs (shielding on/off, mode, temp setting, etc.);

## Central controller CE52-24/F(C)



- High-resolution color LCD;
- 7" capacitive touch screen for easy operation;
- With project setting, parameter viewing, malfunction record and access management functions.

- With various functions: centralized control(control all indoor units), group management(support DIY grouping), schedule management(setting of several schedules) and single unit control(on/off, mode, temp setting, fan speed, quiet, swing control, etc.);
- Provide naming of indoor units, selection of icons and personalized settings(setting background, backlight, etc);
- Up to 32 units can be centrally controlled;
- Elegant and fashionable appearance;
- Embedded installation in wall with projecting thickness only of 11mm;
- Connectable with network of indoor units or outdoor units;
- Independent power supply in 110~240V wide voltage range;
- With project setting, parameter viewing, malfunction record and access management functions.

## E-smart Zone Controller CE54-24/F(C)



- With various functions: centralized control(control all indoor units), group management(support DIY grouping), schedule management(setting of several schedules) and single unit control(on/off, mode, temp setting, fan speed, quiet, swing control, etc.);
- Shielding function of single unit, group and all IDUs (shielding on/off, mode, temp setting, etc.);
- Provide naming of indoor units, selection of icons and personalized settings(setting background, backlight, etc);
- Up to 255 units can be centrally controlled;
- Elegant and fashionable appearance;
- Embedded installation in wall with projecting thickness only of 11mm;
- Connectable with network of indoor units or outdoor units;
- Independent power supply in 110~240V wide voltage range;

- Adopt built-in type installation; the exposed part is only 11mm;
- High resolution colorful LCD;
- 4.3 inch capacitive touch screen for easy operation;
- With single indoor unit control(including general functions and advanced functions), group indoor units control(including general functions and advanced functions), group management(supporting DIY group), single indoor unit and group indoor units timer functions;(general function: ON/OFF, Mode, Set, Fan, Swing, etc; advance functions: Save, Sleep, E-heater, Absence, Quiet, Turbo, etc)
- With long-distance shield function (shield switch, mode, set, etc) for single unit, group and all indoor units;
- Support denomination for indoor units, and icon selection, realizing individuation management;

Support maximum 32 indoor units, with powerful function;

- Indoor or outdoor unit network can be connected, simple and flexible;
- 110~240V super wide voltage for independent power supply, stable and reliable;
- With functions of engineering setting, parameters view, malfunction view and authority management, easy for debugging and maintenance.



# Modbus Gateway

Modbus Gateway provides GMV5 system with the Modbus protocol interface when connecting to the Building Management System(BMS) in order to achieve central control and remote control over GMV5 system by BMS.



Applicable models: GMV5 All DC Inverter Multi VRF System, GMV5 DC Inverter Multi VRF System, GMV DC Inverter Water Cooled Heat Pump Multi VRF System.

- Real-time monitoring of unit operation status, e.g. on/off, mode, temperature;
- Real-time response to the control of unit (on/off, mode setting and speed setting, etc.) by monitoring software;
- Control all the units switches of on and off.
- Monitor unit errors;
- One Modbus bus can support up to 255 gateways. One Modbus gateway can support at most 16 outdoor units(up to 64 modular outdoor units) and 128 indoor units;

- Lock unit operation statuses, directing at all control functions of unit itself or a certain setting function;
- Linkage control, supporting 5 DI and 5 DO for receiving fire alarm signal and user's definition logic;
- CAN, RS485 communication ports are non-polar, convenient for construction wiring;
- Achieve cooling and heating temperature limitation functions;
- 100-240 VAC,50/60Hz wide voltage range, adapted to the power supply of each country and region.

# **G-Cloud**

G-Cloud shall be operated with smart phone, Gree Smart and wireless router. Configure the smart phone and G-Cloud in the same router to achieve smart control, preset management, scene management, device linkage and other functions.



- Quick configuration: Connection between smart phone and G-Cloud can be achieved through pressing one button, so the configuration is quite simplified;
- Device control: User can set temperature, unit on/off and operation mode through the smart phone and view operation parameters in real time;
- Long-distance control: User can control the device from long distance through the Internet after login (G-Cloud shall be linked to the Internet);

- Scene setting: A series of commands can be set to form a scene and then you can activate the scene just by pressing one button.
- Device linkage: According to the trigger conditions set by the user, linkage in devices can be achieved;
- Preset function: User can set preset function according to his own requirement, so the device will operate automatically according to the setting.

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# Control System Lineup

Controllin	ng 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	Air Handler
145 1	0	YAP1F	100 miles	•	0	0		٠	•	٠	0
Wirele	ess Controller	YV1L1		0	0	0	0	0	0	0	0
		XK46		0		٠	0	0	0	0	•
Wire	ed controller	XK79		0	0	0	0	0	0	0	0
		XK55	26.08	0	0	0	0	0	0	0	0
			200 B	0	0	0	0	0	0	0	0
		JS05(receiver)			0	0					
Central	Centralized Controller			0	0	0	0	0	0	0	0
Smart 2	Zone Controller	CE53-24/F(C)	0 0 0	0	0	0	0	0	0	0	0
E-Smart	t Zone Controller	CE54-24/F(C)		0	0	0	0	0	0	0	0
Long-distance	e monitoring software	FE31-00/AD(BM)		0	0	0	0	0	0	0	0
BMS	Commmunication module(modbus)	ME30-24/E4(M)	_	0	0	0	0	0	0	0	0
Accessories	GMV BACnet gateway (BACnet)	ME30-24/D4(B)		0	0	0	0	0	0	0	0
Other	Optoelectronic isolated converter	RS232-RS422\485		0	0	0	0	0	0	0	0
modules	Optoelectronic isolated signal multiplier	RS-422\485		0	0	0	0	0	0	0	0
	G-Cloud		$\bigcirc$	0	0	0	0	0	0	0	0

Note: • means standard, o means optional.

# **Energy Recovery** Ventilation(ERV)



• Air flow: 350~3000m<sup>3</sup>/ h

• Energy Recovery Ventilation System can introduce the fresh air freely on the condition that all the windows closed or exhausted fan uninstalled. It can solve the problem of stagnant air effectively.

It is usually installed in the ceiling of corridor and supplies fresh air to each room through ducts.



# Adopt Advanced Heat Exchange Core

Double-way Ventilation for Fresh Air

supply of fresh air to the indoor space.

ERV adopts cross flow plate exchanger with air volume below 3000m3/h. Fresh air will be introduced and internal leakage is low, which effectively prevent pollution to fresh air.



# Energy Recovery Ventilation(ERV)

	Model		FHBQ-D3.5-K	FHBQ-D5-K	FHBQ-D8-K	FHBQ-D10-K	FHBQ-D15-M	FHBQ-D20-M
Air flow volume	H/M/L	M3/ h	350	500	800	1000	1500	2000
ESP	H/M/L	Pa	100	100	110	110	150	150
Temperatuer exchange efficiency	H/M/L	%	71.00	68.00	70.00	73.00	73.00	71.00
Enthalpy exchange	Heating	%	65.00	62.00	63.00	66.00	65.00	62.00
efficiency(H/M/L)	Cooling	%	61.00	57.00	60.00	62.00	60.00	58.00
Power supply		Ph/V/Hz	1/220/50	1/220/50	1/220/50	1/220/50	3/380/50	3/380/50
Power input		KW	0.165	0.262	0.40	0.44	0.80	0.95
Sound Pressure	Level	Db(A)	37	39	45	46	48	50
Dimension	Outline	mm	800*879*306	800*879*306	832*1016*380	832*1016*380	1210*1215*452	1210*1215*452
(W*D*H)	Package	mm	1050*1165*315	1050*1165*315	1087*1320*400	1087*1320*400	1540*1550*470	1540*1550*470
Net weight		kg	45	45.0	57.0	57.0	110.0	110.0
Gross weight		kg	53	53.0	66.5	66.5	130.0	130.0
	40'GP	set	147	147	85	59	37	37
	40'HQ	set	168	168	104	67	44	44
Standard wired rer	note controller		Z5N151	Z5N151	Z5N151	Z5N151	Z5N151	Z5N151

	M - 1-1								
	Model		FHBQ-D3.5-D <sup>-1</sup>	FHBQ-D30-M	FHBQ-D5-D	FHBQ-D8-D*'	FHBQ-D10-D	FHBQ-D15-D^'	FHBQ-D20-D*'
Air flow volume	H/M/L	M3/ h	350	3000	500	800	1000	1500	2000
ESP	H/M/L	Pa	100	220	100	100	110	150	150
Temperatuer exchange efficiency	H/M/L	%	71	70.00	68.00	70.00	75.00	73.00	71
Enthalpv exchange	Heating	%	61	62.00	62.00	63.00	66.00	65.00	58
efficiency(H/M/L)	Cooling	%	65	58.00	57.00	60.00	62.00	60.00	62
Power supply		Ph/V/Hz	1/220/50	3/380/50	1/220/60	1/220/60	1/220/60	3/220/60	3/208-230/50
Power input		KW	0.165	2.80	0.262	0.50	0.50	1.10	0.95
Sound Pressure	Level	Db(A)	45	54	39	50	46	60	61
Dimension	Outline	mm	800×879×306	1340*1550*572	800*879*306	832*1016*380	832*1016*380	1210*1215*452	1210×1215×452
(W*D*H)	Package	mm	1168×1053×330	1610*1710*700	1050*1165*315	1087*1320*400	1087*1320*400	1540*1550*470	1553×1543×485
Net weight		kg	43.0	215.0	45.0	57.0	57.0	110.0	110.0
Gross weight		kg	51.0	236.0	53.0	66.5	66.5	130.0	130.0
	40'GP	set	147	24	147	59	59	37	37
	40'HQ	set	168	24	168	67	67	44	44
Standard wired rer	note controlle	r	Z5N151	/	Z5N151	Z5N151	Z5N151	Z5N151	/

# No Cross Contamination for Ensuring Healthy Fresh Air

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

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



# Pretreatment of Fresh Air for Energy-saving

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

Note: \*1:This product only gets CB certification.

# Control System Lineup

Control syst	F	Product series	ERV
Wired controller	Z5N151		•
Interface of the main board	BMS		•
Optoelectronic isolated converter	RS232- RS422\485		0
Optoelectronic isolated signal multiplier	RS-422\485		0

Note: • means standard, • means optional.



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Note

# Certification









Canadian CSA Certificate





China EMC Certificate



America ETL Certificate



German TÜV Certificate





Hongkong Energy-saving Certificate



Canadian ETL Certificate



3C Certificate



Mexico NOM Safety Certificate





Thailand TIS Certificate

