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Note:
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GC-1801-05

Distributor information

GREE Multi VRF 5

GREE
AIR CONDITIONER

ONE STOP SOLUTION



Gree GMV- History of Development

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.

2010 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.

2007 Adhering to the philosophy of “Energy Saving 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.

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.

2005 In order to meet consumers’ growing demands on 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.

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.

2002 Gree succeeded in developing GMV Digital 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.

1999 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.

1998 Gree entered high-end technology field of multi VRF system. Other than directly purchasing units and technologies from abroad 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



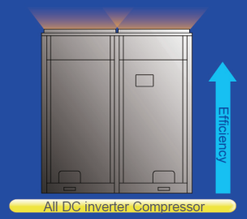
Key Features

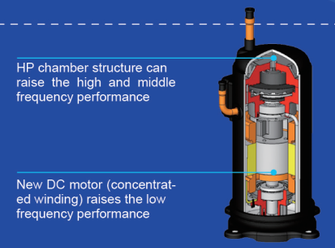
All DC Inverter Technology to Improve Compression Efficiency

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.

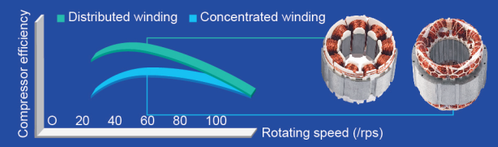
All DC Inverter Compressor

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

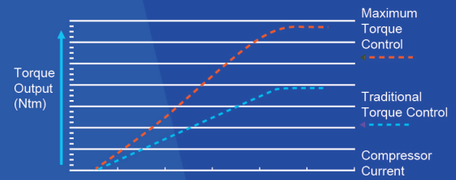




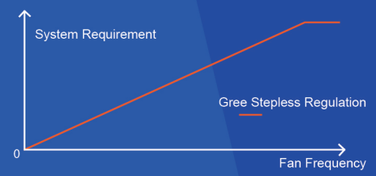
- High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.



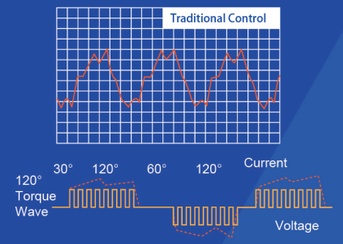
- **Technology of Maximum Torque Control with Minimum Current**
  It can reduce energy loss caused by device winding so as to realize higher efficiency.

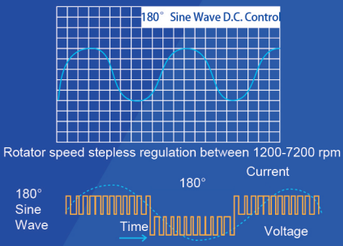


- **Low-frequency Torque Control**
  It can directly control motor torque, through which fan motor can run at a low speed. Users will feel more comfortable while requirements of the system are also met.



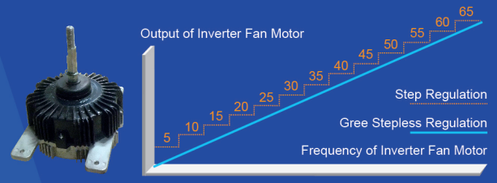
- 180° Sine Wave DC Speed Varying Technology
  It can satisfy various places' demands for different temperature and is able to save a great deal of electricity and provide users with utmost comfort at the same time.



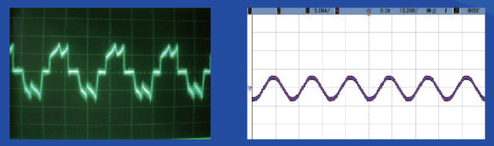


Sensorless DC Inverter Fan Motor

- 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.



Before

After

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



Money is saved in system cost and piping



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.



Company A

GMV 5

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	GMV5 DC Inverter CAN Network
Reliability	Software check	Hardware check, more reliable
	One unit's communication error may lead to a breakdown of the whole network	If one unit has errors, it will exit from the network without any influence to other units.
Communication Efficiency	Low utilization	High utilization
	Communication speed is about 10Kbps.	Communication speed is 20Kbps.
Compatibility	One main network, difficult to add new equipment	Multiple main networks, easy to add new equipment.
Communication Distance	1000m	1500m

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



Wide Range of Operation Condition

Outdoor operation temperature range is improved to **-5℃~52℃ in cooling** and **-20℃~24℃ in heating**.



Wider Applicable Location

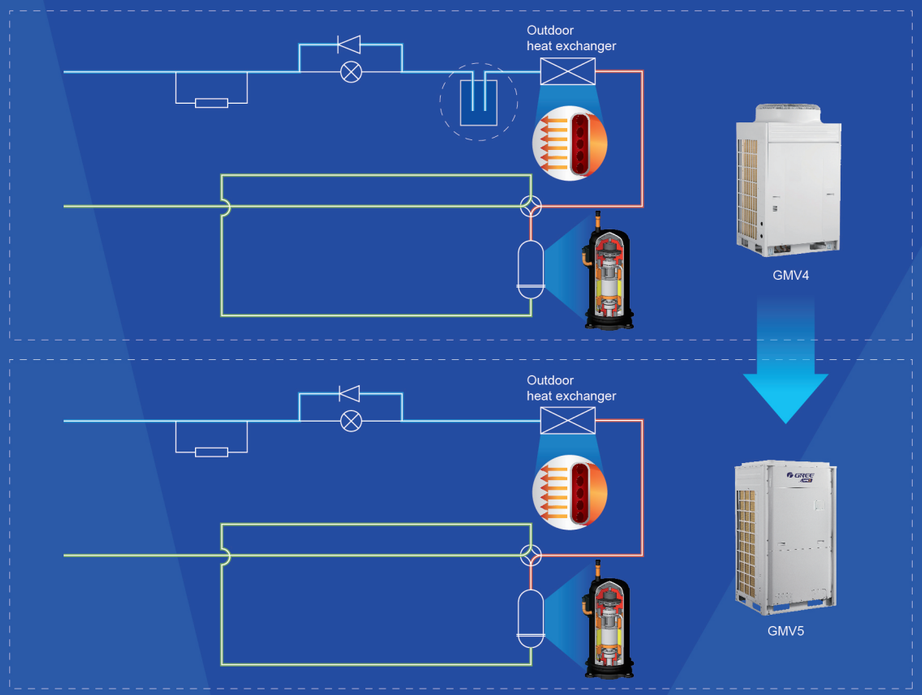
GMV5 can realize a combination of 4 outdoor unit modules connecting with as many as **80** indoor units. It's especially applicable for business building or hotels.



Max.IDU Connection: **80** sets

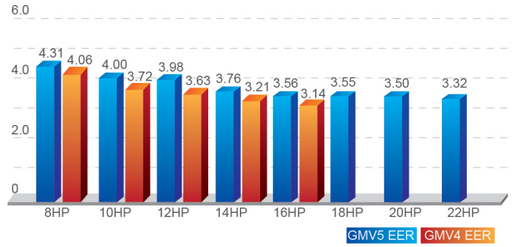
Refrigerant Storage and Distribution

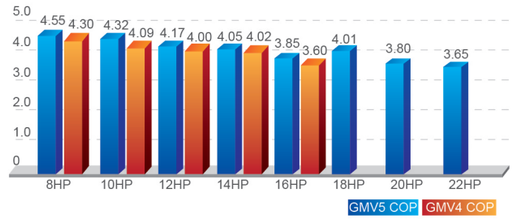
The GMV5 system is designed without liquid receiver and the excess refrigerant is stored in the piping, which can minimize the refrigerant charging volume and enhance the control accuracy of refrigerant.



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%

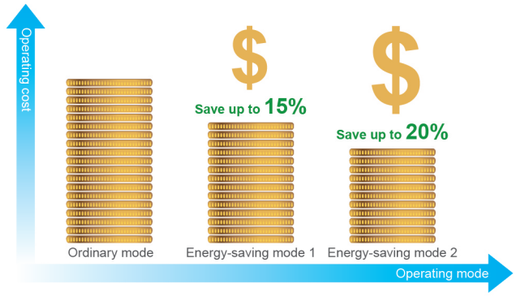
The GMV5 system has 2 modes for energy saving, which can be chosen to meet different electricity demands.

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:

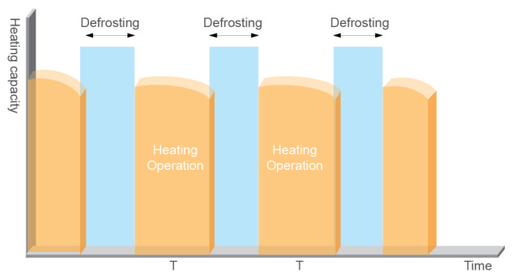
In compulsory energy-saving mode, the system will limit power output forcibly. Up to 20% of energy can be saved.



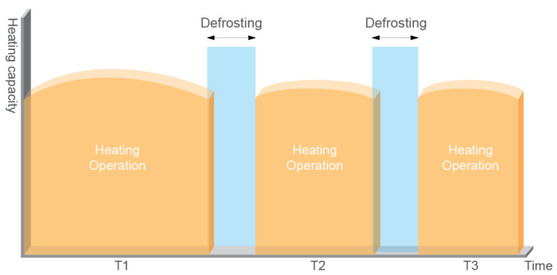
Intelligent Defrosting Control

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



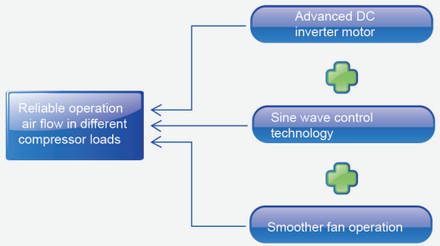
Accurate Intelligent Allocation Technology of Capacity and Output of Optimal Portion to Ensure Highest Efficiency

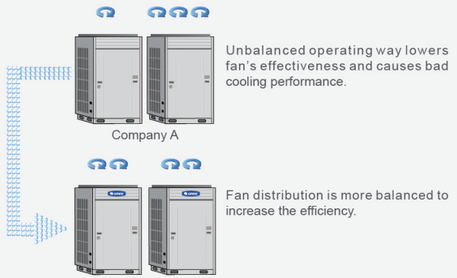
- When total load demands more than 75% of a running system's capacity, one more unit will automatically start;
- When total load demands less than 40% of a running system's capacity, one unit will automatically shut down;
- Therefore, each unit shares 40%-75% of the total load.
- Experiments show that 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**

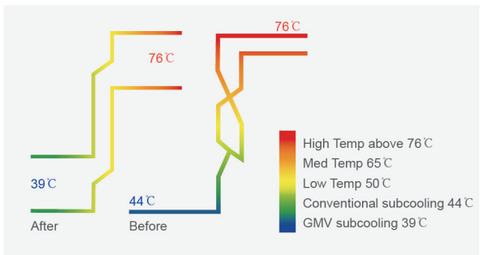
The best heating or cooling performance can be realized in the most energy-saving way. DC inverter compressor and DC inverter fan will also be operating in this way to ensure high efficiency.



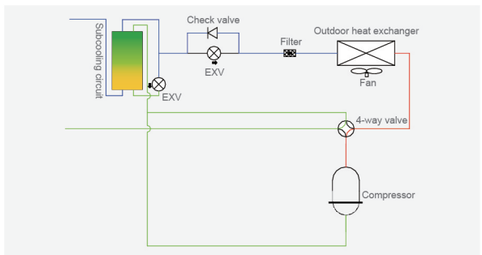


Sub-cooling Control Technology to Ensure Optimal Cooling and Heating

- Heat exchange loop can control the first subcooling process of heat exchanger. Subcooling degree can reach 11℃.



- Subcooling loop can realize 9℃ second subcooling to guarantee cooling and heating performance.



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.

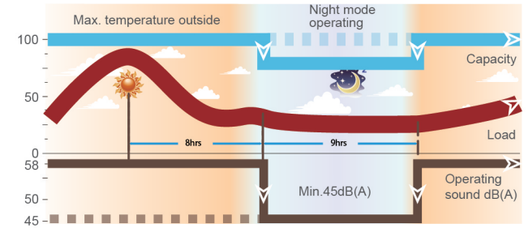
Comfortable Design for A Better Life

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

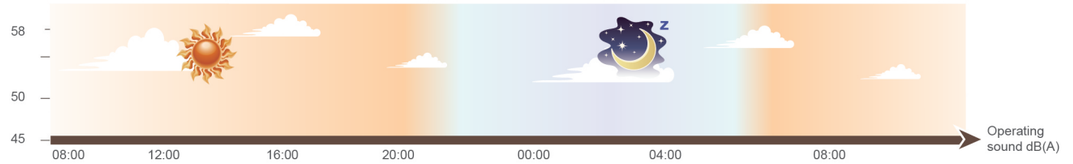
- **Quiet at night**

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**

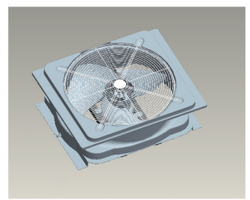
The system can also be set in this mode to ensure low noise as long as it is operating. Noise is as low as 45dB(A).

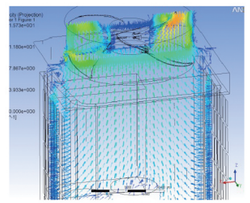


- **Quiet Control**

1. Optimized Bossing Design

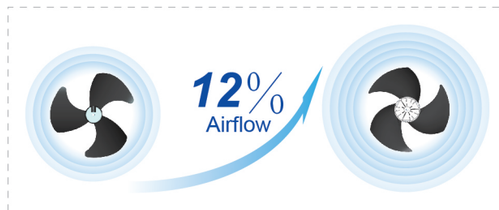
After many times of CFD tests, a new fan bossing structure has been developed to reduce vibration of fan during running. Noise can be reduced by 3dB(A).





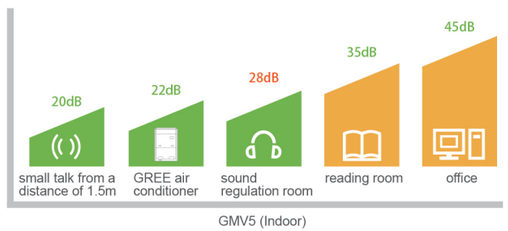
2. Aerodynamics 3D Axial Fan

Compared with conventional fan, it can increase air volume by 12%, improving efficiency as well as lowering noise.



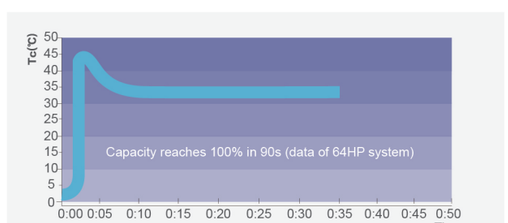
Quiet Indoor Unit

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).



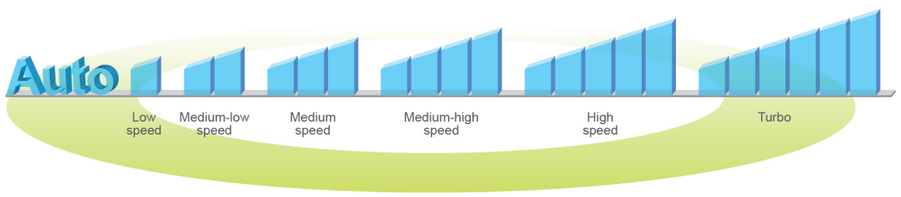
Fast Start-up in Heating

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

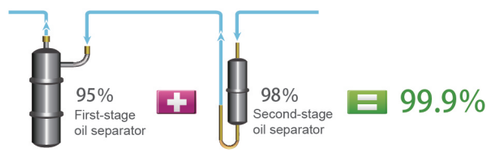
Indoor fan speed can be set in 7 levels by wired controller. They are auto, low speed, medium-low speed, medium speed, medium-high speed, high speed and turbo. When the wired controller is on, press "FAN" button to set indoor fan speed circularly as below:



Excellent Performance Ensured by Advanced Technology

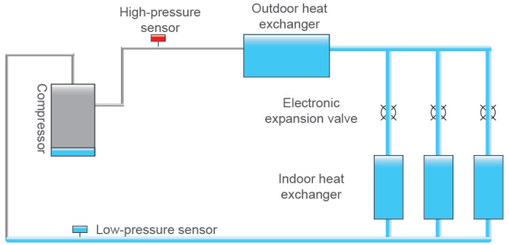
Two-stage Oil Separation Control Technology (Patented)

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%.

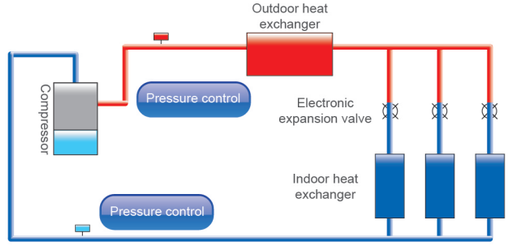


Oil Return Control Technology

- **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.

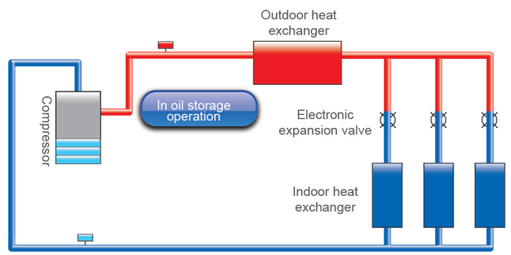


Oil storage status before oil return



Oil return operation

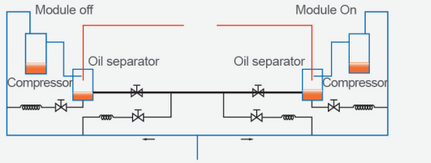
- **Specialized Compressor Oil Storage Control**
  The system applies specialized compressor oil storage technology, which can control the lowest oil level for compressor operation.



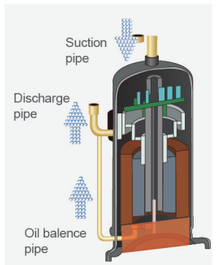
Oil storage operation

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.

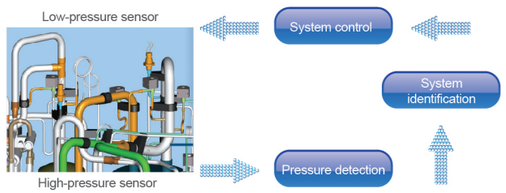


- **Oil Balance between Each Compressor**
  Refrigerant is taken into the compressor by the suction pipe and then runs through the cooling system. It can control the oil level and minimum oil volume required by each compressor so as to realize oil balance between each compressor.



Intelligent Detection Control

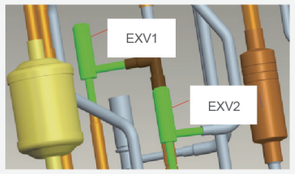
- **Pressure Sensor Detection Control**
  Pressure sensor can precisely detect system high pressure and low pressure, and adjust output of fan and compressor, so as to make sure the system can work under the most energy-saving pressure condition.



- **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.

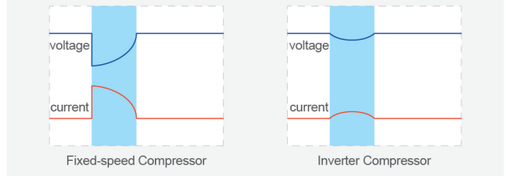
Multi Electronic Expansion Valves Control

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.



Modules Rotation Operating to Maximize Lifespan

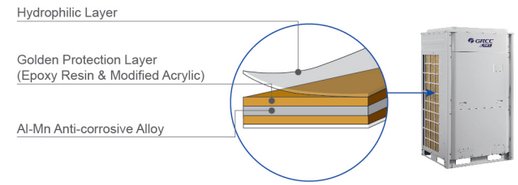
- **Modules 8h rotation operating**
  The operating priority sequence of the outdoor unit modules will be changed without restart when the system accumulatively operates for 8 hours, which can maximize the service life of the system.



Highly Anticorrosive Golden Fins

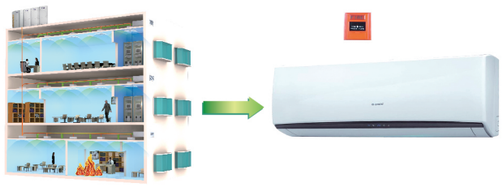
The primary material of Golden Fin is Al-Mn(Aluminum-Manganese) anti-rust alloy, which is coated with the Golden Protection Layer(Components: Epoxy Resin & Modified Acrylic, Sillcon free), the anti-corrosive performance in salt-spray testing is 200%~300% higher than normal Blue Fin*.

Note: Salt-spray 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

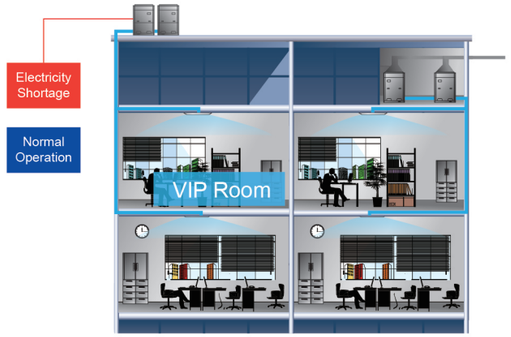
As for the area with power consumption limited time period, the maximum power consumption can be set for the operation. Basing on the power consumption of unit and user's requirement, power consumption limitation can be set according to 100%, 90% or80% of the capacity of complete unit. In this case,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

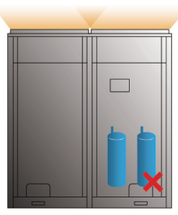


Excellent Emergency Operation Function to Ensure Reliable Operation

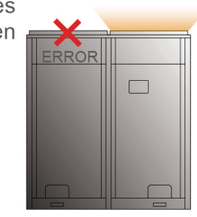
- **Emergency Function**
  The GMV 5 system can realize a combination of 4 outdoor unit modules. When error is occurred to one of the modules, the others will perform the emergency operation to sustain the air conditioning.



- **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.

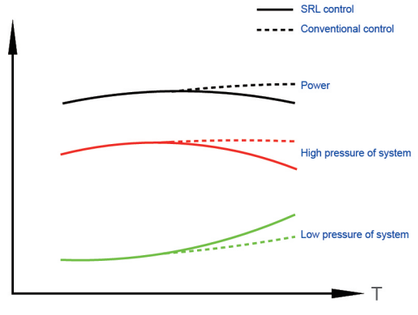


- **Emergency Operation of Fan**
  Double-fan design fan ensures that one fan can still work even if the other one has error.



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.

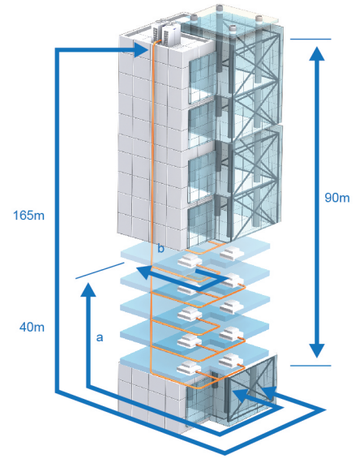


1000m Pipe Design for Flexible Installation

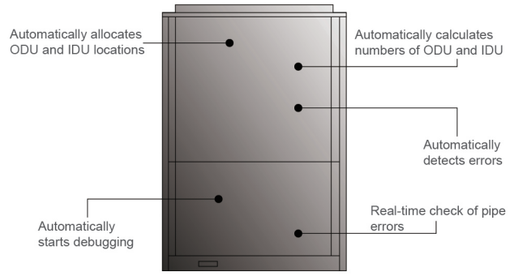
GMV5 system can be applied in different types of building construction. One of its advantages is the simple pipe design, which will simplify the installation and reduce installation cost.

- 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

Note:
a: Distance between the first branch and the farthest indoor unit.
b: Distance between the frist branch and the nearest indoor unit.
a-b≤40m



Engineering Debugging for Convenient Construction



1）GMV5 has five auto debugging features:

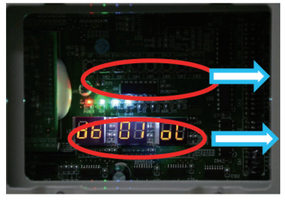
- Automatic allocation of IDU and ODU addresses
- Automatic detection of IDU and ODU quantity
- Automatic detection of errors
- Automatic start-up of debugging
- Real-time judgment of pipe errors

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

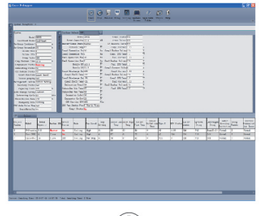
①Button debugging of outdoor unit

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



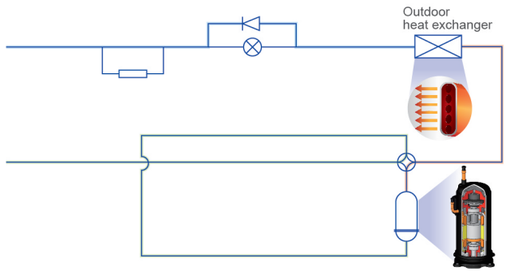
②



③

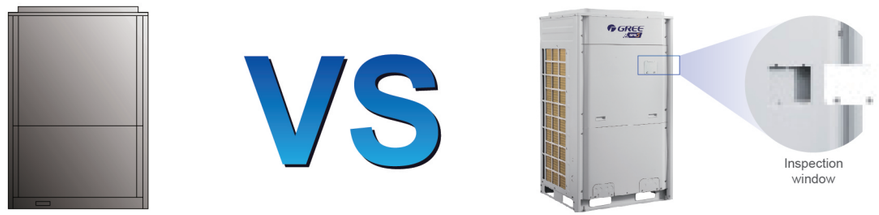
Auto-refrigerant Recovery for Easy Maintenance

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.



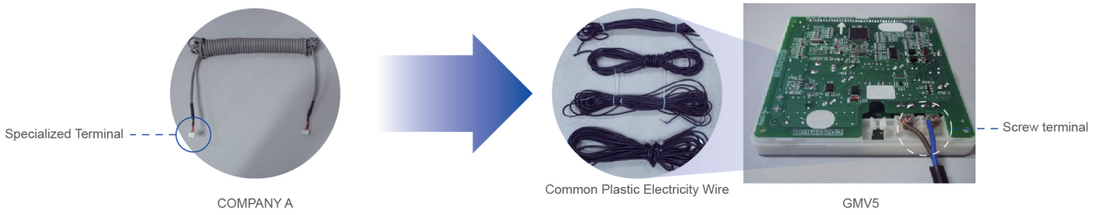
Inspection Window for Convenient Checking

Inspection window is available for quick 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.



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.

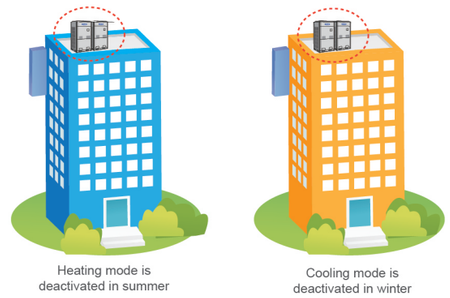


Professional Hotel Functions

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

Season Setting

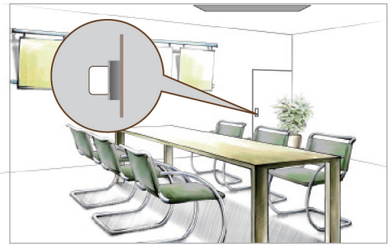
Cooling or heating mode can be deactivated during a certain season to avoid affecting unit's normal operation due to mode conflict.



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.





SPECIFICATIONS & PARAMETERS OF OUTDOOR UNITS

GMV5 Outdoor Units Lineup（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
GMV-224WM/B-X	●							
GMV-280WM/B-X		●						
GMV-335WM/B-X			●					
GMV-400WM/B-X				●				
GMV-450WM/B-X					●			
GMV-504WM/B-X						●		
GMV-560WM/B-X							●	
GMV-615WM/B-X								●
GMV-680WM/B-X		●		●				
GMV-730WM/B-X		●			●			
GMV-785WM/B-X		●				●		
GMV-850WM/B-X		●					●	
GMV-900WM/B-X		●						●
GMV-960WM/B-X			●					●
GMV-1010WM/B-X				●				●
GMV-1065WM/B-X					●			●
GMV-1130WM/B-X						●		●
GMV-1180WM/B-X							●	●
GMV-1235WM/B-X								●●
GMV-1300WM/B-X		●			●		●	
GMV-1350WM/B-X		●			●			●
GMV-1410WM/B-X			●		●			●
GMV-1460WM/B-X		●					●	●
GMV-1515WM/B-X		●						●●
GMV-1580WM/B-X			●					●●
GMV-1630WM/B-X				●				●●
GMV-1685WM/B-X					●			●●
GMV-1750WM/B-X						●		●●
GMV-1800WM/B-X							●	●●
GMV-1845WM/B-X								●●●
GMV-1908WM/B-X		●			●		●	●
GMV-1962WM/B-X		●				●	●	●
GMV-2016WM/B-X		●					●●	●
GMV-2072WM/B-X		●					●	●●
GMV-2128WM/B-X		●						●●●
GMV-2184WM/B-X			●					●●●
GMV-2240WM/B-X				●				●●●
GMV-2295WM/B-X					●			●●●
GMV-2350WM/B-X						●		●●●
GMV-2405WM/B-X							●	●●●
GMV-2460WM/B-X								●●●●

GMV5 Outdoor Units Lineup（208/230V， 60Hz)

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

GMV5 Outdoor Units Lineup（440-460V， 60Hz)

Model	GMV-224WM/B-U	GMV-280WM/B-U	GMV-335WM/B-U	GMV-400WM/B-U	GMV-450WM/B-U
GMV-224WM/B-U	⬢				
GMV-280WM/B-U		⬢			
GMV-335WM/B-U			⬢		
GMV-400WM/B-U				⬢	
GMV-450WM/B-U					⬢
GMV-504WM/B-U	⬢	⬢			
GMV-560WM/B-U		⬢⬢			
GMV-615WM/B-U		⬢	⬢		
GMV-680WM/B-U		⬢		⬢	
GMV-730WM/B-U		⬢			⬢
GMV-785WM/B-U			⬢		⬢
GMV-850WM/B-U				⬢	⬢
GMV-900WM/B-U					⬢⬢
GMV-960WM/B-U		⬢⬢		⬢	
GMV-1010WM/B-U		⬢⬢			⬢
GMV-1065WM/B-U		⬢	⬢		⬢
GMV-1130WM/B-U		⬢		⬢	⬢
GMV-1180WM/B-U		⬢			⬢⬢
GMV-1235WM/B-U			⬢		⬢⬢
GMV-1300WM/B-U				⬢	⬢⬢
GMV-1350WM/B-U					⬢⬢⬢
GMV-1410WM/B-U		⬢⬢		⬢	⬢
GMV-1460WM/B-U		⬢⬢			⬢⬢
GMV-1515WM/B-U		⬢	⬢		⬢⬢
GMV-1580WM/B-U		⬢		⬢	⬢⬢
GMV-1630WM/B-U		⬢			⬢⬢⬢
GMV-1685WM/B-U			⬢		⬢⬢⬢
GMV-1750WM/B-U				⬢	⬢⬢⬢
GMV-1800WM/B-U					⬢⬢⬢⬢

GMV5E Outdoor Units Lineup (380-415V, 50/60Hz)

Model	GMV-224WM/E-X	GMV-280WM/E-X (GMV-280WM/E1-X)	GMV-335WM/E-X	GMV-400WM/E-X	GMV-450WM/E-X (GMV-450WM/E1-X)	GMV-504WM/E-X	GMV-560WM/E-X	GMV-615WM/E-X
GMV-224WM/E-X	⬢							
GMV-280WM/E-X (GMV-280WM/E1-X)		⬢						
GMV-335WM/E-X			⬢					
GMV-400WM/E-X				⬢				
GMV-450WM/E-X (GMV-450WM/E1-X)					⬢			
GMV-504WM/E-X						⬢		
GMV-560WM/E-X							⬢	
GMV-615WM/E-X								⬢
GMV-680WM/E-X		⬢		⬢				
GMV-730WM/E-X		⬢			⬢			
GMV-785WM/E-X		⬢				⬢		
GMV-850WM/E-X		⬢					⬢	
GMV-900WM/E-X		⬢						⬢
GMV-960WM/E-X			⬢					⬢
GMV-1010WM/E-X				⬢				⬢
GMV-1065WM/E-X					⬢			⬢
GMV-1130WM/E-X						⬢		⬢
GMV-1180WM/E-X							⬢	⬢
GMV-1235WM/E-X								⬢⬢
GMV-1300WM/E-X		⬢			⬢		⬢	
GMV-1350WM/E-X		⬢			⬢			⬢
GMV-1410WM/E-X			⬢		⬢			⬢
GMV-1460WM/E-X		⬢					⬢	⬢
GMV-1515WM/E-X		⬢						⬢⬢
GMV-1580WM/E-X			⬢					⬢⬢
GMV-1630WM/E-X				⬢				⬢⬢
GMV-1685WM/E-X					⬢			⬢⬢
GMV-1750WM/E-X						⬢		⬢⬢
GMV-1800WM/E-X							⬢	⬢⬢
GMV-1845WM/E-X								⬢⬢⬢
GMV-1908WM/E-X		⬢			⬢		⬢	⬢
GMV-1962WM/E-X		⬢				⬢	⬢	⬢
GMV-2016WM/E-X		⬢					⬢⬢	⬢
GMV-2072WM/E-X		⬢					⬢	⬢⬢
GMV-2128WM/E-X		⬢						⬢⬢⬢
GMV-2184WM/E-X			⬢					⬢⬢⬢
GMV-2240WM/E-X				⬢				⬢⬢⬢
GMV-2295WM/E-X					⬢			⬢⬢⬢
GMV-2350WM/E-X						⬢		⬢⬢⬢
GMV-2405WM/E-X							⬢	⬢⬢⬢
GMV-2460WM/E-X								⬢⬢⬢⬢

Note:
1.Due to the same capacity, GMV-280WM/E1-X model and GMV-280WM/E-X model can replace each other for operation, GMV-450WM/E1-X model and GMV-450WM/E-X model can replace each other for operation.
2. The combination models of the outdoor units are not Eurovent certified.

Specifications of Outdoor Units

GMV5 380-415V,50/60Hz

Model		-	GMV-224WM/B-X	GMV-280WM/B-X	GMV-335WM/B-X	GMV-400WM/B-X	GMV-450WM/B-X	GMV-504WM/B-X	GMV-560WM/B-X	GMV-615WM/B-X
Capacity range		HP	8	10	12	14	16	18	20	22
Capacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
	Heating	kW	25	31.5	37.5	45	50	56.5	63	69
EER		W/W	4.31	4	3.98	3.76	3.56	3.55	3.50	3.32
COP		W/W	4.55	4.32	4.17	4.05	3.85	4.01	3.80	3.65
Power supply		V/Ph/Hz	380-415V-3Ph-50/60Hz							
Max. Circuit/Fuse Current		A	15.7/20	20.9/25	24.7/32	28.8/40	33.2/40	44.7/50	50/63	52/63
Power comsumption	Cooling	kW	5.2	7	8.41	10.65	12.65	14.2	16.0	18.5
	Heating	kW	5.5	7.3	9	11.1	13	14.1	16.6	18.9
Maximum drive IDU NO.		unit	13	16	19	23	26	29	33	36
Refrigerant Charge volume		kg	5.9	6.7	8.2	9.8	10.3	11.3	14.3	14.3
Sound pressure level		dB(A)	60	61	63	63	63	63	63	64
Connecting pipe	Liquid	mm	Φ9.52		Φ12.7			Φ15.9		
	Gas	mm	Φ19.05	Φ22.2	Φ25.4		Φ28.6		Φ28.6	
	Oil balance	mm	Φ9.52					Φ9.52		
Dimension (W*D*H)	Outline	mm	930*765*1605		1340*765*1605			1340*765*1740		
	Package	mm	1010*840*1775		1420*840*1775			1420*840*1910		
Net weight/Gross weight		kg	225/235	225/235	285/300	360/375	360/375	360/375	385/400	385/400
Loading quantity	40' GP	set	24	24	16	16	16	16	16	16
	40' HQ	set	24	24	16	16	16	16	16	16

GMV5 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	GMV-560 WM/B-F	GMV-615 WM/B-F
Capacity range		HP	8	10	12	14	16	18	20	22
Capacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
	Heating	kW	25	31.5	37.5	45	50	56.5	63	69
EER		W/W	4.31	4	3.98	3.76	3.56	3.55	3.50	3.32
COP		W/W	4.55	4.32	4.17	4.05	3.85	4.01	3.8	3.65
Power supply	Cooling	V/Ph/Hz	208/230V-3Ph-60Hz							
MCA		A	36	38	43	60	65	89	99	113
MOP		A	60	60	60	80	90	110	125	150
Power comsumption	Cooling	kW	5.2	7	8.41	10.65	12.65	14.2	16	18.5
	Heating	kW	5.5	7.3	9.0	11.1	13	14.1	16.6	18.9
Maximum drive IDU NO.		unit	13	16	19	23	26	29	33	36
Refrigerant Charge volume		kg	6.5	6.7	8.2	9.8	10.3	11.3	14.3	14.3
Sound pressure level		dB(A)	60	61	63	63	63	63	63	64
Connecting pipe	Liquid	mm	Φ9.52		Φ12.7			Φ15.9		
	Gas	mm	Φ19.05	Φ22.2	Φ25.4		Φ28.6			
	Oil balance	mm	Φ9.52							
Dimension (W*D*H)	Outline	mm	930*765*1605		1340*765*1605			1340*765*1740		
	Package	mm	1010*840*1775		1420*840*1775			1420*840*1910		
Net weight/Gross weight		kg	225/235	225/235	285/300	360/375	360/375	360/375	385/400	385/400
Loading quantity	40' GP	set	24	24	16	16	16	16	16	16
	40' HQ	set	24	24	16	16	16	16	16	16

GMV5 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*1	GMV-560 WM/B-U*1	GMV-615 WM/B-U*1
Capacity range		HP	8	10	12	14	16	18	20	22
Capacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
	Heating	kW	25	31.5	37.5	45	50	56.5	63	69
EER		W/W	3.92	3.68	3.76	3.51	3.35	3.41	3.33	3.19
COP		W/W	4.17	3.91	3.91	3.91	3.68	3.79	3.62	3.5
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 comsumption	Cooling	kW	5.71	7.61	8.92	11.4	13.45	14.8	16.8	19.3
	Heating	kW	6.0	8.05	9.60	11.5	13.60	14.9	17.4	19.7
Maximum drive IDU NO.		unit	13	16	19	23	26	29	33	36
Refrigerant Charge volume		kg	6.5	6.7	8.2	9.8	10.3	11.3	14.3	14.3
Sound pressure level		dB(A)	60	61	63	63	63	63	63	64
Connecting pipe	Liquid	mm	Φ9.52		Φ12.7			Φ15.9		
	Gas	mm	Φ19.05	Φ22.2	Φ25.4		Φ28.6			
	Oil balance	mm	Φ9.52							
Dimension (W*D*H)	Outline	mm	930*765*1605		1340*765*1605			1340*765*1740		
	Package	mm	1010*840*1775		1420*840*1775			1420*840*1910		
Net weight/Gross weight		kg	225/235	225/235	285/300	360/375	360/375	400/415	400/415	400/415
Loading quantity	40' GP	set	24	24	16	16	16	16	16	16
	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.

GMV5E 380-415V,50/60Hz

Model				GMV-224WM/E-X	GMV-280WM/E-X	GMV-280WM/E1-X	GMV-335WM/E-X	GMV-400WM/E-X
Capacity range			HP	8	10	10	12	14
Capacity	Cooling	Nom.	kW	22.4	28	28	33.5	40
	Heating	Nom.	kW	25	31.5	31.5	37.5	45
		Max.	kW	25	31.5	31.5	37.5	45
EER			W/W	4.73	4.48	3.05	3.99	3.80
COP		Nom.	W/W	5.20	5.56	4.10	5.25	4.73
		Max.	W/W	5.20	5.56	4.10	5.25	4.73
Power supply			V/Ph/Hz	380-415V-3Ph-50/60Hz				
Max. Circuit/Fuse Current			A	16.1/20	20.9/25	20.9/25	24.6/32	28.8/40
Power comsumption	Cooling	Nom.	kW	4.74	6.25	9.18	8.40	10.53
	Heating	Nom.	kW	4.81	5.67	7.68	7.14	9.51
		Max.	kW	4.81	5.67	7.68	7.14	9.51
Maximum drive IDU NO.			unit	13	16	16	19	23
Refrigerant Charge volume			kg	5.9	9	6.7	8.2	9.8
Sound power level	Cooling	Nom.	dB(A)	80	84	84	78	91
Sound pressure level	Cooling	Nom.	dB(A)	60	61	61	63	63
Connecting pipe	Liquid		mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7
	Gas		mm	Φ19.05	Φ22.2	Φ22.2	Φ25.4	Φ25.4
	Oil balance		mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension(WxDxH)	Outline		mm	930×765×1605	930×765×1605	930×765×1605	1340×765×1605	1340×765×1605
	Package		mm	1010×840×1775	1010×840×1775	1010×840×1775	1420×840×1775	1420×840×1775
Net weight/Gross weight			kg	225/235	235/245	225/235	285/300	360/375
Loading quantity	40' GP		set	24	24	24	16	16
	40' HQ		set	24	24	24	16	16

Model				GMV-450WM/E-X	GMV-450WM/E1-X	GMV-504WM/E-X	GMV-560WM/E-X	GMV-615WM/E-X
Capacity range			HP	16	16	18	20	22
Capacity	Cooling	Nom.	kW	45	45	50.4	56	61.5
	Heating	Nom.	kW	50	50	50.4	56	61.5
		Max.	kW	50	50	56.5	63	69.0
EER			W/W	3.51	3.35	3.20	2.80	2.10
COP		Nom.	W/W	4.60	4.20	4.10	3.90	3.70
		Max.	W/W	4.60	4.20	4.01	3.80	3.65
Power supply			V/Ph/Hz	380-415V-3Ph-50/60Hz				
Max. Circuit/Fuse Current			A	33.2/40	33.2/40	44.7/50	50/63	53.6/63
Power comsumption	Cooling	Nom.	kW	12.82	13.43	15.75	20.00	29.29
	Heating	Nom.	kW	10.86	11.90	12.29	14.36	16.62
		Max.	kW	10.86	11.90	14.10	16.60	18.90
Maximum drive IDU NO.			unit	26	26	29	33	36
Refrigerant Charge volume			kg	10.3	10.3	11.3	14.3	14.3
Sound power level	Cooling	Nom.	dB(A)	93	90	89	84	84
Sound pressure level	Cooling	Nom.	dB(A)	63	63	63	63	64
Connecting pipe	Liquid		mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
	Gas		mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ28.6
	Oil balance		mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension(WxDxH)	Outline		mm	1340×765×1740	1340×765×1605	1340×765×1740	1340×765×1740	1340×765×1740
	Package		mm	1420×840×1910	1420×840×1775	1420×840×1910	1420×840×1910	1420×840×1910
Net weight/Gross weight			kg	360/375	360/ 375	360/375	385/400	385/400
Loading quantity	40' GP		set	16	16	16	16	16
	40' HQ		set	16	16	16	16	16

Specifications of ODU Combination

GMV5 380-415V,50/60Hz

Model	Power Supply	Capacity		Power Input		Dimension(W×D×H)	Airflow Volume	ESP	Sound Pressure Level	Operation sound pressure level at night	Connecting pipe diameter			Min. circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating						Liquid	Gas	Oil Balance			
		kW	kW	kW	kW	mm	m^3/h	Pa	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	Φ28.6	Φ9.52	20.9+28.8	25 + 40	225+360
GMV-730WM/B-X		73	81.5	19.65	20.3	(930×765×1605) +(1340×765×1605)	11400+14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25 + 40	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	20.9+44.7	25 + 50	225+360
GMV-850WM/B-X		84	94.5	23	23.9	(930×765×1605) +(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+50	25 + 63	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	20.9+52	25 + 63	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	24.7+52	32 + 63	285+385
GMV-1010WM/B-X		101.5	114	29.15	30	(1340×765×1605) +(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+52	40 + 63	360+385
GMV-1065WM/B-X		106.5	119	31.15	31.9	(1340×765×1605) +(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+52	40 + 63	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	44.7+52	50 + 63	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	50+52	63 + 63	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	52+52	63 + 63	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	20.9+33.2+50	25 + 40 + 63	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	20.9+33.2+52	25 + 40 + 63	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	24.7+33.2+52	32 + 40 + 63	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	20.9+50+52	25 + 63 + 63	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	20.9+52+52	25 + 63 + 63	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	24.7+52+52	32 + 63 + 63	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	28.8+52+52	40 + 63 + 63	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	33.2+52+52	40 + 63 + 63	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	44.7+52+52	50 + 63 + 63	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	50+52+52	63 + 63 + 63	385×3
GMV-1845WM/B-X		184.5	207	55.5	56.7	(1340×765×1740) ×3	16000×3	82	71	45	Φ19.05	Φ41.3	Φ9.52	52+52+52	63+63+63	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	20.9+33.2 +50+52	25+40+63+63	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	20.9+44.7 +50+52	25+50+63+63	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	20.9+50 +50+52	25+63+63+63	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	Φ44.5	Φ9.52	20.9+50 +52+52	25+63+63+63	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	20.9+52 +52+52	25+63+63+63	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	24.7+52 +52+52	32+63+63+63	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	28.8+52 +52+52	40+63+63+63	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	33.2+52 +52+52	40+63+63+63	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	44.7+52 +52+52	50+63+63+63	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	50+52 +52+52	63+63+63+63	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	52+52+52+52	63+63+63+63	385×4

GMV5 208/230V,60Hz

Model	Power Supply	Cooling capacity		Power input		Dimension(W× D× H)	Airflow Volumne	ESP	Noise	Noise at night	Connecting pipe diameter		Oil Balance Pipe	MCA	MOP	Weight
		Cooling	Heating	Cooling	Heating					Operation Noise	Liquid	Gas				
		kw	kw	kw	kw	mm	m^3/h	Pa	db(A)	db(A)	mm	mm	mm	A	A	kg
GMV-680WM/B-F		68.0	76.5	17.65	18.40	(930 × 765 × 1605) +(1340 × 765 × 1605)	11400+14000	82	65	43	Φ28.6	Φ15.9	Φ9.52	38+60	60+80	225+360
GMV-730WM/B-F		73.0	81.5	19.65	20.30	(930 × 765 × 1605) +(1340 × 765 × 1605)	11400+14000	82	65	43	Φ31.8	Φ19.05	Φ9.52	38+65	60+90	225+360
GMV-785WM/B-F		78.4	88.0	21.20	21.40	(930 × 765 × 1605) +(1340 × 765 × 1740)	11400+16000	82	66	43	Φ31.8	Φ19.05	Φ9.52	38+89	60+110	225+360
GMV-850WM/B-F		84.0	94.5	23.00	23.90	(930 × 765 × 1605) +(1340 × 765 × 1740)	11400+16000	82	67	43	Φ31.8	Φ19.05	Φ9.52	38+99	60+125	225+385
GMV-900WM/B-F		89.5	100.5	25.50	26.20	(930 × 765 × 1605) +(1340 × 765 × 1740)	11400+16000	82	67	43	Φ31.8	Φ19.05	Φ9.52	38+113	60+150	225+385
GMV-960WM/B-F		95.0	106.5	26.91	27.90	(1340 × 765 × 1605) +(1340× 765× 1740)	14000+16000	82	68	43	Φ31.8	Φ19.05	Φ9.52	43+113	60+150	285+385
GMV-1010WM/B-F		101.5	114.0	29.15	30.00	(1340 × 765 × 1605) +(1340× 765× 1740)	14000+16000	82	68	43	Φ38.1	Φ19.05	Φ9.52	60+113	80+150	360+385
GMV-1065WM/B-F		106.5	119.0	31.15	31.90	(1340 × 765 × 1605) +(1340× 765× 1740)	14000+16000	82	68	43	Φ38.1	Φ19.05	Φ9.52	65+113	90+150	360+385
GMV-1130WM/B-F		111.9	125.5	32.70	33.00	(1340× 765× 1740)×2	16000×2	82	68	43	Φ38.1	Φ19.05	Φ9.52	89+113	110+150	2×385
GMV-1180WM/B-F		117.5	132.0	34.50	35.50	(1340× 765× 1740)×2	16000×2	82	69	43	Φ38.1	Φ19.05	Φ9.52	99+113	125+150	2×385
GMV-1235WM/B-F		123.0	138.0	37.00	37.80	(1340× 765× 1740)×2	16000×2	82	69	43	Φ38.1	Φ19.05	Φ9.52	113+113	150+150	2×385
GMV-1300WM/B-F		129.0	144.5	35.65	36.90	(930 × 765 × 1605) +(1340 × 765 × 1605) +(1340×765× 1740)	11400+14000 +16000	82	69	45	Φ38.1	Φ19.05	Φ9.52	38+65+99	60+90+125	225+360+385
GMV-1350WM/B-F		134.5	150.5	38.15	39.20	(930 × 765 × 1605) +(1340 × 765 × 1605) +(1340×765× 1740)	11400+14000 +16000	82	69	45	Φ38.1	Φ19.05	Φ9.52	38+65+113	60+90+150	225+360+385
GMV-1410WM/B-F		140.0	156.5	39.56	40.90	(1340 × 765 × 1605)×2 +(1340×765× 1740)	11400+14000 +16000	82	69	45	Φ41.3	Φ19.05	Φ9.52	43+65+113	60+90+150	285+360+385
GMV-1460WM/B-F		145.5	163.5	39.70	41.00	(930×765× 1605) +(1340× 765× 1740)×2	11400+16000×2	82	69	45	Φ41.3	Φ19.05	Φ9.52	38+99+113	60+125+150	225+2×385
GMV-1515WM/B-F	208/230V-3Ph-60Hz	151.0	169.5	44.00	45.10	(930×765× 1605) +(1340× 765× 1740)×2	11400+16000×2	82	70	45	Φ41.3	Φ19.05	Φ9.52	38+113+113	60+150+150	225+2×385
GMV-1580WM/B-F		156.5	175.5	45.41	46.80	(1340×765× 1605) +(1340× 765× 1740)×2	11400+16000×2	82	70	45	Φ41.3	Φ19.05	Φ9.52	43+113+113	60+150+150	285+2×385
GMV-1630WM/B-F		163.0	183.0	47.65	48.90	(1340×765× 1605) +(1340× 765× 1740)×2	14000+16000×2	82	70	45	Φ41.3	Φ19.05	Φ9.52	60+113+113	80+150+150	360+2×385
GMV-1685WM/B-F		168.0	188.0	49.65	50.80	(1340×765× 1605) +(1340× 765× 1740)×2	14000+16000×2	82	70	45	Φ41.3	Φ19.05	Φ9.52	65+113+113	90+150+150	360+2×385
GMV-1750WM/B-F		173.4	194.5	51.20	51.90	(1340× 765× 1740)×3	16000×3	82	70	45	Φ41.3	Φ19.05	Φ9.52	89+113+113	110+150+150	3×385
GMV-1800WM/B-F		179.0	201.0	53.00	54.40	(1340× 765× 1740)×3	16000×3	82	71	45	Φ41.3	Φ19.05	Φ9.52	99+113+113	125+150+150	3×385
GMV-1845WM/B-F		184.5	207.0	55.50	56.70	(1340× 765× 1740)×3	16000×3	82	71	45	Φ41.3	Φ19.05	Φ9.52	113+113+113	150+150+150	3×385
GMV-1908WM/B-F		190.5	213.5	54.15	55.80	(930 × 765 × 1605) +(1340×765× 1605) +(1340× 765× 1740)×2	11400+14000 +16000×2	82	72	47	Φ44.5	Φ22.2	Φ9.52	38+65+99+113	60+90+125+150	225+360+2×385
GMV-1962WM/B-F		195.9	220.0	55.70	56.90	(930×765×1605) +(1340× 765× 1740)×3	11400+16000×3	82	73	47	Φ44.5	Φ22.2	Φ9.52	38+89+99+113	60+110+125+150	225+360+2×385
GMV-2016WM/B-F		201.5	226.5	57.50	59.40	(930×765×1605) +(1340× 765× 1740)×3	11400+16000×3	82	73	47	Φ44.5	Φ22.2	Φ9.52	38+99+99+113	60+125+125+150	225+3×385
GMV-2072WM/B-F		207.0	232.5	60.00	61.70	(930×765×1605) +(1340× 765× 1740)×3	11400+16000×3	82	73	47	Φ44.5	Φ22.2	Φ9.52	38+99+113+113	60+125+150+150	225+3×385
GMV-2128WM/B-F		212.5	238.5	62.50	64.00	(930×765×1605) +(1340× 765× 1740)×3	11400+16000×3	82	73	47	Φ44.5	Φ22.2	Φ9.52	38+113+113+113	60+150+150+150	225+3×385
GMV-2184WM/B-F		218.0	244.5	63.91	65.70	(1340×765×1605) +(1340× 765× 1740)×3	11400+16000×3	82	74	47	Φ44.5	Φ22.2	Φ9.52	43+113+113+113	60+150+150+150	285+3×385
GMV-2240WM/B-F		224.5	252.0	66.15	67.80	(1340×765×1605) +(1340× 765× 1740)×3	14000+16000×3	82	74	47	Φ44.5	Φ22.2	Φ9.52	60+113+113+113	80+150+150+150	360+3×385
GMV-2295WM/B-F		229.5	257.0	68.15	69.70	(1340×765×1605) +(1340× 765× 1740)×3	14000+16000×3	82	74	47	Φ44.5	Φ22.2	Φ9.52	65+113+113+113	90+150+150+150	360+3×385
GMV-2350WM/B-F		234.9	263.5	69.70	70.80	(1340× 765× 1740)×4	16000×4	82	75	47	Φ44.5	Φ22.2	Φ9.52	89+113+113+113	110+150+150+150	360+3×385
GMV-2405WM/B-F		240.5	270.0	71.50	73.30	(1340× 765× 1740)×4	16000×4	82	75	47	Φ44.5	Φ22.2	Φ9.52	99+113+113+113	125+150+150+150	4×385
GMV-2460WM/B-F		246.0	276.0	74.00	75.60	(1340× 765× 1740)×4	16000×4	82	75	47	Φ44.5	Φ22.2	Φ9.52	113+113+113+113	150+150+150+150	4×385

GMV5 440-460V,60Hz

Model	Power Supply	Cooling Capacity		Power Input		Dimension(W*D*H)	Airflow Volume	ESP	Noise		Connecting pipe diameter			MCA	MOP	Weight
		Cooling	Heating	Cooling	Heating					Noise at Night Operation Noise	Liquid	Gas	Oil balance			
		kW	kW	kW	kW	mm	m^3/h	Pa	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-504WM/B-U	440-460V-3Ph-60Hz	50.4	56.5	13.32	14.05	2×(930×765×1605)	2×11400	0~82	64	43	Φ15.9	Φ28.6	Φ9.52	19+20	30+30	225×2
GMV-560WM/B-U		56	63	15.22	16.1	2×(930×765×1605)	2×11400	0~82	64	43	Φ15.9	Φ28.6	Φ9.52	20+20	30+30	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	Φ15.9	Φ28.6	Φ9.52	20+24	30+35	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	Φ15.9	Φ28.6	Φ9.52	20+32	30+40	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	Φ19.05	Φ31.8	Φ9.52	20+35	30+40	225+360
GMV-785WM/B-U		78.5	87.5	22.37	23.2	2×(1340×765×1605)	2×14000	0~82	66	43	Φ19.05	Φ31.8	Φ9.52	24+35	35+40	285+360
GMV-850WM/B-U		85	95	24.85	25.1	2×(1340×765×1605)	2×14000	0~82	66	43	Φ19.05	Φ31.8	Φ9.52	32+35	40+40	360×2
GMV-900WM/B-U		90	100	26.9	27.2	2×(1340×765×1605)	2×14000	0~82	66	43	Φ19.05	Φ31.8	Φ9.52	35+35	40+40	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	Φ19.05	Φ31.8	Φ9.52	20+20+32	30+30+40	225×2+360
GMV-1010WM/B-U		101	113	28.67	29.7	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0~82	67	45	Φ19.05	Φ38.1	Φ9.52	20+20+35	30+30+40	225×2+360
GMV-1065WM/B-U		106.5	119	29.98	31.25	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Φ19.05	Φ38.1	Φ9.52	20+24+35	30+35+40	225+285+360
GMV-1130WM/B-U		113	126.5	32.46	33.15	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Φ19.05	Φ38.1	Φ9.52	20+32+35	30+40+40	225+360×2
GMV-1180WM/B-U		118	131.5	34.51	35.25	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Φ19.05	Φ38.1	Φ9.52	20+35+35	30+40+40	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	Φ19.05	Φ38.1	Φ9.52	24+35+35	35+40+40	285+360×2
GMV-1300WM/B-U		130	145	38.3	38.7	3×(1340×765×1605)	3×14000	0~82	68	45	Φ19.05	Φ38.1	Φ9.52	32+35+35	35+40+40	360×3
GMV-1350WM/B-U		135	150	40.35	40.8	3×(1340×765×1605)	3×14000	0~82	68	45	Φ19.05	Φ38.1	Φ9.52	35+35+35	40+40+40	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	Φ19.05	Φ41.3	Φ9.52	20+20+32+35	30+30+40+40	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	Φ19.05	Φ41.3	Φ9.52	20+20+35+35	30+30+40+40	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	Φ19.05	Φ41.3	Φ9.52	20+24+35+35	30+30+40+40	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	Φ19.05	Φ41.3	Φ9.52	20+32+35+35	30+40+40+40	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	Φ19.05	Φ41.3	Φ9.52	20+35+35+35	30+40+40+40	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	Φ19.05	Φ41.3	Φ9.52	24+35+35+35	35+40+40+40	285+360×3
GMV-1750WM/B-U		175	195	51.75	52.3	4×(1340×765×1605)	4×14000	0~82	70	49	Φ19.05	Φ41.3	Φ9.52	32+35+35+35	40+40+40+40	360×4
GMV-1800WM/B-U		180	200	53.8	54.4	4×(1340×765×1605)	4×14000	0~82	70	49	Φ19.05	Φ41.3	Φ9.52	35+35+35+35	40+40+40+40	360×4

GMV5E 380-415V,50/60Hz

Model	Power Supply	Capacity			Power Input			Dimension(W×D×H)	Airflow Volume	ESP	Connecting pipe diameter			Min.circuit current	Max. fuse current	Weight
		Cooling	Heating		Cooling	Heating					Liquid	Gas	Oil Balance			
		Nom.	Nom.	Max.	Nom.	Nom.	Max.									
		kW	kW	kW	kW	kW	kW	mm	m^3/h	Pa	mm	mm	mm	A	A	kg
GMV-680WM/E-X	380-415V 3Ph 50/60H z	68.0	76.5	76.5	16.8	15.2	15.2	(930×765×1605)+(1340×765×1605)	11400+14000	82	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25 + 40	235+360
GMV-730WM/E-X		73.0	81.5	81.5	19.1	16.5	16.5	(930×765×1605)+(1340×765×1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25 + 40	235+360
GMV-785WM/E-X		78.4	81.9	88.0	22.0	18.0	19.8	(930×765×1605)+(1340×765×1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+44.7	25 + 50	235+360
GMV-850WM/E-X		84.0	87.5	94.5	26.3	20.0	22.3	(930×765×1605)+(1340×765×1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+50	25 + 63	235+385
GMV-900WM/E-X		89.5	93.0	100.5	35.5	22.3	24.6	(930×765×1605)+(1340×765×1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+53.6	25 + 63	235+385
GMV-960WM/E-X		95.0	99.0	106.5	37.7	23.8	26.0	(1340×765×1605)+(1340×765×1740)	14000+16000	82	Φ19.05	Φ31.8	Φ9.52	24.6+53.6	32 + 63	285+385
GMV-1010WM/E-X		101.5	106.5	114.0	39.8	26.1	28.4	(1340×765×1605)+(1340×765×1740)	14000+16000	82	Φ19.05	Φ38.1	Φ9.52	28.8+53.6	40 + 63	360+385
GMV-1065WM/E-X		106.5	111.5	119.0	42.1	27.5	29.8	(1340×765×1740) ×2	16000×2	82	Φ19.05	Φ38.1	Φ9.52	33.2+53.6	40 + 63	360+385
GMV-1130WM/E-X		111.9	111.9	125.5	45.0	28.9	33.0	(1340×765×1740) ×2	16000×2	82	Φ19.05	Φ38.1	Φ9.52	44.7+53.6	50 + 63	360+385
GMV-1180WM/E-X		117.5	117.5	132.0	49.3	31.0	35.5	(1340×765×1740) ×2	16000×2	82	Φ19.05	Φ38.1	Φ9.52	50+53.6	63 + 63	385×2
GMV-1235WM/E-X		123.0	123.0	138.0	58.6	33.2	37.8	(1340×765×1740) ×2	16000×2	82	Φ19.05	Φ38.1	Φ9.52	53.6+53.6	63 + 63	385×2
GMV-1300WM/E-X		129.0	137.5	144.5	39.1	30.9	33.1	(930×765×1605)+(1340×765×1740) ×2	11400+16000×2	82	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+50	25 + 40 + 63	235+360+385
GMV-1350WM/E-X		134.5	143.0	150.5	48.4	33.2	35.4	(930×765×1605)+(1340×765×1740) ×2	11400+16000×2	82	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+53.6	25 + 40 + 63	235+360+385
GMV-1410WM/E-X		140.0	149.0	156.5	50.5	34.6	36.9	(1340×765×1605)+(1340×765×1740) ×2	14000+16000×2	82	Φ19.05	Φ41.3	Φ9.52	24.6+33.2+53.6	32 + 40 + 63	285+360+385
GMV-1460WM/E-X		145.5	149.0	163.5	55.5	36.7	41.2	(930×765×1605)+(1340×765×1740) ×2	11400+16000×2	82	Φ19.05	Φ41.3	Φ9.52	20.9+50+53.6	25 + 63 + 63	235+385×2
GMV-1515WM/E-X		151.0	154.5	169.5	64.8	38.9	43.5	(930×765×1605)+(1340×765×1740) ×2	11400+16000×2	82	Φ19.05	Φ41.3	Φ9.52	20.9+53.6+53.6	25 + 63 + 63	235+385×2
GMV-1580WM/E-X		156.5	160.5	175.5	67.0	40.4	44.9	(1340×765×1605)+(1340×765×1740) ×2	14000+16000×2	82	Φ19.05	Φ41.3	Φ9.52	24.6+53.6+53.6	32 + 63 + 63	285+385×2
GMV-1630WM/E-X		163.0	168.0	183.0	69.1	42.8	47.3	(1340×765×1605)+(1340×765×1740) ×2	14000+16000×2	82	Φ19.05	Φ41.3	Φ9.52	28.8+53.6+53.6	40 + 63 + 63	360+385×2
GMV-1685WM/E-X		168.0	173.0	188.0	71.4	44.1	48.7	(1340×765×1740) ×3	16000×3	82	Φ19.05	Φ41.3	Φ9.52	33.2+53.6+53.6	40 + 63 + 63	360+385×2
GMV-1750WM/E-X		173.4	173.4	194.5	74.3	45.5	51.9	(1340×765×1740) ×3	16000×3	82	Φ19.05	Φ41.3	Φ9.52	44.7+53.6+53.6	50 + 63 + 63	360+385×2
GMV-1800WM/E-X		179.0	179.0	201.0	78.6	47.6	54.4	(1340×765×1740) ×3	16000×3	82	Φ19.05	Φ41.3	Φ9.52	50+53.6+53.6	63 + 63 + 63	385×3
GMV-1845WM/E-X		184.5	184.5	207.0	87.9	49.9	56.7	(1340×765×1740) ×3	16000×3	82	Φ19.05	Φ41.3	Φ9.52	53.6+53.6+53.6	63+63+63	385×3
GMV-1908WM/E-X		190.5	199.0	213.5	68.4	47.5	52.0	(930×765×1605)+(1340×765×1740) ×3	11400+16000×3	82	Φ22.2	Φ44.5	Φ9.52	20.9+33.2+50+53.6	25+40+63+63	235+360+385×2
GMV-1962WM/E-X		195.9	199.4	220.0	71.3	48.9	55.3	(930×765×1605)+(1340×765×1740) ×3	11400+16000×3	82	Φ22.2	Φ44.5	Φ9.52	20.9+44.7+50+53.6	25+50+63+63	235+360+385×2
GMV-2016WM/E-X		201.5	205.0	226.5	75.5	51.0	57.8	(930×765×1605)+(1340×765×1740) ×3	11400+16000×3	82	Φ22.2	Φ44.5	Φ9.52	20.9+50+50+53.6	25+63+63+63	235+385×3
GMV-2072WM/E-X		207.0	210.5	232.5	84.8	53.3	60.1	(930×765×1605)+(1340×765×1740) ×3	11400+16000×3	82	Φ22.2	Φ44.5	Φ9.52	20.9+50+53.6+53.6	25+63+63+63	235+385×3
GMV-2128WM/E-X		212.5	216.0	238.5	94.1	55.5	62.4	(930×765×1605)+(1340×765×1740) ×3	11400+16000×3	82	Φ22.2	Φ44.5	Φ9.52	20.9+53.6+53.6+53.6	25+63+63+63	235+385×3
GMV-2184WM/E-X		218.0	222.0	244.5	96.3	57.0	63.8	(1340×765×1605)+(1340×765×1740) ×3	14000+16000×3	82	Φ22.2	Φ44.5	Φ9.52	24.6+53.6+53.6+53.6	32+63+63+63	285+385×3
GMV-2240WM/E-X		224.5	229.5	252.0	98.4	59.4	66.2	(1340×765×1605)+(1340×765×1740) ×3	14000+16000×3	82	Φ22.2	Φ44.5	Φ9.52	28.8+53.6+53.6+53.6	40+63+63+63	360+385×3
GMV-2295WM/E-X		229.5	234.5	257.0	100.7	60.7	67.6	(1340×765×1740) ×4	16000×4	82	Φ22.2	Φ44.5	Φ9.52	33.2+53.6+53.6+53.6	40+63+63+63	360+385×3
GMV-2350WM/E-X		234.9	234.9	263.5	103.6	62.2	70.8	(1340×765×1740) ×4	16000×4	82	Φ22.2	Φ44.5	Φ9.52	44.7+53.6+53.6+53.6	50+63+63+63	360+385×3
GMV-2405WM/E-X		240.5	240.5	270.0	107.9	64.2	73.3	(1340×765×1740) ×4	16000×4	82	Φ22.2	Φ44.5	Φ9.52	50+53.6+53.6+53.6	63+63+63+63	385×4
GMV-2460WM/E-X		246.0	246.0	276.0	117.2	66.5	75.6	(1340×765×1740) ×4	16000×4	82	Φ22.2	Φ44.5	Φ9.52	53.6+53.6+53.6+53.6	63+63+63+63	385×4

Note:
1.Due to the same capacity, GMV-280WM/E1-X model and GMV-280WM/E-X model can replace each other for operation, GMV-450WM/E1-X model and GMV-450WM/E-X model can replace each other for operation.
2. The combination models of the outdoor units are not Eurovent certified.

GMV5 Mini & Slim



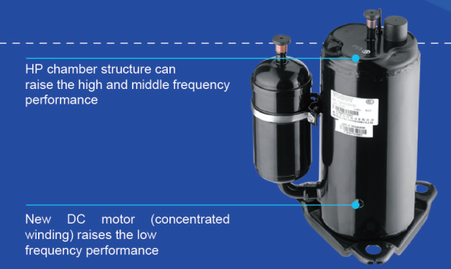
Key Features

All DC Inverter Technology to Improve Compression Efficiency

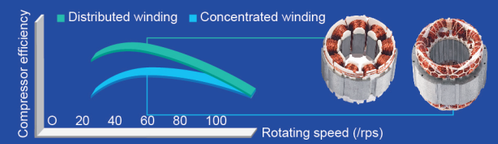
All DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyn motor is adopted to provide better performance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

All DC Inverter Compressor

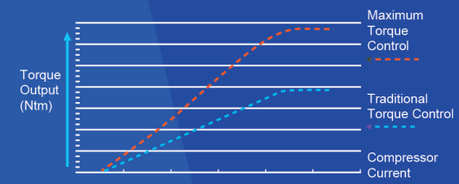
- All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.



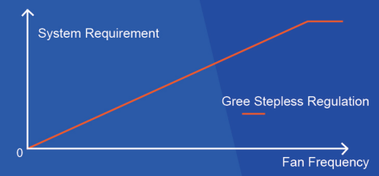
- High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.



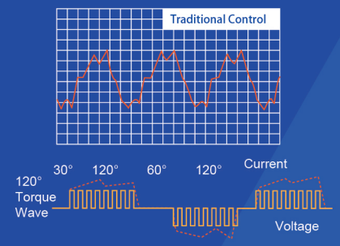
- **Technology of Maximum Torque Control with Minimum Current**
  It can reduce energy loss caused by device winding so as to realize higher efficiency.

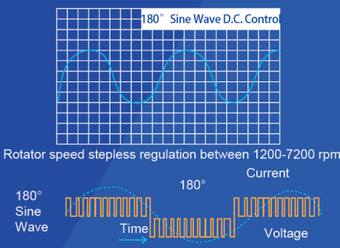


- **Low-frequency Torque Control**
  It can directly control motor torque, through which fan motor can run at a low speed. Users will feel more comfortable while requirements of the system are also met.



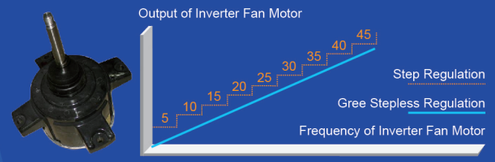
- **180° Sine Wave DC Speed Varying Technology**
  It can satisfy various places' demands for different temperature and is able to save a great deal of electricity and provide users with utmost comfort at the same time.



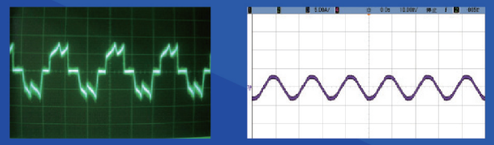


Sensorless DC Inverter Fan Motor

- Stepless speed regulation ranges from **5Hz** to **44Hz**.Compared with traditional inverter motors, the operation is more energy-saving.

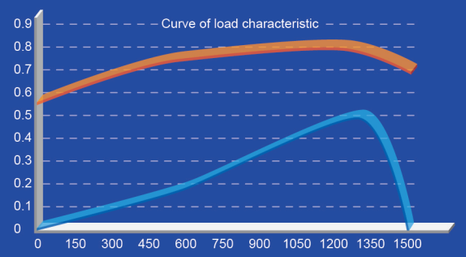


- Sensorless control technology guarantees lower noise, less vibration and steadier operation.



Sensorless DC Inverter Fan Motor

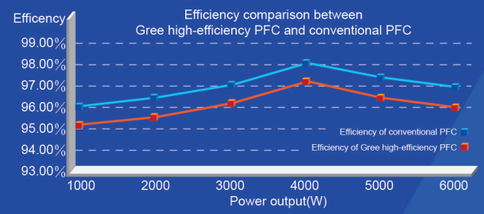
The indoor unit adopts high-efficiency brushless DC motor. Compared with conventional motor, the efficiency of brushless DC motor is improved by more than **30%**. Meanwhile, the design of evaporation capacity flow is optimized through emulation software of refrigeration system and the heat exchange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



High-efficiency Digital PFC Control *

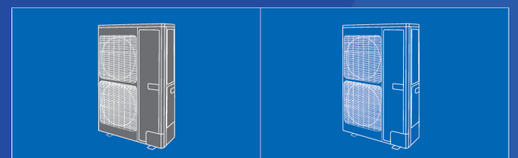
High-efficiency PFC control technology is adopted with efficiency improved by about 1% compared with conventional PFC. For the air conditioner with rated power of 5kW, **50W** of electricity can be saved every hour and **1.2kW** of electricity can be saved every day.

*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 ambient temperature cooling. So the operation range in cooling is wider.



Company A	Gree GMV5 Mini	Gree GMV5 Slim
Cooling:10~48°C Heating:-20~27°C	Cooling:-5~52°C Heating:-20~27°C	Cooling:-5~52°C Heating:-20~27°C

Comfortable and Quiet Mode

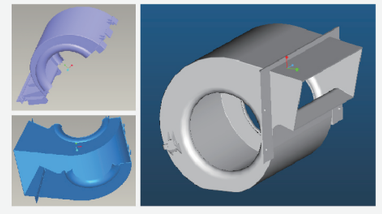
Low Noise of Outdoor Unit

- 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(A) thanks to noise optimized design or fan system and compressor system, and multiple kinds of quiet modes of outdoor unit.

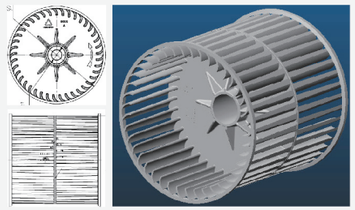


Low Noise of Indoor Unit

- 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).



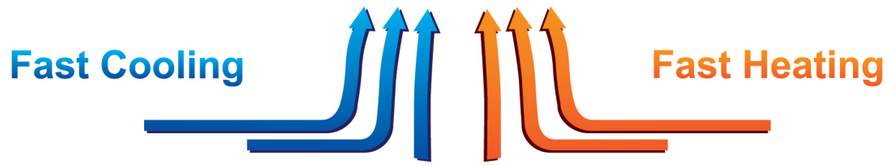
- By adopting the optimal inlet angle of centrifugal fan blade and optimal diameter ratio between internal and external circles of impeller, the air volume is increased and fan noise is decreased greatly.



- 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.

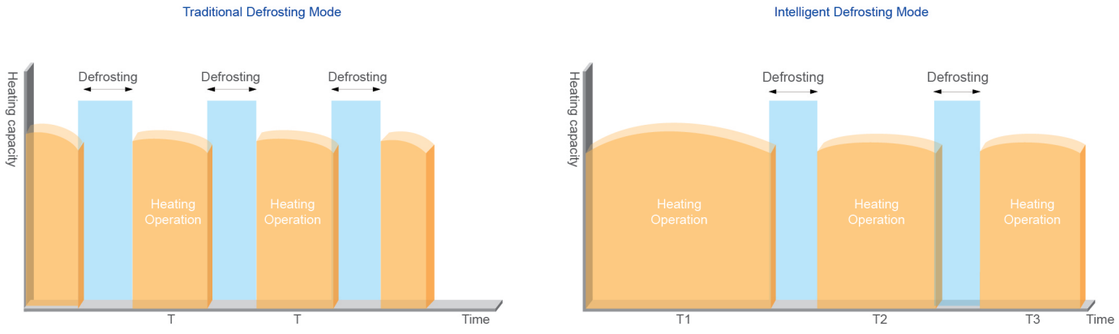
Intelligent Temperature Control Technology

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



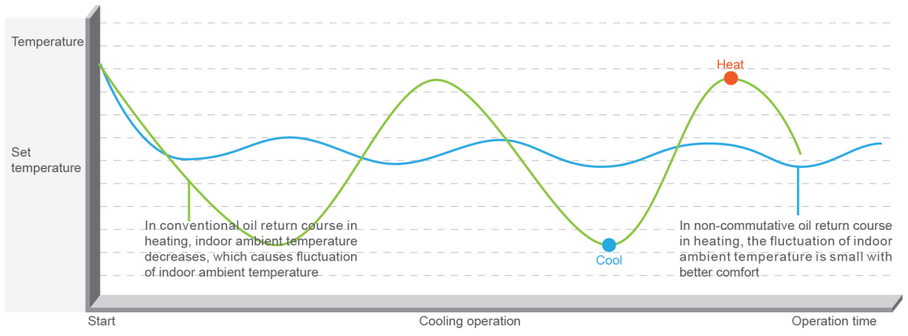
Intelligent Defrosting Control

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.



Non-commutative Oil Return Technology in Heating

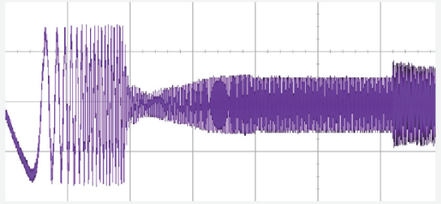
The unit can achieve non-commutative oil return in heating when outdoor ambient temperature is within 0~20°C. Thanks to this technology, indoor ambient temperature is more stable and comfort is improved in heating mode.



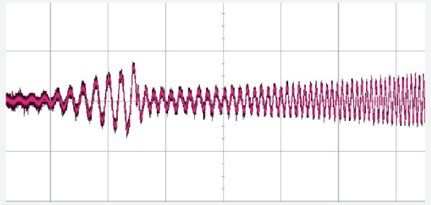
Reliable Operation

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.



Conventional startup mode



Gree closed-loop startup mode

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.

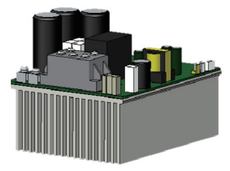


Linear power supply
(Linear inverter
+
Voltage-regulation chip)

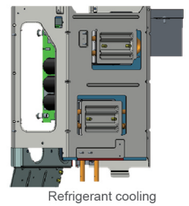
Switching power supply
(High-frequency inverter
+
Switching chip)

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.



Common heat radiation

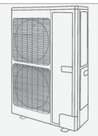


Refrigerant cooling

Easy Installation and Transportation

Ultra-long Connection Pipe for More Convenient Connection

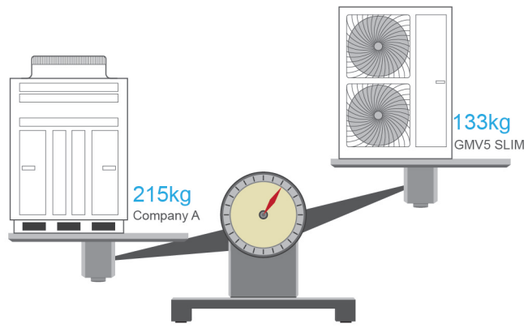
Under the subcooling control technology gained by adding subcooler, the indoor unit and outdoor unit ofGMV5 mini can operate reliably with longer connection pipe.

	 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.





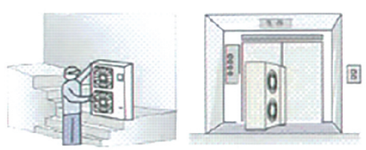
Easy Installation with Lower Construction Cost

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

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

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

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

Slim Lineup（380-415V, 50/60Hz）

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

Mini

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

Model			GMV-80WL/C-T	GMV-100WL/C-T	GMV-121WL/C-T
Capacity range		HP	3	3.5	4
Capacity	Cooling	kW	8	10	12.1
	Heating	kW	9	11	13
EER		W/W	3.90	3.70	3.51
COP		W/W	4.74	4.40	4.81
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60		
Max. Circuit/Fuse Current		A	25	25	32
Power comsumption	Cooling	kW	2.05	2.7	3.45
	Heating	kW	1.9	2.5	2.7
Maximum drive IDU NO.		unit	4	5	6
Refrigerant Charge volume		kg	1.8	1.8	2
Sound pressure level		dB(A)	56	56	57
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9
Dimension(WxDxH)	Outline	mm	980×360×790	980×360×790	980×360×790
	Package	mm	1129×478×937	1129×478×937	1129×478×937
Net weight/Gross weight		kg	80/90	80/90	85/95
Loading quantity	40' GP	set	100	100	100
	40' HQ	set	100	100	100

Model			GMV-120WL/C-T	GMV-140WL/C-T	GMV-160WL/C-T
Capacity range		HP	4	5	6
Capacity	Cooling	kW	12.1	14	16
	Heating	kW	14	16.5	18
EER		W/W	3.99	3.90	3.37
COP		W/W	4.28	4.18	3.87
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60		
Max. Circuit/Fuse Current		A	32	40	40
Power comsumption	Cooling	kW	3.03	3.59	4.75
	Heating	kW	3.27	3.95	4.65
Maximum drive IDU NO.		unit	7	8	9
Refrigerant Charge volume		kg	3.3	3.3	3.3
Sound pressure level		dB(A)	57	58	58
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ19.05
Dimension(WxDxH)	Outline	mm	900×340×1345	900×340×1345	900×340×1345
	Package	mm	1048×458×1507	1048×458×1507	1048×458×1507
Net weight/Gross weight		kg	112/123	112/123	112/123
Loading quantity	40' GP	set	57	57	57
	40' HQ	set	57	57	57

50Hz&60Hz (380-415V)

Model			GMV-120WL/C-X	GMV-140WL/C-X	GMV-160WL/C-X
Capacity range		HP	4	5	6
Capacity	Cooling	kW	12.1	14	16
	Heating	kW	14	16.5	18
EER		W/W	3.99	3.90	3.37
COP		W/W	4.28	4.18	3.87
Power supply		V/Ph/Hz	380-415/3/50&380-415/3/60		
Max. Circuit/Fuse Current		A	16	16	16
Power comsumption	Cooling	kW	3.03	3.59	4.75
	Heating	kW	3.27	3.95	4.65
Maximum drive IDU NO.		unit	7	8	9
Refrigerant Charge volume		kg	3.3	3.3	3.3
Sound pressure level		dB(A)	57	58	58
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ19.05
Dimension(WxDxH)	Outline	mm	900×340×1345	900×340×1345	900×340×1345
	Package	mm	1048×458×1507	1048×458×1507	1048×458×1507
Net weight/Gross weight		kg	122/133	122/133	122/133
Loading quantity	40' GP	set	57	57	57
	40' HQ	set	57	57	57

Slim

50/60 Hz (380-415V)

Model			GMV-224WL/C-X	GMV-280WL/C-X	GMV-335WL/C-X
Capacity range		HP	8	10	12
Capacity	Cooling	kW	22.4	28.0	33.5
	Heating	kW	24	30	35
EER		W/W	3.66	3.6	3.5
COP		W/W	4.9	4.9	4.9
Max. Circuit/Fuse Current		A	20	25	32
Power supply		V/Ph/Hz	380-415~3Ph~50/60Hz		
Power comsumption	Cooling	kW	6.12	7.78	9.57
	Heating	kW	4.9	6.12	7.14
Maximum drive IDU NO.		unit	13	17	20
Refrigerant Charge volume		kg	5.5	7.1	8.0
Sound pressure level		dB(A)	60	62	63
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ25.4
Dimension (W*D*H)	Outline	mm	940*320*1430	940*460*1615	940*460*1615
	Package	mm	1038*438*1580	1038*578*1765	1038*578*1765
Net weight/Gross weight		kg	133/144	166/183	177/194
Loading quantity	40' GP	set	56	44	44
	40' HQ	set	56	44	44

GMV5C



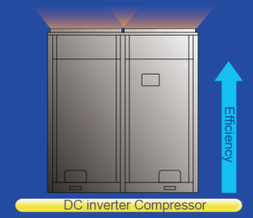
Key Features

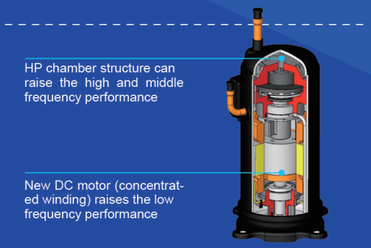
DC Inverter Technology to Improve Compression Efficiency

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.

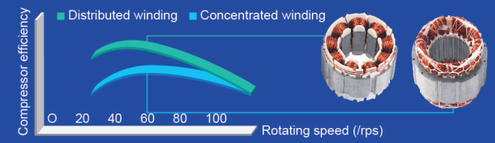
DC Inverter Compressor

- 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.



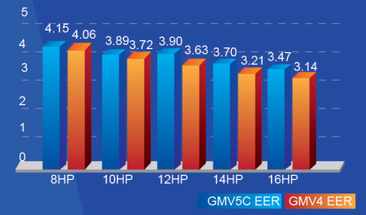


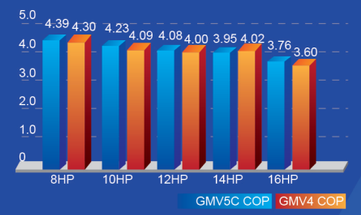
- High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.



High Efficiency and More Energy Saving

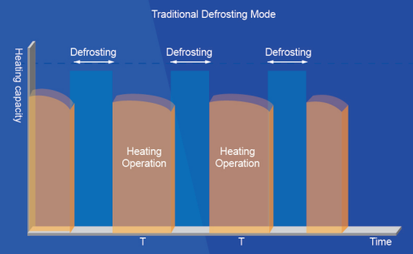
Thanks to the advanced DC inverter technology, optimized system design and accurate intelligent control technology, EER of GMV5C is up to 4.15 while COP is up to 4.39.

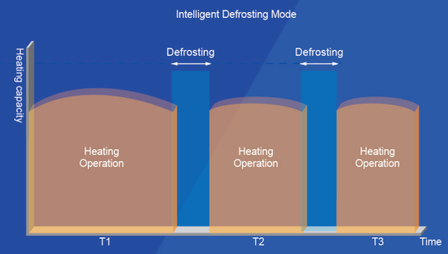




Intelligent Defrosting Control

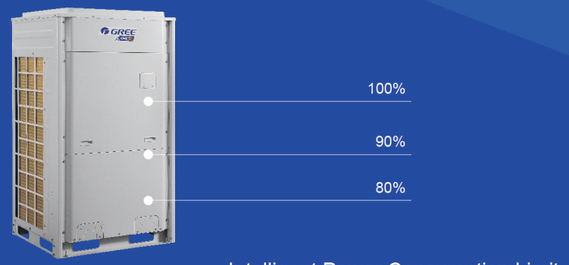
During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness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



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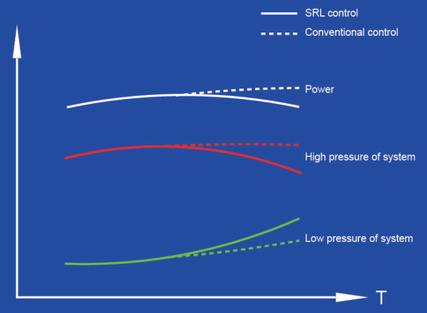
SRL (Self-reaction Load) Self-adaptive Control

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
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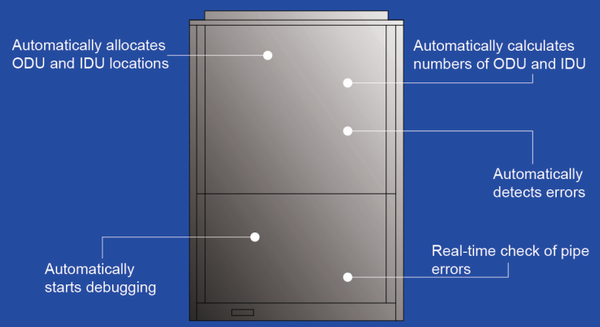
- Real-time judgment of pipe errors



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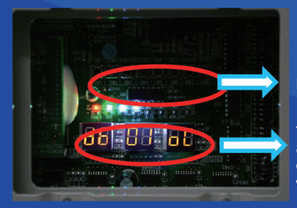

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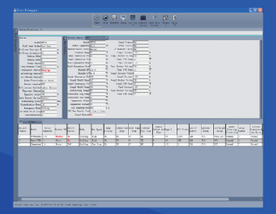

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③

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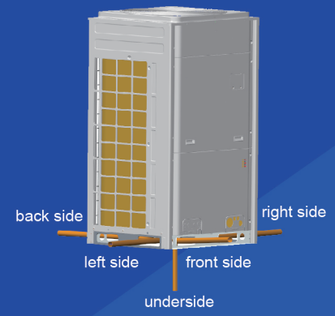

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ODU Combination Lineup

Model	GMV-224WM/A-M	GMV-280WM/A-M	GMV-335WM/A-M	GMV-400WM/A-M	GMV-450WM/A-M
GMV-224WM/A-M	●				
GMV-280WM/A-M		●			
GMV-335WM/A-M			●		
GMV-400WM/A-M				●	
GMV-450WM/A-M					●
GMV-504WM/A-M	●	●			
GMV-560WM/A-M		●●			
GMV-615WM/A-M		●	●		
GMV-680WM/A-M		●		●	
GMV-730WM/A-M		●			●
GMV-785WM/A-M			●		●
GMV-850WM/A-M				●	●
GMV-900WM/A-M					●●
GMV-960WM/A-M		●●		●	
GMV-1010WM/A-M		●●			●
GMV-1065WM/A-M		●	●		●
GMV-1130WM/A-M		●		●	●
GMV-1180WM/A-M		●			●●
GMV-1235WM/A-M			●		●●
GMV-1300WM/A-M				●	●●
GMV-1350WM/A-M					●●●
GMV-1410WM/A-M		●●		●	●
GMV-1460WM/A-M		●●			●●
GMV-1515WM/A-M		●	●		●●
GMV-1580WM/A-M		●		●	●●
GMV-1630WM/A-M		●			●●●
GMV-1685WM/A-M			●		●●●
GMV-1750WM/A-M				●	●●●
GMV-1800WM/A-M					●●●●

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		HP	8	10	12	14	16
Capacity	Cooling	kW	22.4	28	33.5	40	45
	Heating	kW	25	31.5	37.5	45	50
EER		W/W	4.15	3.89	3.90	3.70	3.47
COP		W/W	4.39	4.23	4.08	3.95	3.76
Power supply		V/Ph/Hz	380-415V-3Ph-50Hz				
Max. Circuit/Fuse Current		A	15.7/20	20.9/25	24.7/32	29.5/40	33.8/40
Power comsumption	Cooling	kW	5.40	7.20	8.60	10.80	12.95
	Heating	kW	5.70	7.45	9.20	11.40	13.30
Maximum drive IDU NO.		unit	13	16	19	23	26
Refrigerant Charge volume		kg	5.9	6.7	8.2	9.8	10.3
Sound pressure level		dB(A)	60	61	63	63	63
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6
Dimension (W*D*H)	Outline	mm	930×765×1605		1340×765×1605		
	Package	mm	1010×840×1775		1420×840×1775		
Net weight/Gross weight		kg	225/235	225/235	285/300	345/360	345/360
Loading quantity	40' GP	set	24	24	16	16	16
	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

Model	Power Supply	Capacity		Power Input		Dimension(W×D×H)	Airflow Volume	ESP	Sound Pressure Level	Operation sound pressure level at night	Connecting pipe diameter			Min. circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating						Liquid	Gas	Oil Balance			
		kW	kW	kW	kW	mm	m^3/h	Pa	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-504WM/A-M	380-415V-3N-50Hz	50.4	56.5	12.60	13.15	(930×765×1605) ×2	11400×2	82	64	45	Φ15.9	Φ28.6	Φ9.52	15.7+20.9	20 + 25	225×2
GMV-560WM/A-M		56	63.0	14.40	14.90	(930×765×1605) ×2	11400×2	82	64	45	Φ15.9	Φ28.6	Φ9.52	20.9+20.9	25 + 25	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	Φ15.9	Φ28.6	Φ9.52	20.9+24.7	25 + 32	285+225
GMV-680WM/A-M		68	76.5	18.00	18.85	(930×765×1605) +(1340×765×1605)	11400+14000	82	65	45	Φ15.9	Φ28.6	Φ9.52	20.9+29.5	25 + 40	225+345
GMV-730WM/A-M		73	81.5	20.15	20.75	(930×765×1605) +(1340×765×1605)	11400+14000	82	65	45	Φ19.05	Φ31.8	Φ9.52	20.9+33.8	25 + 40	225+345
GMV-785WM/A-M		78.5	87.5	21.55	22.50	(1340×765×1605) ×2	14000×2	82	66	45	Φ19.05	Φ31.8	Φ9.52	24.7+33.8	40 + 40	285+345
GMV-850WM/A-M		85	95.0	23.75	24.70	(1340×765×1605) ×2	14000×2	82	66	45	Φ19.05	Φ31.8	Φ9.52	29.5+33.8	40 + 40	345×2
GMV-900WM/A-M		90	100.0	25.90	26.60	(1340×765×1605) ×2	14000×2	82	66	45	Φ19.05	Φ31.8	Φ9.52	33.8+33.8	40 + 40	345×2
GMV-960WM/A-M		96	108.0	25.20	26.30	(930×765×1605) ×2+(1340×765×1605)	11400×2 +14000	82	67	45	Φ19.05	Φ31.8	Φ9.52	20.9+ 20.9+29.5	25 + 25 + 40	225×2 +345
GMV-1010WM/A-M		101	113.0	27.35	28.20	(930×765×1605) ×2+(1340×765×1605)	11400×2 +14000	82	67	45	Φ19.05	Φ38.1	Φ9.52	20.9+ 20.9+33.8	25 + 25 + 40	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	Φ19.05	Φ38.1	Φ9.52	20.9+ 24.7+33.8	25 + 40 + 40	225+285 +345
GMV-1130WM/A-M		113	126.5	30.95	32.15	(930×765×1605) +(1340×765×1605)×2	11400+ 14000×2	82	67	45	Φ19.05	Φ38.1	Φ9.52	20.9+ 29.5+33.8	25 + 40 + 40	225 +345×2
GMV-1180WM/A-M		118	131.5	33.10	34.05	(930×765×1605) +(1340×765×1605)×2	11400+ 14000×2	82	67	45	Φ19.05	Φ38.1	Φ9.52	20.9+ 33.8+33.8	25 + 40 + 40	225 +345×2
GMV-1235WM/A-M		123.5	137.5	34.50	35.80	(1340×765×1605)×3	14000×3	82	68	45	Φ19.05	Φ38.1	Φ9.52	24.7+ 33.8+33.8	40 + 40 + 40	285 +345×2
GMV-1300WM/A-M		130	145.0	36.70	38.00	(1340×765×1605)×3	14000×3	82	68	45	Φ19.05	Φ38.1	Φ9.52	29.5+ 33.8+33.8	40 + 40 + 40	345×3
GMV-1350WM/A-M		135	150.0	38.85	39.90	(1340×765×1605)×3	14000×3	82	68	47	Φ19.05	Φ38.1	Φ9.52	33.8+ 33.8+33.8	40 + 40 + 40	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	Φ19.05	Φ41.3	Φ9.52	20.9+20.9 +29.5+33.8	25 + 25 + 40 + 40	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	Φ19.05	Φ41.3	Φ9.52	20.9+20.9 +33.8+33.8	25 + 25 + 40 + 40	225×2 +345×2
GMV-1515WM/A-M		151.5	169.0	41.70	43.25	(930×765×1605) +(1340×765×1605)×3	11400+ 14000×3	82	69	47	Φ19.05	Φ41.3	Φ9.52	20.9+24.7 +33.8+33.8	25 + 32 + 40 + 40	225+285 +345×2
GMV-1580WM/A-M		158	176.5	43.90	45.45	(930×765×1605) +(1340×765×1605)×3	11400+ 14000×3	82	69	47	Φ19.05	Φ41.3	Φ9.52	20.9+29.5 +33.8+33.8	25 + 40 + 40 + 40	225+345×3
GMV-1630WM/A-M		163	181.5	46.05	47.35	(930×765×1605) +(1340×765×1605)×3	11400+ 14000×3	82	69	47	Φ19.05	Φ41.3	Φ9.52	20.9+33.8 +33.8+33.8	25 + 40 + 40 + 40	225+345×3
GMV-1685WM/A-M		168.5	187.5	47.45	49.10	(1340×765×1605)×4	14000×4	82	70	47	Φ19.05	Φ41.3	Φ9.52	24.7+33.8 +33.8+33.8	32 + 40 + 40 + 40	285+345×3
GMV-1750WM/A-M		175	195.0	49.65	51.30	(1340×765×1605)×4	14000×4	82	70	47	Φ19.05	Φ41.3	Φ9.52	29.5+33.8 +33.8+33.8	40 + 40 + 40 + 40	345×4
GMV-1800WM/A-M		180	200.0	51.80	53.20	(1340×765×1605)×4	14000×4	82	70	47	Φ19.05	Φ41.3	Φ9.52	33.8+33.8 +33.8+33.8	40 + 40 + 40 + 40	345×4

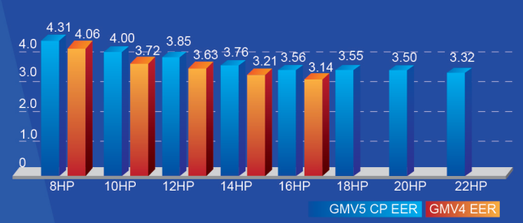
GMV5 CP

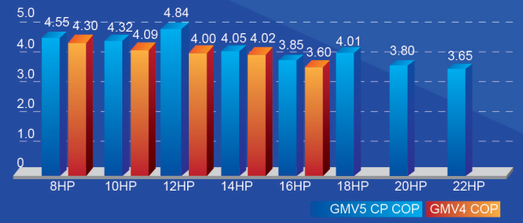


Key Features

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

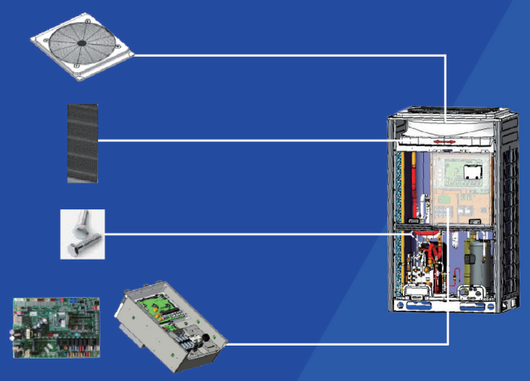
The GMV5 CP unit adopts corrosion-resistance materials on both metal and electronic parts make it can be installed near the sea.

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.

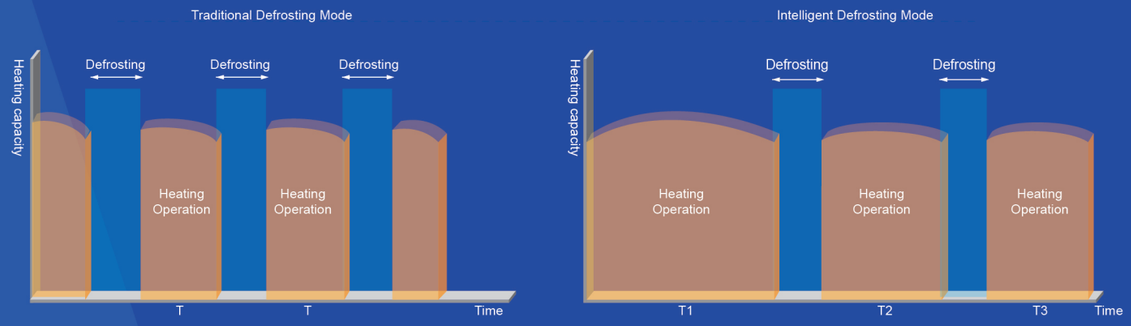
All screws are anti-rust.

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.



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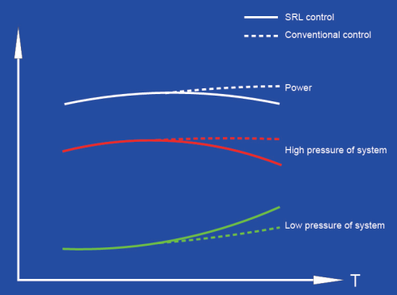

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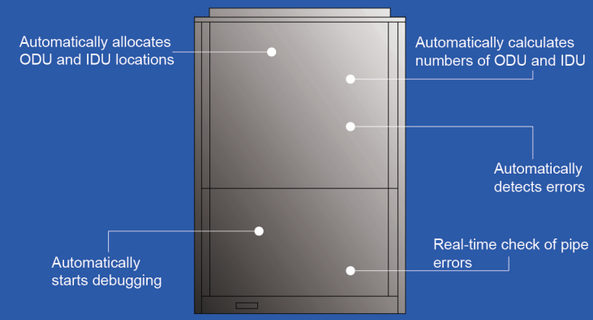

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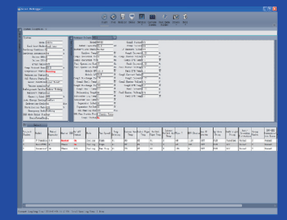

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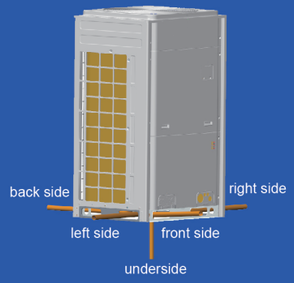

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GMV-224WM/B1-X	●							
GMV-280WM/B1-X		●						
GMV-335WM/B1-X			●					
GMV-400WM/B1-X				●				
GMV-450WM/B1-X					●			
GMV-504WM/B1-X						●		
GMV-560WM/B1-X							●	
GMV-615WM/B1-X								●
GMV-680WM/B1-X		●		●				
GMV-730WM/B1-X		●			●			
GMV-785WM/B1-X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

HP	Model	Product
8HP	GMV-224WM/B1-X	
10HP	GMV-280WM/B1-X	
12HP	GMV-335WM/B1-X	
14HP	GMV-400WM/B1-X	
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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
Capacity	Cooling	kW	22.4	28	33.5	40
	Heating	kW	25	31.5	37.5	45
EER		W/W	4.31	4.00	3.85	3.76
COP		W/W	4.55	4.32	4.84	4.05
Power supply		V/Ph/Hz	380-415V-3Ph-50Hz/60Hz			
Max. Circuit/Fuse Current		A	15.7/20	20.9/25	22.5/32	28.8/40
Power comsumption	Cooling	kW	5.2	7	8.7	10.65
	Heating	kW	5.5	7.3	7.75	11.1
Maximum drive IDU NO.		unit	13	16	19	23
Refrigerant Charge volume		kg	5.9	6.7	9	9.8
Sound pressure level		dB(A)	60	61	61	63
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4
	Oil balance	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension (W*D*H)	Outline	mm	930×765×1605	930×765×1605	930×765×1605	1340×765×1605
	Package	mm	1010×840×1775	1010×840×1775	1010×840×1775	1420×840×1775
Net weight/Gross weight		kg	225/235	225/235	235/250	360/375
Loading quantity	40' GP	set	24	24	24	16
	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		HP	16	18	20	22
Capacity	Cooling	kW	45	50.4	56	61.5
	Heating	kW	50	56.5	63	69
EER		W/W	3.56	3.55	3.50	3.32
COP		W/W	3.85	4.01	3.80	3.65
Power supply		V/Ph/Hz	380-415V/3Ph/50/60Hz			
Max. Circuit/Fuse Current		A	33.2/40	45.4/50	51.1/63	59.2/63
Power comsumption	Cooling	kW	12.65	14.2	16	18.5
	Heating	kW	13	14.1	16.6	18.9
Maximum drive IDU NO.		unit	26	29	33	36
Refrigerant Charge volume		kg	10.3	11.3	14.3	14.3
Sound pressure level		dB(A)	63	63	63	64
Connecting pipe	Liquid	mm	Φ12.7	Φ15.9	Φ15.9	Φ15.9
	Gas	mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6
	Oil balance	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension (W*D*H)	Outline	mm	1340×765×1605	1340×765×1740	1340×765×1740	1340×765×1740
	Package	mm	1420×840×1775	1420×840×1910	1420×840×1910	1420×840×1910
Net weight/Gross weight		kg	360/375	360/375	385/400	385/400
Loading quantity	40' GP	set	16	16	16	16
	40' HQ	set	16	16	16	16

Specification of ODU Combination of GMV5 CP

Model	Power Supply	Capacity		Power Input		Dimension(W×D×H)	Airflow Volume	ESP	Sound Pressure Level	Operation sound pressure level at night	Connecting pipe diameter			Min.circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating						Liquid	Gas	Oil			
		kW	kW	kW	kW	mm	m^3/h	Pa	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-680WM/B1-X	380-415V/3Ph/50/60Hz	68.0	76.5	17.7	18.4	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25 + 40	225+360
GMV-730WM/B1-X		73.0	81.5	19.7	20.3	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25 + 40	225+360
GMV-785WM/B1-X		78.4	88.0	21.2	21.4	(930×765×1605)+(1340×765×1740)	11400+16000	82	66	43	Φ19.05	Φ31.8	Φ9.52	20.9+45.4	25 + 50	225+360
GMV-850WM/B1-X		84.0	94.5	23.0	23.9	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+51.1	25 + 63	225+385
GMV-900WM/B1-X		89.5	100.5	25.5	26.2	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+59.2	25 + 63	225+385
GMV-960WM/B1-X		95.0	106.5	27.2	26.7	(930×765×1605)+(1340×765×1740)	11400+16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	22.5+59.2	32 + 63	235+385
GMV-1010WM/B1-X		101.5	114.0	29.2	30.0	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+59.2	40 + 63	360+385
GMV-1085WM/B1-X		106.5	119.0	31.2	31.9	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+59.2	40 + 63	360+385
GMV-1130WM/B1-X		111.9	125.5	32.7	33.0	(1340×765×1740) ×2	16000×2	82	68	43	Φ19.05	Φ38.1	Φ9.52	45.4+59.2	50 + 63	360+385
GMV-1180WM/B1-X		117.5	132.0	34.5	35.5	(1340×765×1740) ×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	51.1+59.2	63 + 63	385×2
GMV-1235WM/B1-X		123.0	138.0	37.0	37.8	(1340×765×1740) ×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	59.2+59.2	63 + 63	385×2
GMV-1300WM/B1-X		129.0	144.5	35.7	36.9	(930×765×1605)+(1340×765×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+51.1	25 + 40 + 63	225+360+385
GMV-1350WM/B1-X		134.5	150.5	38.2	39.2	(930×765×1605)+(1340×765×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+59.2	25 + 40 + 63	225+360+385
GMV-1410WM/B1-X		140.0	156.5	39.9	39.7	(930×765×1605)+(1340×765×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	22.5+33.2+59.2	32 + 40 + 63	235+360+385
GMV-1460WM/B1-X		145.5	163.5	41.5	42.8	(930×765×1605)+(1340×765×1740) ×2	11400+16000×2	82	69	45	Φ19.05	Φ41.3	Φ9.52	20.9+51.1+59.2	25 + 63 + 63	225+385×2
GMV-1515WM/B1-X		151.0	169.5	44.0	45.1	(930×765×1605)+(1340×765×1740) ×2	11400+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	20.9+59.2+59.2	25 + 63 + 63	225+385×2
GMV-1580WM/B1-X		156.5	175.5	45.7	45.6	(930×765×1605)+(1340×765×1740) ×2	11400+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	22.5+59.2+59.2	32 + 63 + 63	235+385×2
GMV-1630WM/B1-X		163.0	183.0	47.7	48.9	(1340×765×1605)+(1340×765×1740) ×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	28.8+59.2+59.2	40 + 63 + 63	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	Φ19.05	Φ41.3	Φ9.52	33.2+59.2+59.2	40 + 63 + 63	360+385×2
GMV-1750WM/B1-X		173.4	194.5	51.2	51.9	(1340×765×1740) ×3	16000×3	82	70	45	Φ19.05	Φ41.3	Φ9.52	45.4+59.2+59.2	50 + 63 + 63	360+385×2
GMV-1800WM/B1-X		179.0	201.0	53.0	54.4	(1340×765×1740) ×3	16000×3	82	71	45	Φ19.05	Φ41.3	Φ9.52	51.1+59.2+59.2	63 + 63 + 63	385×3
GMV-1854WM/B1-X		184.5	207.0	55.5	56.7	(1340×765×1740) ×3	16000×3	82	71	45	Φ19.05	Φ41.3	Φ9.52	59.2+59.2+59.2	63+63+63	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	Φ22.2	Φ44.5	Φ9.52	20.9+33.2+51.1+59.2	25+40+63+63	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	Φ22.2	Φ44.5	Φ9.52	20.9+45.4+51.1+59.2	25+50+63+63	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	Φ22.2	Φ44.5	Φ9.52	20.9+51.1+51.1+59.2	25+63+63+63	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	Φ44.5	Φ9.52	20.9+51.1+59.2+59.2	25+63+63+63	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	Φ22.2	Φ44.5	Φ9.52	20.9+59.2+59.2+59.2	25+63+63+63	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	Φ44.5	Φ9.52	22.5+59.2+59.2+59.2	32+63+63+63	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	Φ22.2	Φ44.5	Φ9.52	28.8+59.2+59.2+59.2	40+63+63+63	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	Φ44.5	Φ9.52	33.2+59.2+59.2+59.2	40+63+63+63	360+385×3
GMV-2350WM/B1-X		234.9	263.5	69.7	70.8	(1340×765×1740) ×4	16000×4	82	75	47	Φ22.2	Φ44.5	Φ9.52	45.4+59.2+59.2+59.2	50+63+63+63	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	Φ44.5	Φ9.52	51.1+59.2+59.2+59.2	63+63+63+63	385×4
GMV-2460WM/B1-X		246.0	276.0	74.0	75.6	(1340×765×1740) ×4	16000×4	82	75	47	Φ22.2	Φ44.5	Φ9.52	59.2+59.2+59.2+59.2	63+63+63+63	385×4

GMV5 MAX



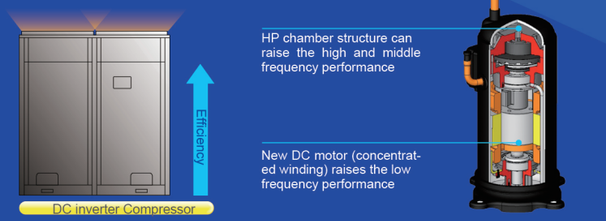
Key Features

DC Inverter Technology to Improve Compression Efficiency

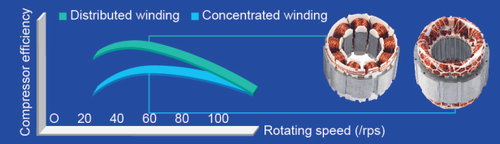
DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyn motor is adopted to provide better performance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

DC Inverter Compressor

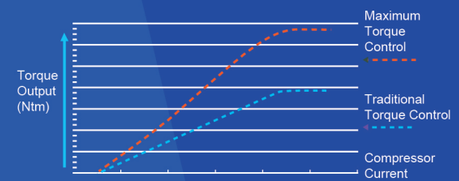
- High-performance high pressure chamber DC inverter compressor is adopted. High pressure chamber structure can directly reduce loss of overheat and improve compression efficiency, comparing with the compression efficiency of low pressure chamber.



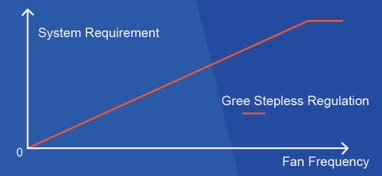
- High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.



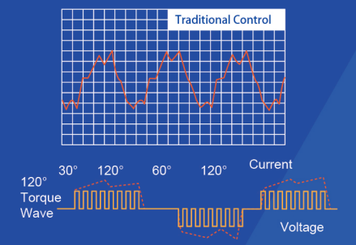
- **Technology of Maximum Torque Control with Minimum Current**
  It can reduce energy loss caused by device winding so as to realize higher efficiency.

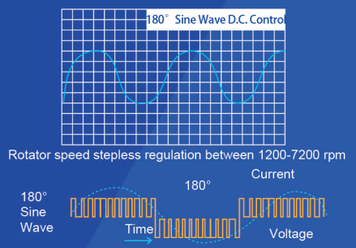


- **Low-frequency Torque Control**
  It can directly control motor torque, through which fan motor can run at a low speed. Users will feel more comfortable while requirements of the system are also met.



- 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.

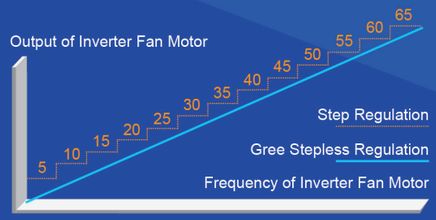




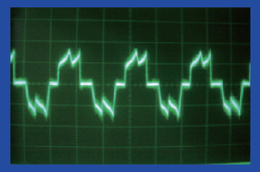
Sensorless DC Inverter Fan Motor

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

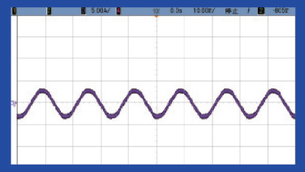




- Sensorless control technology guarantees lower noise, less vibration and steadier operation.



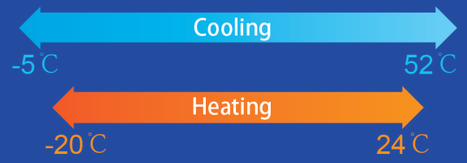
Before



After

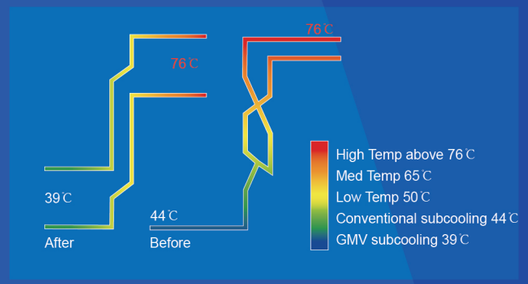
Wide Range of Operation Condition

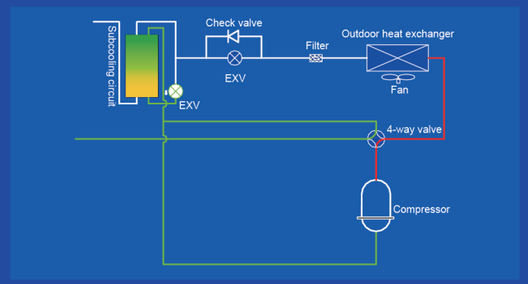
Outdoor operation temperature range is improved to **-5℃~52℃ in cooling** and **-20℃~24℃ in heating**.



Sub-cooling Control Technology to Ensure Optimal Cooling and Heating

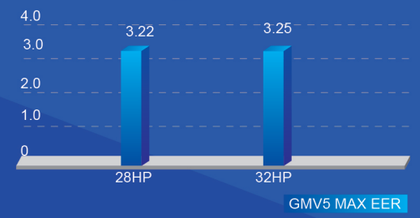
- Heat exchange loop can control the first subcooling process of heat exchanger. Subcooling degree can reach 11℃.
- Subcooling loop can realize 9℃ second subcooling to guarantee cooling and heating performance.

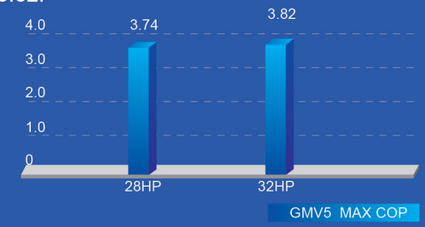




High Efficiency and More Energy Saving

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

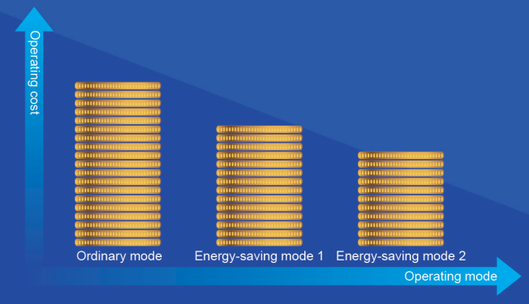
The GMV5 MAX system has 2 modes for energy saving, which can be chosen to meet different electricity demands.

Mode 1:

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.

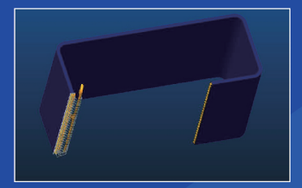
Mode 2:

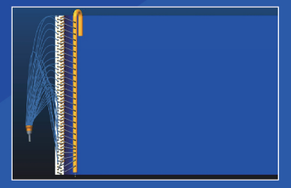
When unit is set in compulsory energy-saving mode, it will limit system power output in a compulsory way.



G-type Heat Exchanger

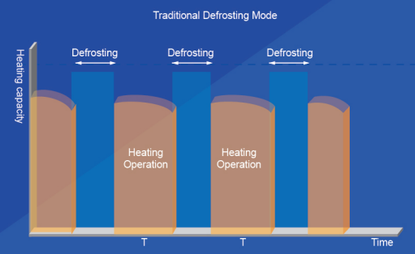
G-type heat exchanger fully utilizes the turning angle and vertical space to ensure sufficient heat exchange area. Stream heat exchange features high control precision and efficient heat exchange to guarantee satisfactory cooling and heating performance.

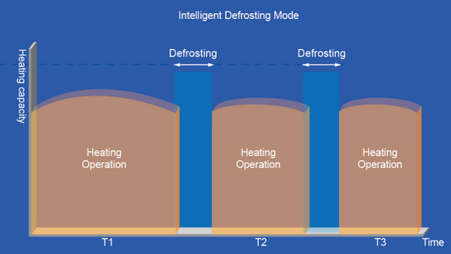




Intelligent Defrosting Control

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.

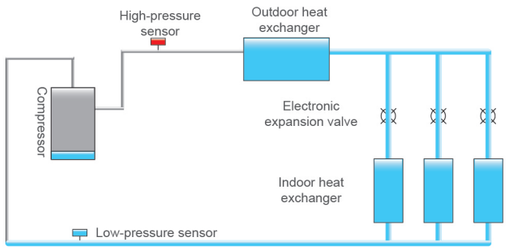




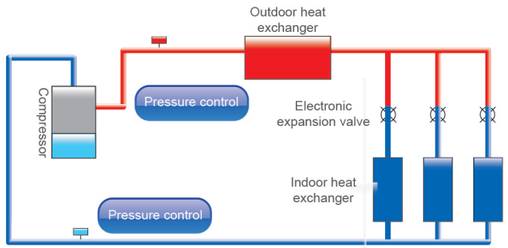
Oil Return Control Technology

- **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.



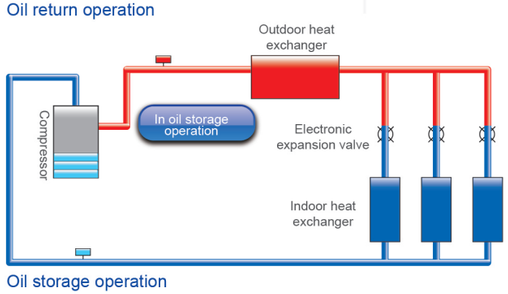
Oil storage status before oil return



Oil return operation

- **Specialized Compressor Oil Storage Control**

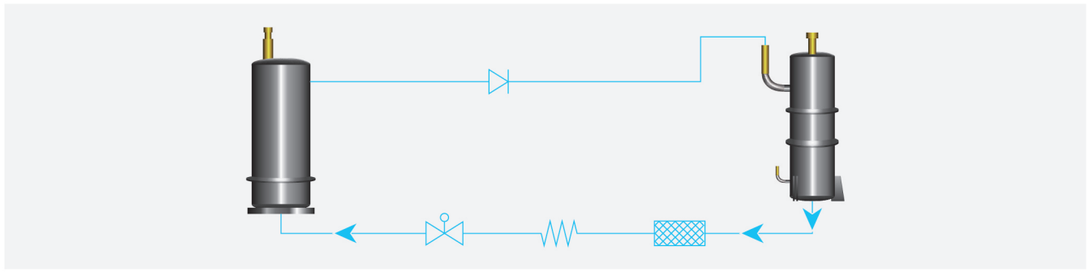
The system applies specialized compressor oil storage technology, which can control the lowest oil level for compressor operation.



Oil storage operation

- **Oil Circuit Malfunction Detection for Real-time Judgment and Protection**

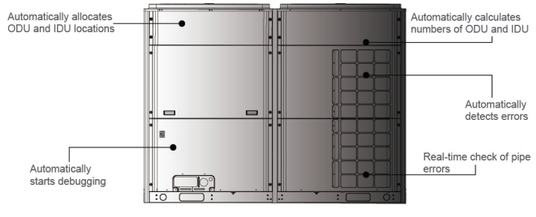
For GMV5 MAX, detection sensor is designed for the oil supply circuit of each compressor. This is to realize real-time judgment and detection for the oil supply circuit. When the compressor oil supply circuit is malfunctioning, shutdown protection will be enabled immediately to avoid further damage to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

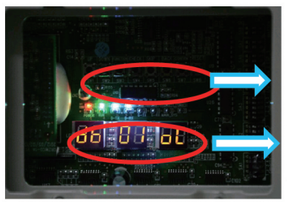


2）Diversified debugging methods for satisfying different requirements and improving debugging efficiency:

①Button debugging of outdoor unit

②Special GMV debugging system

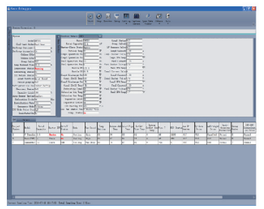
③CE41-24/F(C) debugger has functions of debugging of complete unit, independent debugging of indoor unit, malfunction display, data record and so on. It's no need to connect special software and PC. Moreover, it can connect external USB storage data.



Debugging button

Three dual 8 nixie tubes display debugging status with high readability

①



②

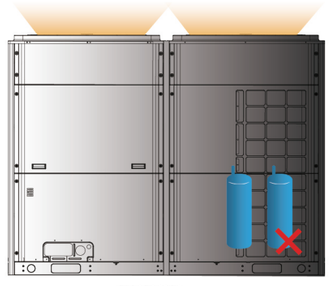


③

Excellent Emergency Operation Function to Ensure Reliable Operation

- **Emergency Operation of Compressor**

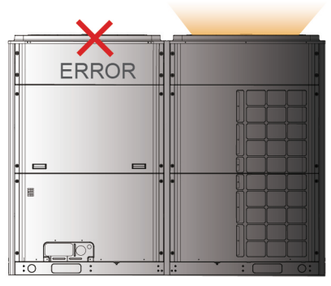
All the compressors in each single module are DC Inverter based, when one compressor has error, others will perform the emergency operation.



ERROR

- **Emergency Operation of Fan**

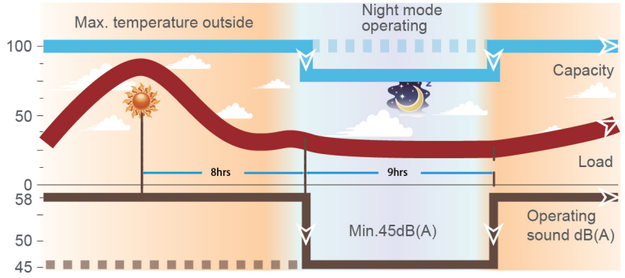
Double-fan design ensures that one fan can still work even if the other one has error.



Outdoor Unit Quiet Mode and Quiet Control

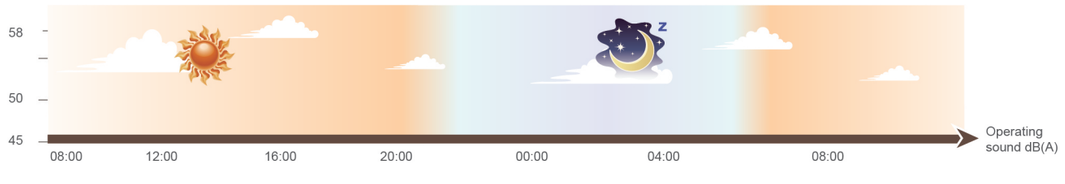
- **Quiet at night**

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**

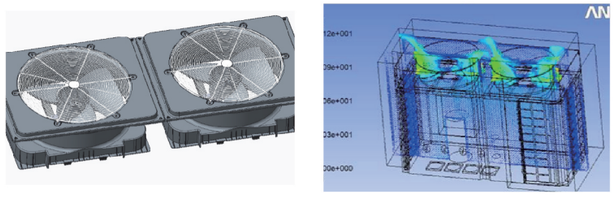
The system can also be set in this mode to ensure low noise as long as it is operating. Noise is as low as 45dB(A).



- **Quiet Control**

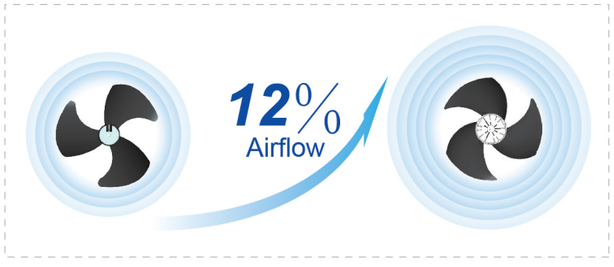
1. Optimized Bossing Design

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

HP	Model	Product
28	GMV-785W/A-M	
32	GMV-900W/A-M	

Specifications and Parameters

Model			GMV-785W/A-M	GMV-900W/A-M
Capacity range		HP	28	32
Capacity	Cooling	kW	78.5	90
	Heating	kW	87.5	100
EER		W/W	3.22	3.25
COP		W/W	3.74	3.82
Power supply		V/Ph/Hz	380-415V-3Ph-50Hz	
Max. Circuit/Fuse Current		A	57.2/63	71.5/80
Power comsumption	Cooling	kW	24.4	27.7
	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
Connecting pipe	Liquid	mm	Φ19.05	Φ19.05
	Gas	mm	Φ31.8	Φ31.8
Dimension (WxDxH)	Outline	mm	2200x880x1675	
	Package	mm	2267x952x1867	
Net weight/Gross weight		kg	557/592	600/635
Loading quantity	40'GP	set	12	12
	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

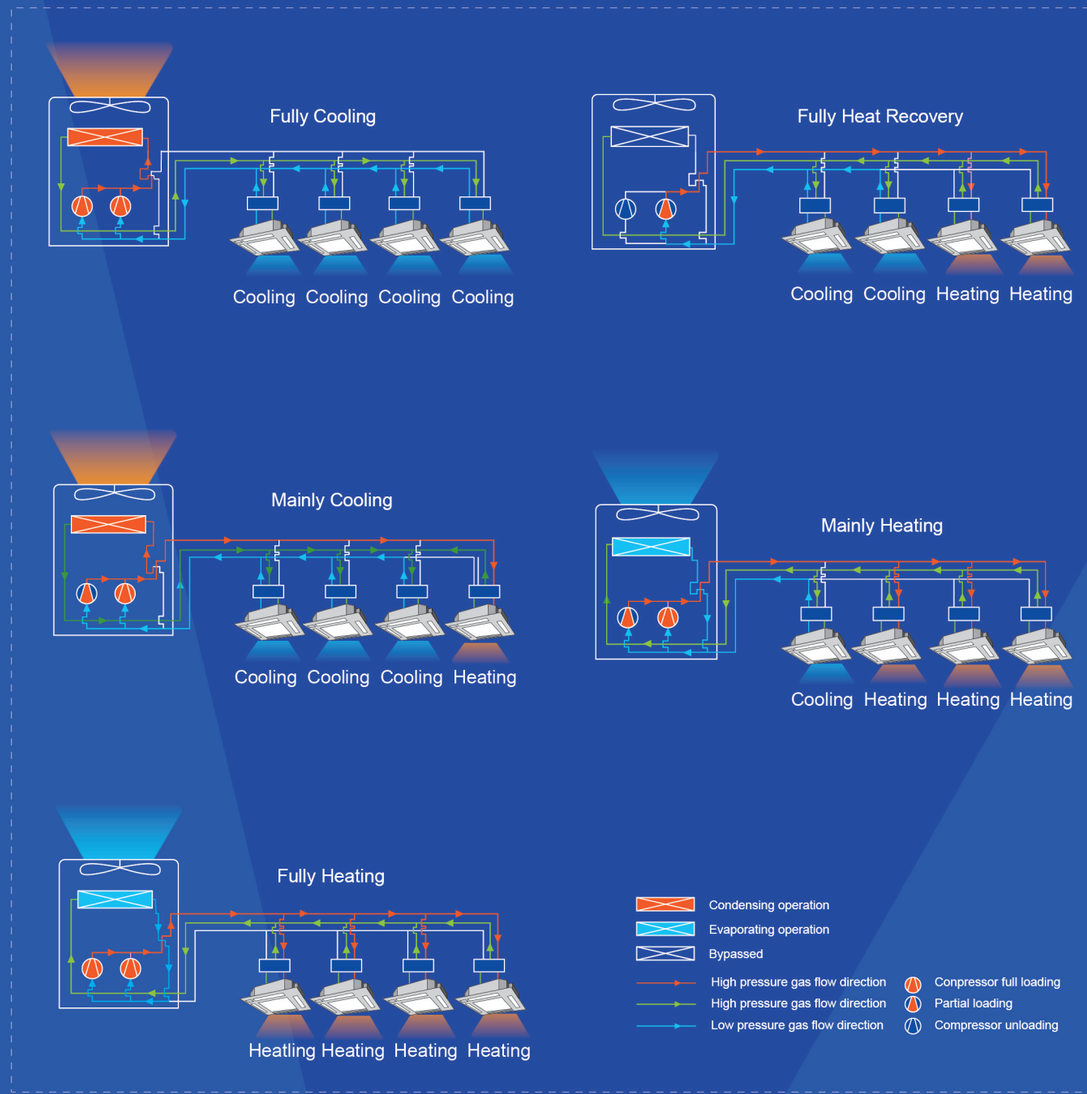


Key Features

High Efficiency

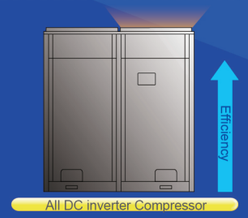
GMV5 Heat Recovery System embodies the excellent features of GMV5 (DC inverter technology, DC fan linkage control, precise control of capacity output, balancing control of refrigerant, original oil balancing technology with high pressure chamber, high-efficiency output control, low-temperature operation 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**

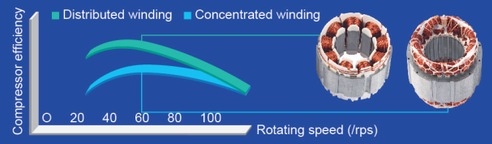


All DC Inverter Technology to Improve Compression Efficiency

- 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.



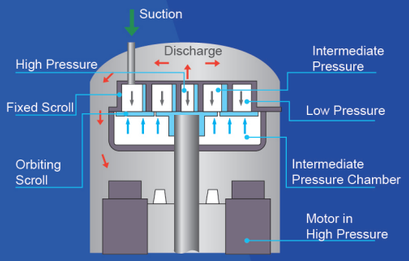
- **High Pressure Chamber Design**

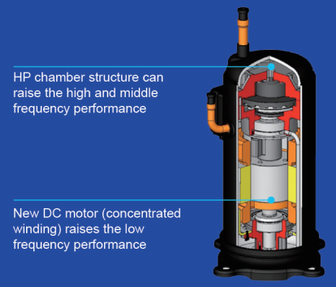
What's high pressure chamber?

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?

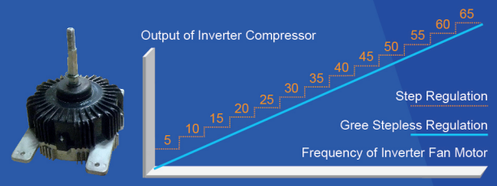
High pressure chamber compressor inhales directly to reduce overheat suction loss and improve compression efficiency.



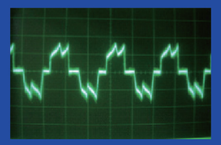


- **Sensorless DC Inverter Fan Motor**

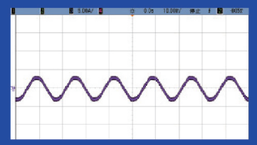
Stepless speed regulation ranges from **5Hz** to **65Hz**.Compared with traditional inverter motors, the operation is more energy-saving.



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



Before



After

Wider Applicable Location

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.



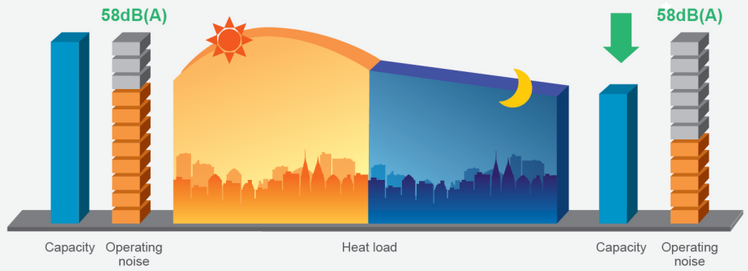
Max. IDU Connection: **80** sets

Comfortable Design for A Better Life

Intelligent Quiet Function at Night

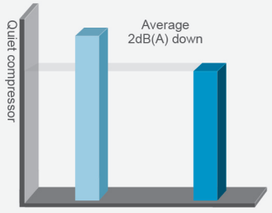
- **Quiet at night**

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.

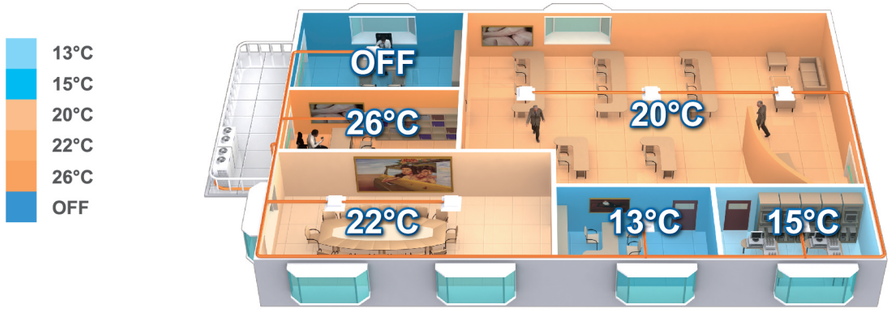


The optimized design of condensing fan blade reduces the air flow turbulence among blades, so that the noise is lower.



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.

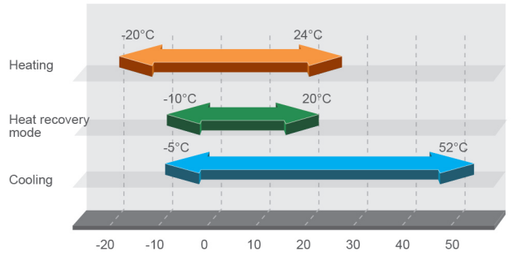


Wide Operation Range

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

Note:
If the required capacity of indoor units is 50% higher that of outdoor units,cooling range may be lower to -15°C.

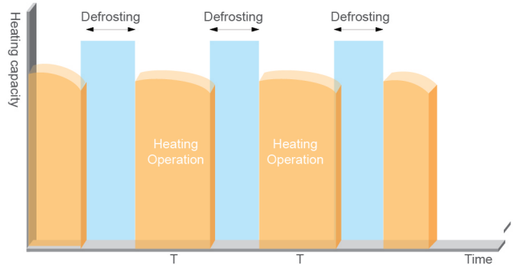
If the required capacity of indoor units is 50% higher that of outdoor units,cooling range may be up to -5°C



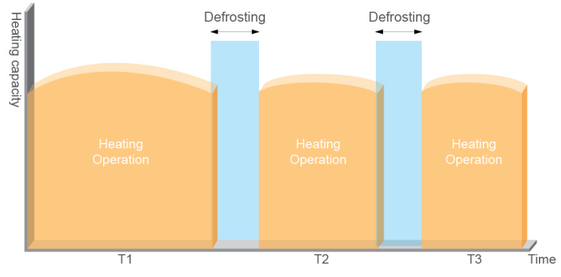
Intelligent Defrosting Control

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



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.

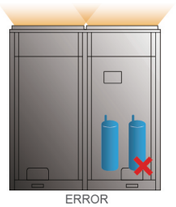


Excellent Emergency Operation Function to Ensure Reliable Operation

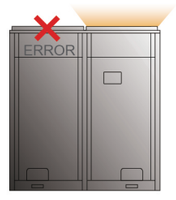
- **Emergency Function**
  The GMV 5 system can realize a combination of 4 outdoor unit modules. When error is occurred to one of the modules, the others will perform the emergency operation to sustain the air conditioning.



- **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.

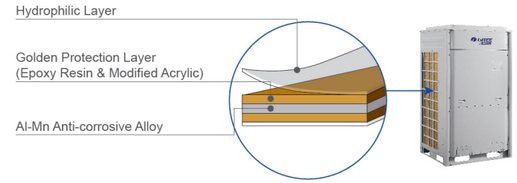


- **Emergency Operation of Fan**
  Double-fan design ensures that one fan can still work even if the other one has error.



Highly Anticorrosive Golden Fins

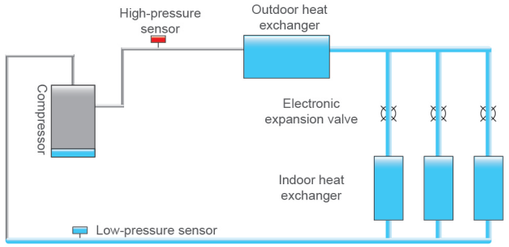
The primary material of Golden Fin is Al-Mn (Alumium-Manganese) anti-rust alloy, which is coated with the Golden Protection Layer(Components: Epoxy Resin & Modified Acrylic, Sillcon free), the anti-corrosive performance in salt-spray testing is 200%~300% higher than normal Blue Fin*.



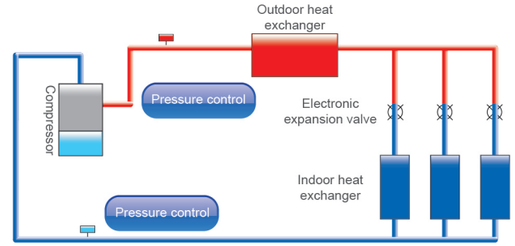
Note: Salt-spray testing result is from GREE materials chemistry testing laboratory.

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.

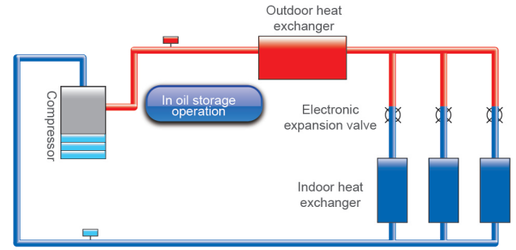


Oil storage status before oil return



Oil return operation

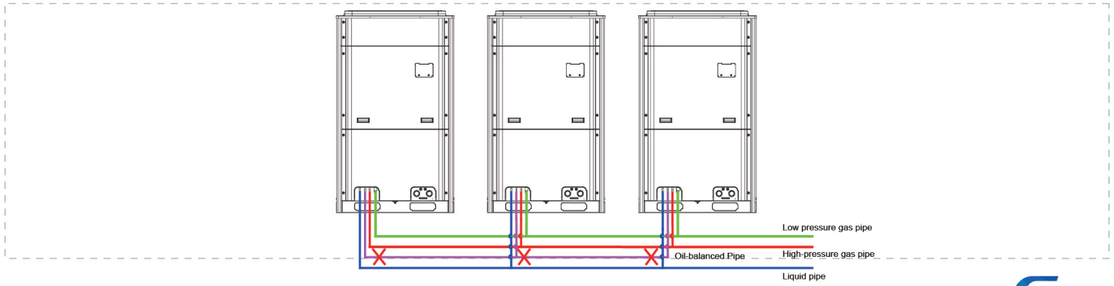
- **Specialized Compressor Oil Storage Control**
  The system applies specialized compressor oil storage technology, which can control the lowest oil level for compressor operation.



Oil storage 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.



Company A GMV5 HR

Easy Transportation

- **Optimized base frame**

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



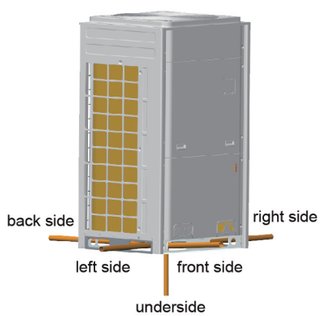
- **Transportable by forklift**



- **Five-way piping connection**

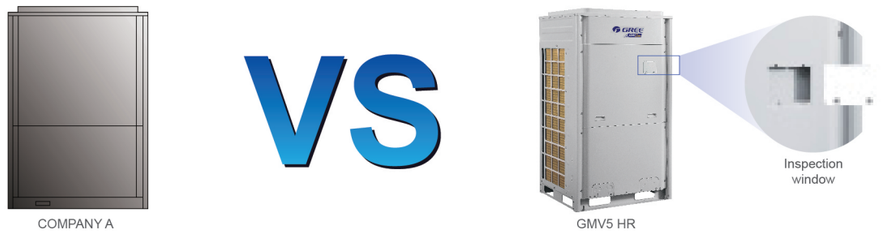
Piping and wiring are availiable to the front and back, left and right, and bottom.

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



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.



COMPANY A GMV5 HR

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



GMV5 HR LineUp

HR Lineup

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

Model	Product
NCHS1C	
NCHS2C	
NCHS4C	
NCHS8C	

Specifications and Parameters

50/60 Hz

Model			GMV-Q224WM/E-X	GMV-Q280WM/E-X	GMV-Q335WM/E-X	GMV-Q400WM/E-X	GMV-Q450WM/E-X
Capacity range		HP	8	10	12	14	16
Capacity	Cooling	kW	22.4	28	33.5	40	45
	Heating	kW	25	31.5	37.5	45	50
EER		W/W	4.09	3.44	4.04	3.36	3.04
COP		W/W	4.75	4.32	4.87	4.5	3.94
Power supply		V/Ph/Hz	380~415V 3Ph 50/60Hz				
Max. Circuit/Fuse Current		A	16.3/20	20.9/25	24.7/32	28.8/40	33.2/40
Power comsumption	Cooling	kW	5.48	8.15	8.3	11.9	14.8
	Heating	kW	5.26	7.3	7.7	10	12.7
Maximum drive IDU NO.		unit	13	16	19	23	26
Refrigerant Charge volume		kg	6.2	7.1	9.6	11.1	11.6
Sound power level	Cooling	dB(A)	82	84	85	90	90
Sound pressure level	Cooling	dB(A)	60	61	63	63	63
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
	High Pressure Gas	mm	Φ15.9	Φ19.05	Φ19.05	Φ22.2	Φ22.2
	Low Pressure Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6
Dimension(WxDxH)	Outline	mm	930×765×1605	930×765×1605	1340×765×1605	1340×765×1605	1340×765×1605
	Package	mm	1010×840×1775	1010×840×1775	1420×840×1775	1420×840×1775	1420×840×1775
Net weight/Gross weight		kg	233/243	233/243	302/317	346/361	346/361
Loading quantity	40' GP	set	24	24	16	16	16
	40' HQ	set	24	24	16	16	16

50/60 Hz

Model			NCHS1C	NCHS2C	NCHS4C	NCHS8C
Max.IDU Branches		unit	1	2	4	8
No. of connectable IDU of each branch		unit	8	8	8	8
Total Connectable IDU		unit	8	16	32	64
Max. Capacity of each branch		kW	14.2	14.2	14.2	14.2
Max. Capacity of connectable IDU		kW	14.2	28	45	68
Power supply		V/Ph/Hz	220-240V 1Ph 50/60Hz			
Power comsumption		W	8	28	44	80
Max. branch quantity of connecting IDU		unit	1	2	4	8
Outdoor Unit Piping Connection	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ15.9
	Gas(Low pressure)	mm	Φ22.2		Φ28.6	
	Gas(High pressure)	mm	Φ15.9	Φ19.05	Φ22.2	Φ22.2
Indoor Unit Piping Connection	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9

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

ODU Combination Lineup-GMV5 HR*

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

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

Specification of ODU Combination of GMV5 HR*

Model	Power Supply	Capacity		Power Input		Dimension(W×D×H)	Airflow Volume	ESP	Connecting pipe diameter			Min. circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating				Liquid	HP Gas	LP Gas			
		kW	kW	kW	kW	mm	m^3/h	Pa	mm	mm	mm	A	A	kg
GMV-Q504WM/E-X	380-415V 3Ph 50/60Hz	50.4	56.5	13.63	12.56	(930×765×1605) ×2	11400×2	82	Φ15.9	Φ25.4	Φ28.6	16.3+20.9	20 + 25	233+233
GMV-Q560WM/E-X		56	63.0	16.30	14.60	(930×765×1605) ×2	11400×2	82	Φ15.9	Φ25.4	Φ28.6	20.9+20.9	25 + 25	233+233
GMV-Q615WM/E-X		61.5	69.0	16.45	15.00	(930×765×1605) + (1340×765×1605)	11400+14000	82	Φ15.9	Φ25.4	Φ28.6	20.9+24.7	25 + 32	233+302
GMV-Q680WM/E-X		68	76.5	20.05	17.30	(930×765×1605) + (1340×765×1605)	11400+14000	82	Φ15.9	Φ25.4	Φ28.6	20.9+28.8	25 + 40	233+346
GMV-Q730WM/E-X		73	81.5	22.95	20.00	(930×765×1605) + (1340×765×1605)	11400+14000	82	Φ19.05	Φ28.6	Φ31.8	20.9+33.2	25 + 40	233+346
GMV-Q785WM/E-X		78.5	87.5	23.10	20.40	(1340×765×1605) ×2	14000×2	82	Φ19.05	Φ28.6	Φ31.8	24.7+33.2	40 + 40	302+346
GMV-Q850WM/E-X		85	95.0	26.70	22.70	(1340×765×1605) ×2	14000×2	82	Φ19.05	Φ28.6	Φ31.8	28.8+33.2	40 + 40	346+346
GMV-Q900WM/E-X		90	100.0	29.60	25.40	(1340×765×1605) ×2	14000×2	82	Φ19.05	Φ28.6	Φ31.8	33.2+33.2	40 + 40	346+346
GMV-Q960WM/E-X		96	108.0	28.20	24.60	(930×765×1605) ×2 +(1340×765×1605)	11400×2+14000	82	Φ19.05	Φ28.6	Φ31.8	20.9+20.9+28.8	25 + 25 + 40	233×2+346
GMV-Q1010WM/E-X		101	113.0	31.10	27.30	(930×765×1605) ×2 +(1340×765×1605)	11400×2+14000	82	Φ19.05	Φ31.8	Φ38.1	20.9+20.9+33.2	25 + 25 + 40	233×2+346
GMV-Q1065WM/E-X		106.5	119.0	31.25	27.70	(930×765×1605) + (1340×765×1605)×2	11400+14000×2	82	Φ19.05	Φ31.8	Φ38.1	20.9+24.7+33.2	25 + 40 + 40	233+302+346
GMV-Q1130WM/E-X		113	126.5	34.85	30.00	(930×765×1605) + (1340×765×1605)×2	11400+14000×2	82	Φ19.05	Φ31.8	Φ38.1	20.9+28.8+33.2	25 + 40 + 40	233+346×2
GMV-Q1180WM/E-X		118	131.5	37.75	32.70	(930×765×1605) + (1340×765×1605)×2	11400+14000×2	82	Φ19.05	Φ31.8	Φ38.1	20.9+33.2+33.2	25 + 40 + 40	233+346×2
GMV-Q1235WM/E-X		123.5	137.5	37.90	33.10	(1340×765×1605)×3	14000×3	82	Φ19.05	Φ31.8	Φ38.1	24.7+33.2+33.2	40 + 40 + 40	302+346×2
GMV-Q1300WM/E-X		130	145.0	41.50	35.40	(1340×765×1605)×3	14000×3	82	Φ19.05	Φ31.8	Φ38.1	28.8+33.2+33.2	40 + 40 + 40	346×3
GMV-Q1350WM/E-X		135	150.0	44.40	38.10	(1340×765×1605)×3	14000×3	82	Φ19.05	Φ31.8	Φ38.1	33.2+33.2+33.2	40 + 40 + 40	346×3
GMV-Q1410WM/E-X		141	158.0	43.00	37.30	(930×765×1605) ×2+ (1340×765×1605)×2	11400×2+14000×2	82	Φ19.05	Φ38.1	Φ41.3	20.9+20.9 +28.8+33.2	25 + 25 + 40 + 40	233×2+346×2
GMV-Q1460WM/E-X		146	163.0	45.90	40.00	(930×765×1605) ×2+ (1340×765×1605)×2	11400×2+14000×2	82	Φ19.05	Φ38.1	Φ41.3	20.9+20.9 +33.2+33.2	25 + 25 + 40 + 40	233×2+346×2
GMV-Q1515WM/E-X		151.5	169.0	46.05	40.40	(930×765×1605) + (1340×765×1605)×3	11400+14000×3	82	Φ19.05	Φ38.1	Φ41.3	20.9+24.7 +33.2+33.2	25 + 32 + 40 + 40	233+302+346×2
GMV-Q1580WM/E-X		158	176.5	49.65	42.70	(930×765×1605) + (1340×765×1605)×3	11400+14000×3	82	Φ19.05	Φ38.1	Φ41.3	20.9+28.8 +33.2+33.2	25 + 40 + 40 + 40	233+346×3
GMV-Q1630WM/E-X		163	181.5	52.55	45.40	(930×765×1605) + (1340×765×1605)×3	11400+14000×3	82	Φ19.05	Φ38.1	Φ41.3	20.9+33.2 +33.2+33.2	25 + 40 + 40 + 40	233+346×3
GMV-Q1685WM/E-X		168.5	187.5	52.70	45.80	(1340×765×1605)×4	14000×4	82	Φ19.05	Φ38.1	Φ41.3	24.7+33.2 +33.2+33.2	32 + 40 + 40 + 40	302+346×3
GMV-Q1750WM/E-X		175	195.0	56.30	48.10	(1340×765×1605)×4	14000×4	82	Φ19.05	Φ38.1	Φ41.3	28.8+33.2 +33.2+33.2	40 + 40 + 40 + 40	346×4
GMV-Q1800WM/E-X		180	200.0	59.20	50.80	(1340×765×1605)×4	14000×4	82	Φ19.05	Φ38.1	Φ41.3	33.2+33.2 +33.2+33.2	40 + 40 + 40 + 40	346×4

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

GMV Water



GMV Water combines the features of water source system with DC Inverter Multi VRF Units. It inherits the energy efficiency of water-cooled system and the comfortable and flexible characteristics of VRF units, which will provide a new air conditioning solution for high buildings, villas, hotels, comprehensive halls, etc. GMV Water can be divided into two parts: water system that exchanges energy between outdoor units and water/ground source; VRF refrigerating system from outdoor units to indoor units.

Key Features

Utilization of Renewable Resources

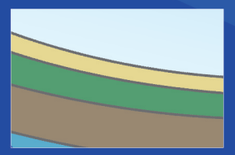
The water source of GMV Water can be a cooling tower, boiler or renewable resources: surface water (river, lake, and sea), ground water, soil, solar power, industrial waste heat or domestic waste water.

Regenerated Energy Resources


Sea water


Lakes


Rivers

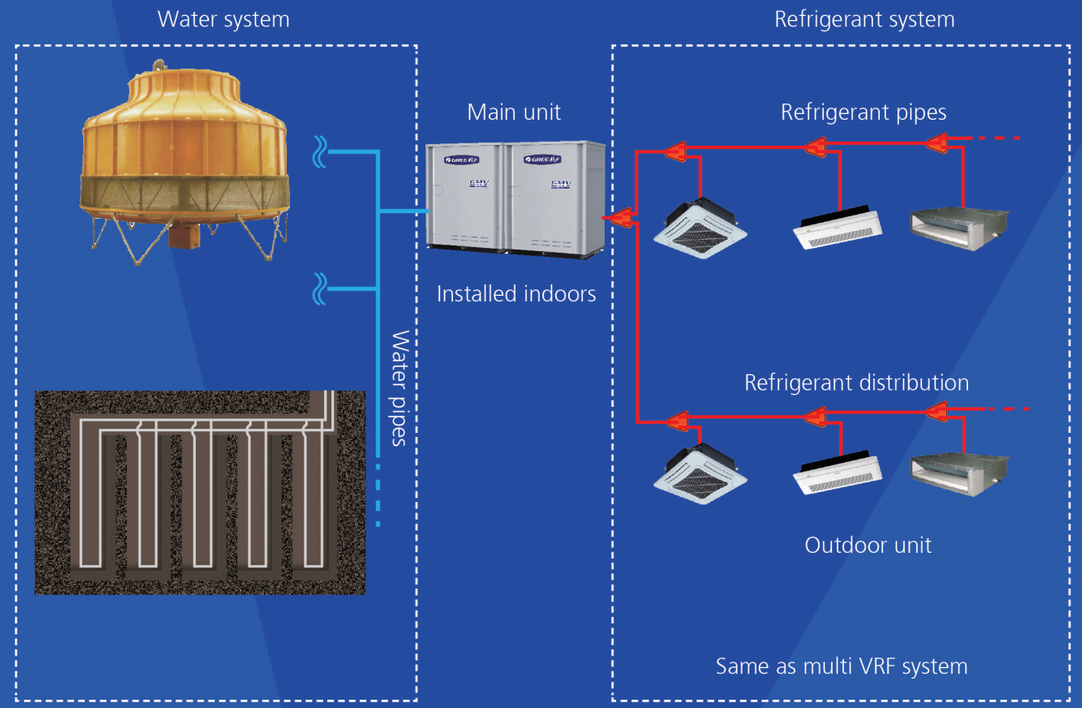

Ground Water


Earth


Solar Power

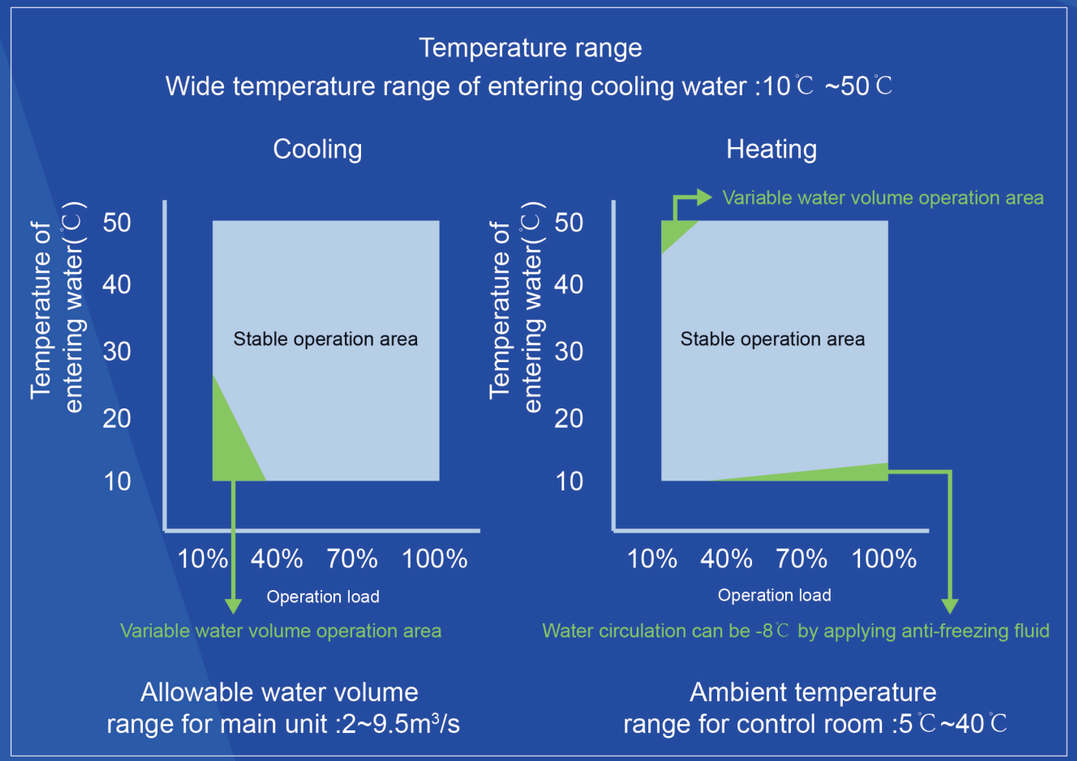

Industrial Waste Heat


Polluted Water and Waste Water



Wide Operating Range

Wide range for water entering the water side heat exchanger: 10~50℃; Water flow range of the main unit: 2~9.5m³/h, suitable in most of the places across the nation.



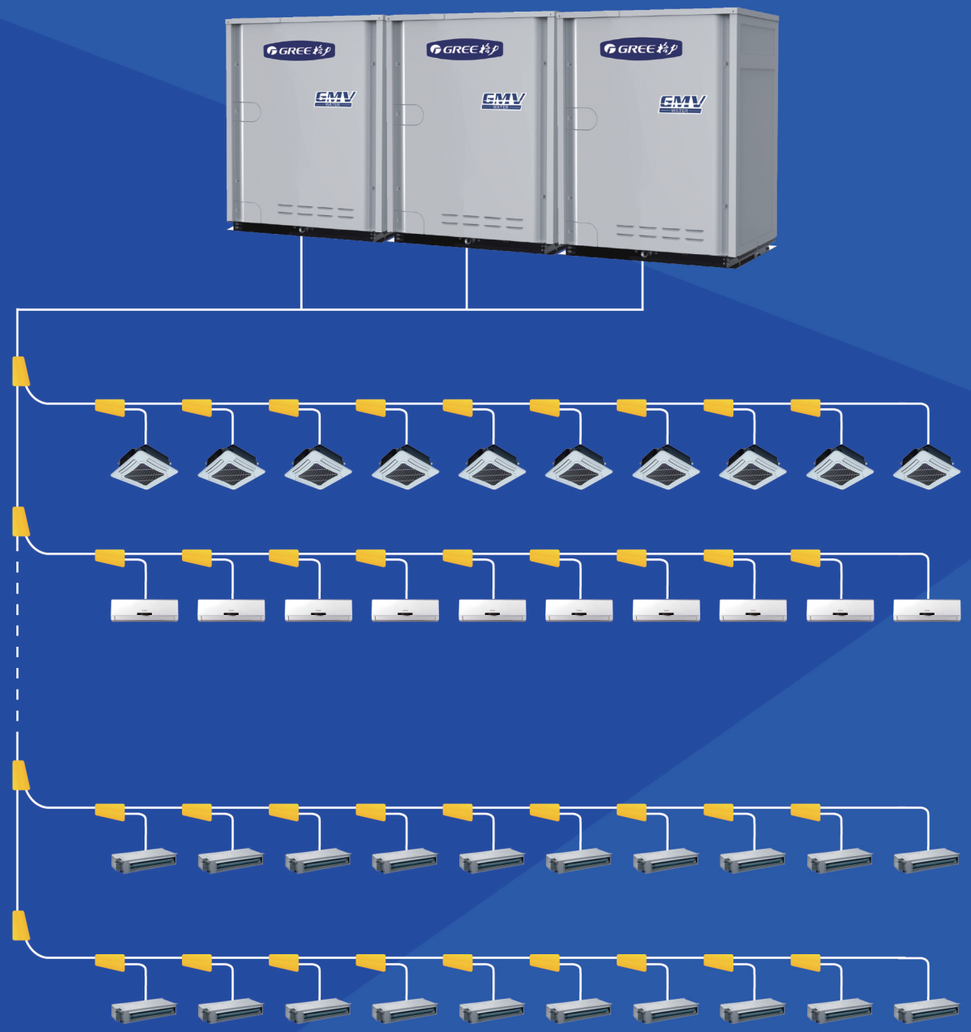
Large Capacity Design

- The combination of basic modules can have 4 modules at most, with maximum capacity of 134kW. The wide range of capacity can satisfy different construction demands.



22.4kW　　134.0kW

- Up to 80 indoor units can be connected.



80 Sets

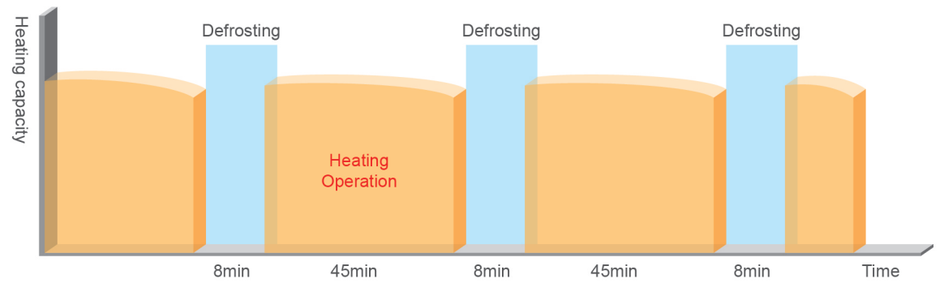
Operating in Turns, for Longer Service Life

Each module starts up in sequence and operates in turn, which will effectively extend the units' service life.

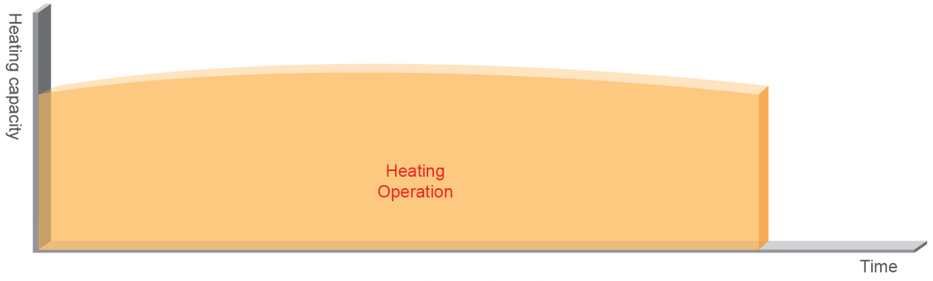


Water-cooled System, No Need of Defrosting

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.



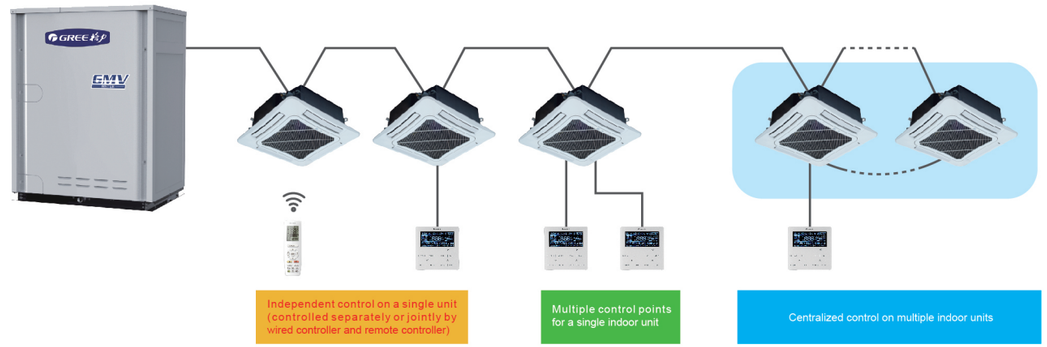
Air-cooled GMV



GMV Water

Completely New CAN Network Control

Same as GMV5, GMV Water adopts CAN communication, which has greatly improved the networking performance. It can be used in perfect combination with GMV5 indoor units.

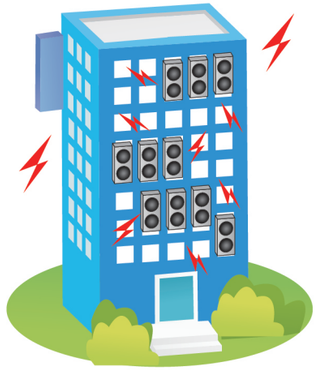


- Independent control on a single unit: every indoor unit can have an independent controller to realize independent control and management.
- Multiple control points for a single unit: one indoor unit can be connected to multiple wired controllers, which will together control one indoor unit.
- Centralized control on multiple indoor units: multiple indoor units can be connected to one wired controller to realize centralized control. One wired controller can control up to 16 indoor units.
- Joint control by remote controller and wired controller: remote controller is convenient for use and wired controller is with complete functions. With Gree's unique control logic, user can use both remote controller and wired controller to control a same indoor unit.

Fully Closed Design, Low Noise

Gree GMV Water System has a totally enclosed design. Unlike traditional outdoor units, this system has low noise, which is especially suitable for places where quietness is needed.

Fan noise



Air-cooled heat pump units

Quiet mode



Water-cooled heat pump units

No Weather Influence

GMV Water exchange heat with water source and ground source without regard to the weather influence. Especially in winter, when it is running in heat mode, the outdoor unit will not generate frost like the air-cooled outdoor unit. There's no need to run defrosting mode, thus ensuring reliable heating performance.



Stable operation under all kinds of weather

Compact Size, Easy for Transportation and Installation

- Products of this series are all compact in size, can be transported in common passenger elevators, which will help save transportation cost and the project time.



- Compared with air-cooled VRF units, GMV Water require less floor space and lower installation height and are lightweight. Units can be installed one on top of the other, which is efficient in space utilization.





No Impact on Construction Appearance

Air-cooled air conditioners must be installed outdoors so that they can exchange heat with the air. However, outdoor installation space is limited and for the sake of preserving the construction beauty, more and more outdoor units are placed indoors. In order to ensure normal operation, there must have large quantities of grilles. As for GMV Water, there's no need to exchange heat with the air, therefore, the installation position is very flexible and can be coordinated with the construction design, having no impact on the construction appearance.



Water-cooled VRF　　Air-cooled VRF

ODU Combination Lineup

380-415V,50/60Hz

Model	GMV-W224WM/A-X	GMV-W280WM/A-X	GMV-W335WM/A-X
GMV-W448WM/A-X	●●		
GMV-W504WM/A-X	●	●	
GMV-W560WM/A-X		●●	
GMV-W615WM/A-X		●	●
GMV-W670WM/A-X			●●
GMV-W728WM/A-X	●●	●	
GMV-W784WM/A-X	●	●●	
GMV-W840WM/A-X		●●●	
GMV-W895WM/A-X		●●	●
GMV-W950WM/A-X		●	●●
GMV-W1005WM/A-X			●●●
GMV-W1064WM/A-X	●	●●●	
GMV-W1120WM/A-X		●●●●	
GMV-W1175WM/A-X		●●●	●
GMV-W1230WM/A-X		●●	●●
GMV-W1285WM/A-X		●	●●●
GMV-W1340WM/A-X			●●●●

208/230V,60Hz

Model	GMV-W224WM/A-F	GMV-W280WM/A-F	GMV-W335WM/A-F
GMV-W448WM/A-F	●●		
GMV-W504WM/A-F	●	●	
GMV-W560WM/A-F		●●	
GMV-W615WM/A-F		●	●
GMV-W670WM/A-F			●●
GMV-W728WM/A-F	●●	●	
GMV-W784WM/A-F	●	●●	
GMV-W840WM/A-F		●●●	
GMV-W895WM/A-F		●●	●
GMV-W950WM/A-F		●	●●
GMV-W1005WM/A-F			●●●
GMV-W1064WM/A-F	●	●●●	
GMV-W1120WM/A-F		●●●●	
GMV-W1175WM/A-F		●●●	●
GMV-W1230WM/A-F		●●	●●
GMV-W1285WM/A-F		●	●●●
GMV-W1340WM/A-F			●●●●

Outdoor Unit

380-415V,50/60Hz

Model			GMV-W224WM/A-X	GMV-W280WM/A-X	GMV-W335WM/A-X
Capacity	Cooling	kW	22.4	28	33.5
	Heating	kW	25	31.5	37.5
Sound pressure level		dB(A)	50	52	52
Power supply		Ph/V/Hz	3Ph/380-415V/50/60Hz		
Water flow volume		m^3/h	4.8	6	7.2
		CFM	2.83	3.53	4.24
Water pressure drop		Kpa	16	24	45
Rated Power Input	Cooling	kW	3.9	5.7	7.9
	Heating	kW	4	5.4	7.35
Refrigerant Connecting Pipe diameter	Gas	mm	Φ22.2	Φ22.2	Φ25.4
	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
Water connecting pipe diameter	Inlet	mm	DN32	DN32	DN32
	Outlet	mm	DN32	DN32	DN32
Dimension(W×D×H)		mm	785×550×1000	785×550×1000	785×550×1000
Net weight/Gross weight		kg	162/165	162/165	162/165
Loading quantity	40' GP	set	108	108	108
	40' HQ	set	108	108	108

208/230V,60Hz

Model			GMV-W224WM/A-F	GMV-W280WM/A-F	GMV-W335WM/A-F
Capacity	Cooling	kW	22.4	28	33.5
	Heating	kW	25	31.5	37.5
Sound pressure level		dB(A)	50	52	52
Power supply		V/Ph/Hz	208/230V~3Ph~60Hz		
Water flow volume		m^3/h	4.8	6	7.2
		CFM	2.83	3.53	4.24
Water pressure drop		Kpa	16	24	45
Rated Power Input	Cooling	kW	3.9	5.7	7.9
	Heating	kW	4	5.4	7.35
Refrigerant Connecting Pipe diameter	Gas	mm	Φ22.2	Φ22.2	Φ25.4
	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
Water connecting pipe diameter	Inlet	mm	DN32	DN32	DN32
	Outlet	mm	DN32	DN32	DN32
Dimension(W×D×H)		mm	785×550×1000	785×550×1000	785×550×1000
Net weight/Gross weight		kg	162/165	162/165	162/165
Loading quantity	40' GP	set	108	108	108
	40' HQ	set	108	108	108

Specifications of ODU Combination

380-415V,50/60Hz

Model	Power Supply	Capacity		Power Input		Dimension (W×D×H)	Water flow volume	Sound Pressure Level Semi-anechoic	Connecting pipe diameter		Min.circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating				Liquid	Gas			
	Ph/V/Hz	kW	kW	kW	kW	mm	m^3/h	dB(A)	mm	mm	A	A	kg
GMV-W448WM/A-X	3Ph/380-415V/50/60Hz	44.8	50.0	3.9x2	4.0x2	(780×550×1000)×2	4.8x2	53	Φ12.7	Φ28.6	16.1x2	20x2	162×2
GMV-W504WM/A-X		50.4	56.5	3.9+5.7	4.0+5.4	(780×550×1000)×2	4.8+6.0	54	Φ15.9	Φ28.6	16.1+19.7	20x2	162×2
GMV-W560WM/A-X		56.0	63.0	7.9x2	5.4x2	(780×550×1000)×2	6.0x2	55	Φ15.9	Φ28.6	19.7x2	20x2	162×2
GMV-W615WM/A-X		61.5	69.0	5.7+7.9	5.4+7.35	(780×550×1000)×2	4.8x3	55	Φ15.9	Φ28.6	19.7+26.8	20+32	162×2
GMV-W670WM/A-X		67.0	75.0	7.9x2	7.35x2	(780×550×1000)×2	7.2x2	55	Φ15.9	Φ28.6	26.8x2	32x2	162×2
GMV-W728WM/A-X		72.8	81.5	3.9x2+5.7	4.0x2+5.4	(780×550×1000)×3	4.8x2+6.0	56	Φ19.1	Φ31.8	16.1x2+19.7	20x3	162×3
GMV-W784WM/A-X		78.4	88.0	3.9+5.7x2	4.0+5.4x2	(780×550×1000)×3	4.8+6.0x2	57	Φ19.1	Φ31.8	16.1+19.7x2	20x3	162×3
GMV-W840WM/A-X		84.0	94.5	5.7x3	5.4x3	(780×550×1000)×3	6.0x3	57	Φ19.1	Φ31.8	19.7x3	20x3	162×3
GMV-W895WM/A-X		89.5	100.5	5.7x2+7.9	5.4x2+7.35	(780×550×1000)×3	6.0x2+7.2	57	Φ19.1	Φ31.8	19.7x2+26.8	20x2+32	162×3
GMV-W950WM/A-X		95.0	106.5	5.7+7.9x2	5.4+7.35x2	(780×550×1000)×3	6.0+7.2x2	57	Φ19.1	Φ31.8	19.7+26.8x2	20+32x2	162×3
GMV-W1005WM/A-X		100.5	112.5	7.9x3	7.35x3	(780×550×1000)×3	7.2x3	57	Φ19.1	Φ38.1	26.8x3	32x3	162×3
GMV-W1064WM/A-X		106.4	119.5	3.9+5.7x3	4.0+5.4x3	(780×550×1000)×4	4.8+6.0x3	58	Φ19.1	Φ38.1	16.1+19.7x3	20x4	162×4
GMV-W1120WM/A-X		112.0	126.0	5.7x4	5.4x4	(780×550×1000)×4	6.0x4	59	Φ19.1	Φ38.1	19.7x4	20x4	162×4
GMV-W1175WM/A-X		117.5	132.0	5.7x3+7.9	5.4x3+7.35	(780×550×1000)×4	6.0x3+7.2	59	Φ19.1	Φ38.1	19.7x3+26.8	20x3+32	162×4
GMV-W1230WM/A-X		123.0	138.0	5.7x2+7.9x3	5.4x2+7.35x2	(780×550×1000)×4	6.0x2+7.2x2	59	Φ19.1	Φ38.1	19.7x2+26.8x2	20x2+32x2	162×4
GMV-W1285WM/A-X		128.5	144.0	5.7+7.9x3	5.4+7.35x3	(780×550×1000)×4	6.0+7.2x3	59	Φ19.1	Φ38.1	19.7+26.8x3	20+32x3	162×4
GMV-W1340WM/A-X		134.0	150.0	7.9x4	7.35x4	(780×550×1000)×4	7.2x4	59	Φ19.1	Φ38.1	26.8x4	32x4	162×4

208/230V,60Hz

Model	Power Supply	Capacity		Power Input		Dimension (W×D×H)	Water flow volume	Sound Pressure Level	Connecting		Min.circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating				Liquid	Gas			
	V/Ph/Hz	kW	kW	kW	kW	mm	m^3/h	dB(A)	mm	mm	A	A	kg
GMV-W448WM/A-F	208/230V~3Ph	44.8	50.0	3.9x2	4.0x2	(780×550×1000)×2	4.8x2	53	Φ12.7	Φ28.6	32.3x2	50x2	162×2
GMV-W504WM/A-F		50.4	56.5	3.9+5.7	4.0+5.4	(780×550×1000)×2	4.8+6.0	54	Φ15.9	Φ28.6	32.3+34.2	50+60	162×2
GMV-W560WM/A-F		56.0	63.0	7.9x2	5.4x2	(780×550×1000)×2	6.0x2	55	Φ15.9	Φ28.6	34.2x2	60x2	162×2
GMV-W615WM/A-F		61.5	69.0	5.7+7.9	5.4+7.35	(780×550×1000)×2	4.8x3	55	Φ15.9	Φ28.6	34.2+45.1	60+80	162×2
GMV-W670WM/A-F		67.0	75.0	7.9x2	7.35x2	(780×550×1000)×2	7.2x2	55	Φ15.9	Φ28.6	45.1x2	80x2	162×2
GMV-W728WM/A-F		72.8	81.5	3.9x2+5.7	4.0x2+5.4	(780×550×1000)×3	4.8x2+6.0	56	Φ19.1	Φ31.8	32.3x2+34.2	50x2+60	162×3
GMV-W784WM/A-F		78.4	88.0	3.9+5.7x2	4.0+5.4x2	(780×550×1000)×3	4.8+6.0x2	57	Φ19.1	Φ31.8	32.3+34.2x2	50+60x2	162×3
GMV-W840WM/A-F		84.0	94.5	5.7x3	5.4x3	(780×550×1000)×3	6.0x3	57	Φ19.1	Φ31.8	34.2x3	60x3	162×3
GMV-W895WM/A-F		89.5	100.5	5.7x2+7.9	5.4x2+7.35	(780×550×1000)×3	6.0x2+7.2	57	Φ19.1	Φ31.8	34.2x2+45.1	60x2+80	162×3
GMV-W950WM/A-F		95.0	106.5	5.7+7.9x2	5.4+7.35x2	(780×550×1000)×3	6.0+7.2x2	57	Φ19.1	Φ31.8	34.2+45.1x2	60+80x2	162×3
GMV-W1005WM/A-F		100.5	112.5	7.9x3	7.35x3	(780×550×1000)×3	7.2x3	57	Φ19.1	Φ38.1	45.1x3	80x3	162×3
GMV-W1064WM/A-F		106.4	119.5	3.9+5.7x3	4.0+5.4x3	(780×550×1000)×4	4.8+6.0x3	58	Φ19.1	Φ38.1	32.3+34.2x3	50+60x3	162×4
GMV-W1120WM/A-F		112.0	126.0	5.7x4	5.4x4	(780×550×1000)×4	6.0x4	59	Φ19.1	Φ38.1	34.2x4	60x4	162×4
GMV-W1175WM/A-F		117.5	132.0	5.7x3+7.9	5.4x3+7.35	(780×550×1000)×4	6.0x3+7.2	59	Φ19.1	Φ38.1	34.2x3+45.1	60x3+80	162×4
GMV-W1230WM/A-F		123.0	138.0	5.7x2+7.9x2	5.4x2+7.35x2	(780×550×1000)×4	6.0x2+7.2x2	59	Φ19.1	Φ38.1	34.2x2+45.1x2	60x2+80x2	162×4
GMV-W1285WM/A-F		128.5	144.0	5.7+7.9x3	5.4+7.35x3	(780×550×1000)×4	6.0+7.2x3	59	Φ19.1	Φ38.1	34.2+45.1x3	60+80x3	162×4
GMV-W1340WM/A-F		134.0	150.0	7.9x4	7.35x4	(780×550×1000)×4	7.2x4	59	Φ19.1	Φ38.1	45.1x4	80x4	162×4

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.

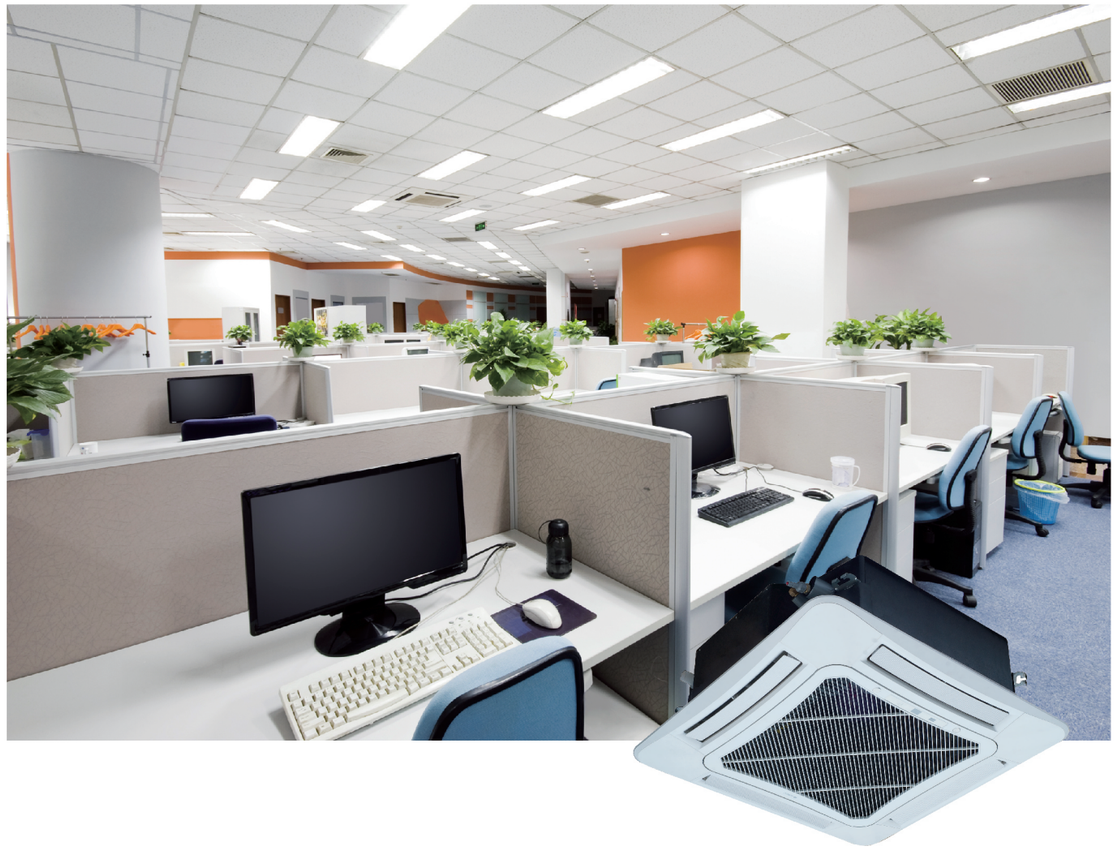
- **Fast & Strong**
  Intelligent temperature control technology is adopted. Cooling/ Heating function is fast and strong so that room temperature can quickly reach set temperature.

- **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



- **Multiple fan speed**
  The fan can operate at multiple speeds and satisfy 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, offices, etc.

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

Concealed Floor Standing Type



- **Wide capacity range**
  Wide capacity range from 2.2kW to 7.1kW.

- **DC motor**
  DC motor is adopted, which is more efficient.
  All units are only 200mm's thick, saving space while offering highly efficient performance.

- **Easy installation**
  High ESP allows installation with air ducts.
  The low altitude design allows installation under a window. It is applicable for hotels, schools and office buildings.
  The three different height choices* of ex-factory supporter satisfy users' different installation needs.

  *Note:This is an optional function. Please state specifically if you want to order.

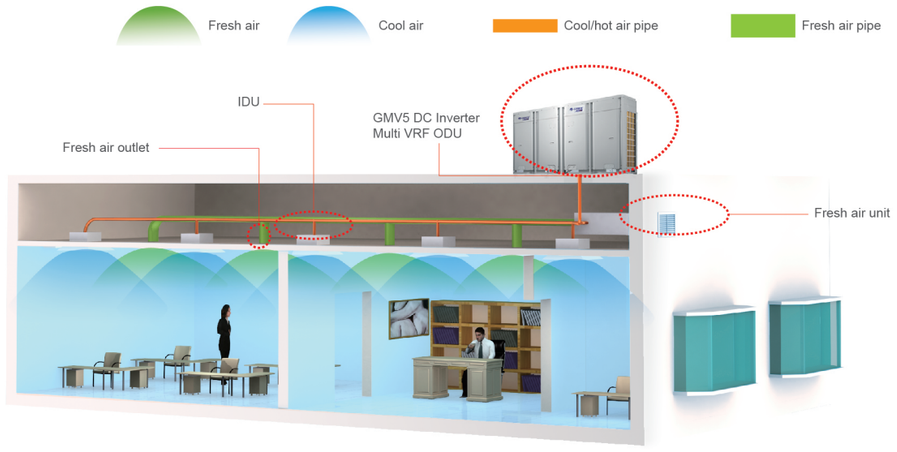
Fresh Air Processing Indoor Unit

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



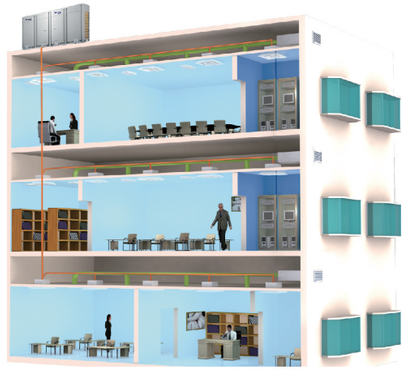
One system, two functions

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



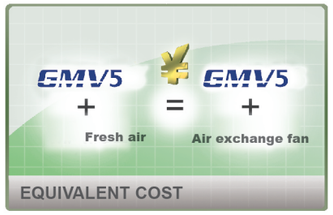
Enjoy fresh air

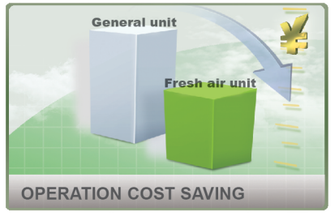
- Airflow volume: 1200~4000m³/h, cooling capacity: 14-45kW
  Applicable for all kinds of structure.
- Direct evaporative cooling adopted, air conditioning+fresh air can be realized accurately.
- DC inverter technology adopted, constant humidity is enabled with less power consumption.
- Integrated system control with Gree GMV Multi VRF System.

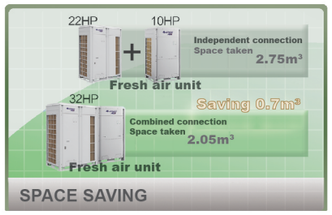


Air conditioning and fresh air, two in one

- **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.



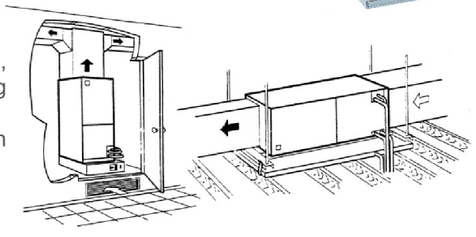




Air Handler

- **Multiple fan speed**
  The fan can operate in multiple speed and satisfy different air flow volume requirements.
- **DC inverter motor**
  With good speed regulation performance, motor efficiency improved by 30% vs. normal motor.
- **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.
- **Protection function**
  Anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection. Anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection.





AHU KIT

- Multiple installation methods, convenient for engineering design.
- Independent design, convenient for installation.
- Wide capacity range, applicable to most occasions.
- Malfunction signal access, safe and reliable operation.
- VRF outdoor unit as the cold/heat source, no need of additional cold/heat source.
- Connected to variable refrigerant control system, with DC inverter control technology.
- Run together with VRF indoor units in the same system.



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	250	280	450	560
High Static Pressure Duct Type Unit		●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●		●		
Low Static Pressure Duct Type Unit		●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●						
Slim Ducted Type Indoor Unit		●	●	●	●	●	●	●	●	●	●		●												
4-way Cassette Unit				●		●		●	●	●	●	●		●	●	●	●	●	●	●					
Compact 4-way Cassette Indoor Unit		●		●		●		●	●	●															
2-way Cassette Indoor Unit				●		●		●	●	●	●	●													
1-way Cassette Unit		●		●		●		●	●																
Wall-mounted Type Unit		●		●		●		●	●	●	●	●		●	●	●									
Floor Ceiling Type Indoor Unit				●		●			●	●	●	●			●		●	●	●	●					
Console Indoor Unit		●		●		●		●	●																
Floor Standing Type Indoor Unit																●			●						
Fresh Air Processing Indoor Unit																		●	●		●	●	●	●	
AHU KIT						●						●							●				●		●
Concealed Floor Standing Type		●		●		●		●		●	●	●													
Air Handler												●			●	●	●		●						

High Static Pressure Duct Type Indoor Unit

50/60 Hz

Model			GMV-ND22PHS/B-T	GMV-ND25PHS/B-T	GMV-ND28PHS/B-T	GMV-ND32PHS/B-T	GMV-ND36PHS/B-T	GMV-ND40PHS/B-T
Capacity	Cooling	kW	2.2	2.5	2.8	3.2	3.6	4.0
	Heating	kW	2.5	2.8	3.2	3.6	4.0	4.5
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60					
Power consumption		W	55	55	55	65	65	85
Airflow volume(H/M/L)		m^3/h	550/480/400	550/480/400	550/480/400	600/500/420	600/500/420	850/700/600
		CFM	324/282/235	324/282/235	324/282/235	353/294/247	353/294/247	500/412/353
Rated Current	Cooling	A	0.5	0.5	0.5	0.5	0.5	0.5
	Heating	A	0.5	0.5	0.5	0.5	0.5	0.5
	Water Heating	A	/	/	/	/	/	/
ESP		Pa	60/0～150	60/0～150	60/0～150	60/0～150	60/0～150	60/0～150
Sound pressure level(H/M/L)		dB(A)	33/30/28	33/30/28	33/30/28	33/31/29	33/31/29	36/34/32
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	700×700×300	700×700×300	700×700×300	700×700×300	700×700×300	700×700×300
	Package	mm	897×808×362	897×808×360	897×808×360	897×808×360	897×808×360	897×808×360
Net weight/Gross weight		kg	32/38	32/38	32/38	32/38	32/38	34/40
Loading quantity	40' GP	set	168	168	168	168	168	168
	40' HQ	set	196	196	196	196	196	196

Model			GMV-ND45PHS/B-T	GMV-ND50PHS/B-T	GMV-ND56PHS/B-T	GMV-ND63PHS/B-T	GMV-ND71PHS/B-T	GMV-ND80PHS/B-T
Capacity	Cooling	kW	4.5	5.0	5.6	6.3	7.0	8.0
	Heating	kW	5.0	5.6	6.3	7.1	8.0	9.0
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60					
Power consumption		W	85	85	90	90	100	100
Airflow volume(H/M/L)		m^3/h	850/700/600	850/700/600	1000/800/700	1000/800/700	1250/1050/950	1250/1050/950
		CFM	500/412/353	500/412/353	589/471/412	589/471/412	736/618/559	736/618/559
Rated Current	Cooling	A	0.5	0.5	0.8	0.8	0.8	0.8
	Heating	A	0.5	0.5	0.8	0.8	0.8	0.8
	Water Heating	A	/	/	/	/	/	/
ESP		Pa	60/0～150	60/0～150	90/0～200	90/0～200	90/0～200	90/0～200
Sound pressure level(H/M/L)		dB(A)	36/34/32	36/34/32	37/35/33	37/35/33	38/36/34	38/36/34
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	700×700×300	700×700×300	1000×700×300	1000×700×300	1000×700×300	1000×700×300
	Package	mm	897×808×360	897×808×360	1205×813×360	1205×813×360	1205×813×360	1205×813×360
Net weight/Gross weight		kg	34/40	34/40	43/49	43/49	43/49	43/49
Loading quantity	40' GP	set	168	168	138	138	138	138
	40' HQ	set	196	196	161	161	161	161

Model			GMV-ND90 PHS/B-T	GMV-ND100 PHS/B-T	GMV-ND112 PHS/B-T	GMV-ND125 PHS/B-T	GMV-ND140 PHS/B-T	GMV-ND160 PHS/B-T	GMV-ND224 PH/A-T	GMV-ND280 PH/A-T
Capacity	Cooling	kW	9.0	10.0	11.2	12.5	14.0	16.0	22.4	28.0
	Heating	kW	10.0	11.2	12.5	14.0	16.0	18.0	25.0	31.0
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60							
Power consumption		W	140	140	160	160	220	230	800	900
Airflow volume(H/M/L)		m^3/h	1800/1450/1250	1800/1450/1250	2000/1600/1400	2000/1600/1400	2350/1900/1650	2500/2000/1750	4000/3600/3200	4400/4000/3600
		CFM	1059/853/736	1059/853/736	1177/942/824	1177/942/824	1383/1118/971	1471/1177/1030	2354/2119/1883	2589/2354/2119
Rated Current	Cooling	A	1.1	1.1	1.1	1.1	2.0	2.0	3.7	4.1
	Heating	A	1.1	1.1	1.1	1.1	2.0	2.0	3.7	4.1
	Water Heating	A	/	/	/	/	/	/	/	/
ESP		Pa	90/0～200	90/0～200	90/0～200	90/0～200	90/0～200	90/0～200	100/50~200	100/50~200
Sound pressure level(H/M/L)		dB(A)	40/37/35	40/37/35	40/38/36	40/38/36	42/39/37	44/41/38	54/52/49	55/52/50
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05	Φ19.05	Φ22.2
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ30	Φ30
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	1.5	1.5
Dimension (WxDxH)	Outline	mm	1400×700×300	1400×700×300	1400×700×300	1400×700×300	1400×700×300	1400×700×300	1483×791×385	1686x870x450
	Package	mm	1601×813×360	1601×813×360	1601×813×360	1601×813×360	1678×808×365	1678×808×365	1578x883x472	1788x988x580
Net weight/Gross weight		kg	57/64	57/64	57/64	57/64	58/67	58/67	82/104	105/140
Loading quantity	40' GP	set	84	84	84	84	84	84	52	52
	40' HQ	set	98	98	98	98	98	98	65	52

Low Static Pressure Duct Type Indoor Unit

50/60 Hz

Model			GMV-ND22PLS/B1-T	GMV-ND25PLS/B1-T	GMV-ND28PLS/B1-T	GMV-ND32PLS/B1-T	GMV-ND36PLS/B1-T
Capacity	Cooling	kW	2.2	2.5	2.8	3.2	3.6
	Heating	kW	2.5	2.8	3.2	3.6	4
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60				
Power consumption		W	65	65	65	65	65
Airflow volume（H/M/L）		m^3/h	610/437/350	610/437/350	610/437/350	650/629/449	650/629/449
		CFM	359/257/206	359/257/206	359/257/206	383/370/264	383/370/264
Rated Current	Cooling	A	0.32	0.32	0.32	0.32	0.32
	Heating	A	0.32	0.32	0.32	0.32	0.32
	Water Heating	A	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	38/36/30	38/36/30	38/36/30	38/36/30	38/36/30
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	710x450x200				
	Package	mm	1003x551x285				
Net weight/Gross weight		kg	19/23	19/23	19/23	20/23.5	20/23.5
Loading quantity	40'GP	set	352	352	352	352	352
	40'HQ	set	352	352	352	352	352

Model			GMV-ND40PLS/B1-T	GMV-ND45PLS/B1-T	GMV-ND50PLS/B1-T	GMV-ND56PLS/B1-T	GMV-ND63PLS/B1-T
Capacity	Cooling	kW	4	4.5	5	5.6	6.3
	Heating	kW	4.5	5	5.6	6.3	7
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60				
Power consumption		W	65	65	65	65	65
Airflow volume （H/M/L）		m^3/h	810/743/659	810/743/659	810/736/690	810/736/690	810/736/690
		CFM	477/437/388	477/437/388	477/433/406	477/433/406	477/433/406
Rated Current	Cooling	A	0.32	0.32	0.32	0.32	0.32
	Heating	A	0.32	0.32	0.32	0.32	0.32
	Water Heating	A	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	37/35/33	37/35/33	37/35/31	37/35/31	37/35/31
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)	Outline	mm	1010×450×200				
	Package	mm	1303×551×285				
Net weight/Gross weight		kg	24/29	24/29	25/30.5	25/30.5	25/30.5
Loading quantity	40'GP	set	288	288	288	288	288
	40'HQ	set	288	288	288	288	288

Model			GMV-ND71PLS/B1-T	GMV-ND80PLS/A-T	GMV-ND90PLS/A-T	GMV-ND100PLS/A-T	GMV-ND112PLS/A-T	GMV-ND125PLS/A-T	GMV-ND140PLS/A-T
Capacity	Cooling	kW	7.1	8.0	9.0	10.0	11.2	12.5	14.0
	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 consumption		W	70	140	209	209	209	230	230
Airflow volume(H/M/L)		m^3/h	1210/919/754	1100/1000/800	1500/1250/950	1500/1350/1000	1700/1500/1100	2000/1500/1150	2000/1500/1150
		CFM	712/541/444	650/590/471	885/736/599	885/795/590	1000/885/650	1175/885/677	1175/885/677
Rated Current	Cooling	A	0.34	0.7	1.0	1.0	1.0	1.1	1.1
	Heating	A	0.34	0.7	1.0	1.0	1.0	1.1	1.1
	Water Heating	A	/	/	/	/	/	/	/
ESP		Pa	30/0~50						
Sound pressure level(H/M/L)		dB(A)	39/37/35	36/34/31	40/36/32	40/36/32	40/36/32	42/40/37	42/40/37
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	25	25	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)	Outline	mm	1310×450×200	1200 × 655 × 260	1340 × 655 × 260				
	Package	mm	1603×551×285	1448×858×315	1588x858x315				
Net weight/Gross weight		kg	30.5/37	40/47	46/55	46/55	46/55	47/56	47/56
Loading quantity	40' GP	set	224	96	78	78	78	78	78
	40' HQ	set	224	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*
Capacity	Cooling	kW	2.2	2.5	2.8	3.2	3.6
	Heating	kW	2.5	2.8	3.2	3.6	4.0
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60				
Power consumption		W	25	25	25	30	30
Airflow volume(H/M/L)		m^3/h	450/400/320	450/400/320	450/400/320	550/450/340	550/450/340
		CFM	265/235/188	265/235/188	265/235/188	324/265/200	324/265/200
Rated Current	Cooling	A	0.2	0.2	0.2	0.3	0.3
	Heating	A	0.2	0.2	0.2	0.3	0.3
	Water Heating	A	/	/	/	/	/
ESP		Pa	0/15				
Sound pressure level(H/M/L)		dB(A)	30/28/22	30/28/22	30/28/22	31/29/25	31/29/25
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	710x450x200				
	Package	mm	1003x551x285				
Net weight/Gross weight		kg	18.5/22	18.5/22	18.5/22	19.5/23	19.5/23
Loading quantity	40' GP	set	352	352	352	352	352
	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*
Capacity	Cooling	kW	4.0	4.5	5.0	5.6	6.3	7.2
	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 consumption		W	35	35	35	45	45	50
Airflow volume(H/M/L)		m^3/h	750/660/540	750/660/540	750/660/540	850/700/610	850/700/610	1100/800/640
		CFM	441/388/318	441/388/318	441/388/318	500/412/359	500/412/359	647/471/377
Rated Current	Cooling	A	0.3	0.3	0.3	0.3	0.3	0.5
	Heating	A	0.3	0.3	0.3	0.3	0.3	0.5
	Water Heating	A	/	/	/	/	/	/
ESP		Pa	0/15					
Sound pressure level(H/M/L)		dB(A)	33/30/27	33/30/27	33/30/27	35/33/29	35/33/29	37/34/30
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	25	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	1010x450x200					1310x450x200
	Package	mm	1303x551x285					1603x551x285
Net weight/Gross weight		kg	23.5/28	23.5/28	23.5/28	24.5/29	24.5/29	30.5/36
Loading quantity	40' GP	set	288	288	288	288	288	224
	40' HQ	set	288	288	288	288	288	224

Note:
* This series is without water pump.

4-way Cassette Indoor Unit

50/60 Hz

Model			GMV-ND28T/A-T	GMV-ND36T/A-T	GMV-ND45T/A-T	GMV-ND50T/A-T	GMV-ND56T/A-T	GMV-ND63T/A-T	GMV-ND71T/A-T
Capacity	Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3	7.1
	Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1	8.0
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60						
Power consumption		W	48	48	48	50	59	59	68
Airflow volume(H/M/L)		m^3/h	750/650/550	750/650/550	750/650/550	830/650/550	1000/900/750	1000/900/750	1180/950/850
		CFM	440/383/325	440/383/325	440/383/325	490/383/325	590/530/440	590/530/440	695/559/550
Rated Current	Cooling	A	0.2	0.2	0.2	0.2	0.3	0.3	0.3
	Heating	A	0.2	0.2	0.2	0.2	0.3	0.3	0.3
	Water Heating	A	/	/	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	36/34/31	36/34/31	36/34/31	36/34/31	37/35/32	37/35/32	38/36/33
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	25	25	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Main Body	Dimension (WxDxH)	Outline	mm	840x840x190	840x840x190	840x840x190	840x840x190	840x840x240	840x840x240	840x840x240
		Package	mm	963x963x272	963x963x272	963x963x272	963x963x272	963x963x325	963x963x325	963x963x325
	Net weight/Gross weight		kg	22.5/29.5	22.5/29.5	22.5/29.5	22.5/29.5	26.5/34.5	26.5/34.5	26.5/34.5
Panel	Dimension (WxDxH)	Outline	mm	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65
		Package	mm	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133
	Net weight/Gross weight		kg	7/11	7/11	7/11	7/11	7/11	7/11	7/11
Loading quantity		40'GP	set	167	167	167	167	140	140	140
		40'HQ	set	171	171	171	171	156	156	156

Model			GMV-ND80T/A-T	GMV-ND90T/A-T	GMV-ND100T/A-T	GMV-ND112T/A-T	GMV-ND125T/A-T	GMV-ND140T/A-T	GMV-ND160T/A-T
Capacity	Cooling	kW	8.0	9.0	10.0	11.2	12.5	14.0	16.0
	Heating	kW	9.0	10.0	11.2	12.5	14.0	16.0	17.5
Power supply		V/Ph/Hz	220~240/1/50 & 208~230/1/60						
Power consumption		W	68	98	98	110	110	110	130
Airflow volume(H/M/L)		m^3/h	1180/950/850	1500/1350/1100	1500/1350/1100	1700/1400/1100	1860/1500/1150	1860/1500/1150	2100/1700/1400
		CFM	695/559/550	880/795/650	880/795/650	1000/824/650	1095/880/677	1095/880/677	1235/1000/824
Rated Current	Cooling	A	0.3	0.4	0.4	0.5	0.5	0.5	0.6
	Heating	A	0.3	0.4	0.4	0.5	0.5	0.5	0.6
	Water Heating	A	/	/	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	38/36/33	40/37/35	40/37/35	41/38/36	43/41/38	43/41/38	47/44/42
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Drain pipe	External dia.	mm	25	25	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Main Body	Dimension (WxDxH)	Outline	mm	840x840x240	840x840x320	840x840x320	840x840x320	840x840x320	840x840x320	910×910×293
		Package	mm	963x963x325	963x963x409	963x963x409	963x963x409	963x963x409	963x963x409	1023×993×375
	Net weight/Gross weight		kg	26.5/34.5	32.5/40.0	32.5/40.0	32.5/40.0	32.5/40.0	32.5/40.0	46.5/56.5
Panel	Dimension (WxDxH)	Outline	mm	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	1040x1040x65
		Package	mm	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1137x1137x140
	Net weight/Gross weight		kg	7/11	7/11	7/11	7/11	7/11	7/11	7.5/11.5
Loading quantity	40'GP		set	140	104	104	104	104	104	144
	40'HQ		set	156	119	119	119	119	119	144

Model			GMV-ND28T/C-T*1	GMV-ND36T/C-T*1	GMV-ND45T/C-T*1	GMV-ND50T/C-T*1	GMV-ND56T/C-T*1	GMV-ND63T/C-T*1	GMV-ND71T/C-T*1
Capacity	Cooling	kW	2.8	3.6	4.5	5	5.6	6.3	7.1
	Heating	kW	3.2	4	5	5.6	6.3	7.1	8
Power supply		V/Ph/Hz	220-240/1/50& 208-230/1/60						
Power consumption		W	40	40	40	60	60	60	60
Airflow volume H/M/L		m^3/h	750/680/600	750/680/600	820/710/600	950/800/700	1050/900/830	1050/900/830	1150/950/850
		CFM	441/400/353	441/400/353	483/418/353	559/471/412	618/530/489	618/530/489	677/559/500
Rated Current	Cooling	A	0.2	0.2	0.2	0.4	0.4	0.4	0.4
	Heating	A	0.2	0.2	0.2	0.4	0.4	0.4	0.4
	Water Heating	A	/	/	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	30/27/25	30/27/25	32/29/25	32/29/26	35/33/29	35/33/29	37/34/30
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Main Body Dimension (WxDxH)	Outline	mm	840×840×240	840×840×240	840×840×240	840×840×240	840×840×240	840×840×240	840×840×240
	Package	mm	963×963×325	963×963×325	963×963×325	963×963×325	963×963×325	963×963×325	963×963×325
	Net weight/Gross weight	kg	26/34	26/34	26/34	29/37	29/37	29/37	29/37
Panel Dimension (WxDxH)	Outline	mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65
	Package	mm	1038×1033×112	1038×1033×112	1038×1033×112	1038×1033×112	1038×1033×112	1038×1033×112	1038×1033×112
	Net weight/Gross weight	kg	7/11	7/11	7/11	7/11	7/11	7/11	7/11
Loading quantity	40'GP	set	117	117	117	117	117	117	117
	40'HQ	set	134	134	134	134	134	134	134

			GMV-ND80T/C-T*1	GMV-ND90T/C-T*1	GMV-ND100T/C-T*1	GMV-ND112T/C-T*1	GMV-ND125T/C-T*1	GMV-ND140T/C-T*1
Capacity	Cooling	kW	8	9	10	11.2	12.5	14
	Heating	kW	9	10	11.2	12.5	14	16
Power supply		V/Ph/Hz	220-240/1/50& 208-230/1/60					
Power consumption		W	80	80	80	115	115	115
Airflow volume H/M/L		m^3/h	1200/980/850	1250/980/850	1250/980/850	1500/1250/1000	1650/1300/1100	1650/1300/1100
		CFM	706/577/500	736/577/500	736/577/500	883/736/586	971/765/647	971/765/647
Rated Current	Cooling	A	0.5	0.5	0.5	0.9	0.9	0.9
	Heating	A	0.5	0.5	0.5	0.9	0.9	0.9
	Water Heating	A	/	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	38/36/33	39/36/33	39/36/33	41/37/33	43/39/34	43/39/34
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Main Body Dimension (WxDxH)	Outline	mm	840×840×240	840×840×240	840×840×240	840×840×290	840×840×290	840×840×290
	Package	mm	963×963×325	963×963×325	963×963×325	963×963×379	963×963×379	963×963×379
	Net weight/Gross weight	kg	31/38	31/38	31/38	35/44	35/44	35/44
Panel Dimension (WxDxH)	Outline	mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65
	Package	mm	1038×1033×112	1038×1033×112	1038×1033×112	1038×1033×112	1038×1033×112	1038×1033×112
	Net weight/Gross weight	kg	7/11	7/11	7/11	7/11	7/11	7/11
Loading quantity	40'GP	set	117	117	117	96	96	96
	40'HQ	set	134	134	134	116	116	116

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

Compact 4-way Cassette Indoor Unit

50/60 Hz

Model			GMV-ND22T/B-T	GMV-ND28T/B-T	GMV-ND36T/B-T	GMV-ND45T/B-T	GMV-ND50T/B-T	GMV-ND56T/B-T
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5	5.6
	Heating	kW	2.5	3.2	4	5	5.6	6.3
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60					
Power consumption		W	35	35	35	45	45	45
Airflow volume(H/M/L)		m^3/h	600/500/400	600/500/400	600/500/400	700/600/500	700/600/500	700/600/500
		CFM	355/295/235	355/295/235	355/295/235	410/355/295	410/355/295	410/355/295
Rated Current	Cooling	A	0.4	0.4	0.4	0.5	0.5	0.5
	Heating	A	0.4	0.4	0.4	0.5	0.5	0.5
	Water Heating	A	/	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	41/39/37	41/39/37	41/39/37	45/43/39	45/43/39	45/43/39
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9
Drain pipe	External dia.	mm	25	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Main Body	Dimension (WxDxH)	Outline	mm	596x596x240	596x596x240	596x596x240	596x596x240	596x596x240	596x596x240
		Package	mm	778x738x300	778x738x300	778x738x300	778x738x300	778x738x300	778x738x300
	Net weight/Gross weight		kg	20.5/25.5	20.5/25.5	20.5/25.5	20.5/25.5	20.5/25.5	20.5/25.5
Panel	Dimension (WxDxH)	Outline	mm	670x670x50	670x670x50	670x670x50	670x670x50	670x670x50	670x670x50
		Package	mm	763x763x105	763x763x105	763x763x105	763x763x105	763x763x105	763x763x105
	Net weight/Gross weight		kg	3.5/5.0	3.5/5.0	3.5/5.0	3.5/5.0	3.5/5.0	3.5/5.0
Loading quantity	40'GP		set	245	245	245	245	245	245
	40'HQ		set	279	279	279	279	279	279

2-way Cassette Indoor Unit

50/60 Hz

Model			GMV-ND28TS/A-T	GMV-ND36TS/A-T	GMV-ND45TS/A-T	GMV-ND50TS/A-T	GMV-ND56TS/A-T	GMV-ND63TS/A-T	GMV-ND71TS/A-T
Capacity	Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3	7.1
	Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1	8.0
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60						
Power consumption		W	55.0	55.0	55.0	55.0	103.0	103.0	103.0
Airflow volume(H/M/L)		m^3/h	830/660/580	830/660/580	830/660/580	830/660/580	1100/900/750	1100/900/750	1100/900/750
		CFM	490/388/341	490/388/341	490/388/341	490/388/341	650/530/441	650/530/441	650/530/441
Rated Current	Cooling	A	0.3	0.3	0.3	0.3	0.7	0.7	0.7
	Heating	A	0.3	0.3	0.3	0.3	0.7	0.7	0.7
	Water Heating	A	/	/	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	35/32/29	35/32/29	35/32/29	35/32/29	39/36/33	39/36/33	39/36/33
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	25	25	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Main Body	Dimension (WxDxH)	Outline	mm	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315
		Package	mm	1523x658x430	1523x658x430	1523x658x430	1523x658x430	1523x658x430	1523x658x430	1523x658x430
	Net weight/Gross weight		kg	43/54	43/54	43/54	43/54	46/56	46/56	46/56
Panel	Dimension (WxDxH)	Outline	mm	1443x630x33	1443x630x33	1443x630x33	1443x630x33	1443x630x33	1443x630x33	1443x630x33
		Package	mm	1578x768x120	1578x768x120	1578x768x120	1578x768x120	1578x768x120	1578x768x120	1578x768x120
	Net weight/Gross weight		kg	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0
Loading quantity	40'GP		set	90	90	90	90	90	90	90
	40'HQ		set	105	105	105	105	105	105	105

1-way Cassette Indoor Unit

50/60 Hz

Model			GMV-ND22TD/A-T	GMV-ND28TD/A-T	GMV-ND36TD/A-T	GMV-ND45TD/A-T	GMV-ND50TD/A-T	GMV-ND56TD/A-T
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0	5.6
	Heating	kW	2.5	3.2	4.0	5.0	5.6	6.3
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60					
Power consumption		W	30	30	30	45	45	45
Airflow volume(H/M/L)		m^3/h	600/500/450	600/500/450	600/500/450	830/600/500	830/600/500	890/667/564
		CFM	355/295/265	355/295/265	355/295/265	490/355/295	490/355/295	524/393/332
Rated Current	Cooling	A	0.2	0.2	0.2	0.3	0.3	0.3
	Heating	A	0.2	0.2	0.2	0.3	0.3	0.3
	Water Heating	A	/	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	36/32/28	36/32/28	36/32/28	40/35/30	40/35/30	41/38/35
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9
Drain pipe	External dia.	mm	25	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Main Body	Dimension (WxDxH)	Outline	mm	987x385x178	987x385x178	987x385x178	987x385x178	987x385x178	987x385x178
		Package	mm	1307x501x310	1307x501x310	1307x501x310	1307x501x310	1307x501x310	1307x501x310
	Net weight/Gross weight		kg	20.0/27.0	20.0/27.0	20.0/27.0	21.0/28.5	21.0/28.5	21/28.5
Panel	Dimension (WxDxH)	Outline	mm	1200x460x55	1200x460x55	1200x460x55	1200x460x55	1200x460x55	1200x460x55
		Package	mm	1265x536x121	1265x536x121	1265x536x121	1265x536x121	1265x536x121	1265x536x121
	Net weight/Gross weight		kg	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0
Loading quantity	40'GP		set	138	138	138	138	138	138
	40'HQ		set	138	138	138	138	138	138

Wall-mounted Type Indoor Unit

50 Hz

Model			GMV-N22G/A3A-K *	GMV-N28G/A3A-K *	GMV-N36G/A3A-K *	GMV-N45G/A3A-K *	GMV-N50G/A3A-K *	GMV-N56G/A3A-K *	GMV-N63G/A3A-K *	GMV-N71G/A3A-K *
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1
	Heating	kW	2.5	3.2	4.0	5.0	5.8	6.3	7.0	7.5
Power supply		V/Ph/Hz	220-240/1/50							
Power consumption		W	50	50	60	60	60	70	70	70
Airflow volume(H/M/L)		m^3/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
		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
Rated Current	Cooling	A	0.2	0.2	0.31	0.31	0.31	0.31	0.31	0.31
	Heating	A	0.2	0.2	0.31	0.31	0.31	0.31	0.31	0.31
	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 diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ30	Φ30	Φ30
	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dimension (WxDxH)	Outline	mm	843x180x275		940x200x298			1008x221x319		
	Package	mm	973x258x370		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 quantity	40' GP	set	702	702	557	557	557	441	441	441
	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*
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1
	Heating	kW	2.5	3.2	4.0	5.0	5.8	6.3	7.0	7.5
Power supply		V/Ph/Hz	208-230/1/60							
Power consumption		W	50	50	60	60	60	70	70	70
Airflow volume(H/M/L)		m^3/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
		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
Rated Current	Cooling	A	0.2	0.2	0.31	0.31	0.31	0.31	0.31	0.31
	Water Heating	A	/	/	/	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	38/34/30	38/34/30	44/41/38	44/41/38	44/41/38	44/41/38	44/41/38	44/41/38
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ30	Φ30	Φ30
	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dimension (WxDxH)	Outline	mm	843x180x275		940x200x298			1008x221x319		
	Package	mm	973x285x370		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 quantity	40' GP	set	702	702	557	557	557	441	441	441
	40' HQ	set	819	819	624	624	624	503	503	503

Note：
* This series is without water pump.

50/60 Hz

Model			GMV-ND22G/A3A-T	GMV-ND28G/A3A-T	GMV-ND36G/A3A-T	GMV-ND45G/A3A-T	GMV-ND50G/A3A-T
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5
	Heating	kW	2.5	3.2	4	5	5.8
Power supply		V/PH/Hz	220-240/1/50 & 208-230/1/60				
Power consumption		W	20	20	30	30	30
Rated cument	Cooling	A	0.1	0.1	0.16	0.16	0.16
	Heating	A	0.1	0.1	0.16	0.16	0.16
	Water heating	A	/	/	/	/	/
Sound pressure level		dB（A）	38	38	44	44	44
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20
	Thickness	mm	1.5	1.5	1.5	1.5	1.5
Dimension （W×D×H）	Outline	mm	843×180×275	843×180×275	940×200×298	940×200×298	940×200×298
	Package	mm	973x258x370	973x258x370	1068x288x395	1068x288x395	1068x288x395
Net weight/gross weight		Kg	10	10	12.5	12.5	12.5
Loading quantity	40'GP	Set	702	702	557	557	557
	40'HP	Set	819	819	624	624	624

Model			GMV-ND56G/A3A-T	GMV-ND63G/A3A-T	GMV-ND71G/A3A-T	GMV-ND80G/A3A-T	GMV-ND90G/A3A-T	GMV-ND100G/A3A-T
Capacity	Cooling	kW	5.6	6.3	7.1	8	9	9.5
	Heating	kW	6.3	7	7.5	9	10	10.5
Power supply		V/PH/HZ	220-240/1/50 &208-230/1/60					
Power consumption		W	40	40	40	80	80	100
Rated cument	Cooling	A	0.17	0.17	0.17	0.41	0.41	0.41
	Heating	A	0.17	0.17	0.17	0.41	0.41	0.41
	Water heating	A	/	/	/	/	/	/
Sound pressure level		dB（A）	44	44	44	49	49	52
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.87	Φ15.87	Φ15.87	Φ15.87	Φ15.87	Φ15.87
Drain pipe	External dia.	mm	Φ30	Φ30	Φ30	Φ30	Φ30	Φ30
	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5
Dimension （W×D×H）	Outline	mm	1008×221×319	1008×221×319	1008×221×319	1350×258×326	1350×258×326	1350×258×326
	Package	mm	1131x398x328	1131x398x328	1131x398x328	1496x421x358	1496x421x358	1496x421x358
Net weight/gross weight		Kg	15	15	15	18.5	18.5	18.5
Loading quantity	40'GP	Set	441	441	441	228	228	228
	40'HP	Set	503	503	503	266	266	266

Model			GMV-ND22G/B4B-T*1	GMV-ND28G/B4B-T*1	GMV-ND36G/B4B-T*1	GMV-ND45G/B4B-T*1
Capacity	Cooling	kW	2.2	2.8	3.6	4.5
	Heating	kW	2.5	3.2	4	5
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60			
Power consumption		W	30	30	40	40
Airflow volume（H/M/L）		m^3/h	500	500	630	630
		CFM	294	294	371	371
Rated Current	Cooling	A	0.3	0.3	0.4	0.4
	Heating	A	0.3	0.3	0.4	0.4
	Water Heating	A	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	38/34/30	38/34/30	44/41/38	44/41/38
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20
	Thickness	mm	1.5	1.5	1.5	1.5
Dimension (WxDxH)	Outline	mm	845×289×209	845×289×209	970×300×224	970×300×224
	Package	mm	921×379×281	921×379×281	1041×383×320	1041×383×320
Net weight/Gross weight		kg	13	13	15	15
Loading quantity	40'GP	set	600	600	462	462
	40'HQ	set	600	600	528	528

Model			GMV-ND50G/B4B-T*1	GMV-ND56G/B4B-T*1	GMV-ND63G/B4B-T*1	GMV-ND71G/B4B-T*1
Capacity	Cooling	kW	5	5.6	6.3	7.1
	Heating	kW	5.6	6.3	7	7.5
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60			
Power consumption		W	40	50	50	50
Airflow volume（H/M/L）		m^3/h	630	750	750	750
		CFM	371	441	441	441
Rated Current	Cooling	A	0.4	0.4	0.4	0.4
	Heating	A	0.4	0.4	0.4	0.4
	Water Heating	A	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	44/41/38	44/41/38	44/41/38	44/41/38
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ20	Φ30	Φ30	Φ30
	Thickness	mm	1.5	1.5	1.5	1.5
Dimension (WxDxH)	Outline	mm	970×300×224	1078×325×246	1078×325×246	1078×325×246
	Package	mm	1041×383×320	1148×413×350	1148×413×350	1148×413×350
Net weight/Gross weight		kg	15	18	18	18
Loading quantity	40'GP	set	462	336	336	336
	40'HQ	set	528	392	392	392

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

Fresh Air Processing Indoor Unit

50/60 Hz

Model			GMV-NDX125P/A-T*	GMV-NDX140P/A-T *	GMV-NDX224P/A-T*	GMV-NDX250P/A-T*	GMV-NDX280P/A-T*	GMV-NX450P/A(X4.0)-M *
Capacity	Cooling	kW	12.5	14.0	22.4	25 .0	28.0	45
	Heating	kW	8.5	10.0	16.0	18.0	20.0	32.0
Power supply		V/Ph/Hz	220-240V/1/50 & 208-230/1/60					380~415/3/50
Power consumption		W	350	350	760	860	860	1240
Airflow volume(H/M/L)		m^3/h	1200/1000~2000	1200/1000~2000	2000/1500~3000	2500/2000~3500	2500/2000~3500	4000
		CFM	706/589~1177	706/589~1177	1177/883~1766	1471/1177~2060	1471/1177~2060	2354
Rated Current	Cooling	A	1.5	1.5	2.5	3.1	3.1	3.4
	Heating	A	1.5	1.5	2.5	3.1	3.1	3.4
	Water Heating	A	/	/	/	/	/	/
ESP		Pa	150/50~200	150/50~200	200/50~300	200/50~300	200/50~280	200
Sound pressure level(H/M/L)		dB(A)	40~50	40~50	45~54	47~54	47~54	58
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ15.9	Φ15.9	Φ19.05	Φ22.2	Φ22.2	Φ28.6
Drain pipe	External dia.	mm	Φ25	Φ25	Φ30	Φ30	Φ30	Φ33
	Thickness	mm	2.5	2.5	1.5	1.5	1.5	3.0
Dimension (WxDxH)	Outline	mm	1400×700×300	1400×700×300	1483×791×385	1483×791×385	1483×791×385	1700x1100x650
	Package	mm	1601×813×365	1601×813×365	1578×883×472	1578×883×472	1578×883×472	1893x1463x838
Net weight/Gross weight		kg	54/61	54/61	82/104	82/104	82/104	208/266
Loading quantity	40' GP	set	84	84	52	52	52	16
	40' HQ	set	98	98	65	65	65	16

Note*: This series can be matched with GMV5 、GMV5E、GMV5C、GMV5 CP、GMV5 MAX and GMV5 HR (Top discharge outdoor unit)

Console Indoor Unit

50/60 Hz

Model			GMV-ND22C/A-T	GMV-ND28C/A-T	GMV-ND36C/A-T	GMV-ND45C/A-T	GMV-ND50C/A-T
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0
	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 consumption		W	15	15	20	40	40
Airflow volume(H/M/L)		m^3/h	400/320/270	400/320/270	480/400/310	680/600/500	680/600/500
		CFM	235/188/159	235/188/159	282/235/182	400/353/294	400/353/294
Rated Current	Cooling	A	0.17	0.17	0.25	0.4	0.4
	Heating	A	0.17	0.17	0.25	0.4	0.4
	Water Heating	A	/	/	/	/	/
ESP		Pa	0	0	0	0	0
Sound pressure level(H/M/L)		dB(A)	38/33/27	38/33/27	40/37/32	46/43/39	46/43/39
Connecting pipe diameter	Liquid	mm	6.35	6.35	6.35	6.35	6.35
	Gas	mm	9.52	9.52	9.52	12.7	12.7
Drain pipe	External dia.	mm	28	28	28	28	28
	Thickness	mm	1	1	1	1	1
Dimension (WxDxH)	Outline	mm	700/215/600	700/215/600	700/215/600	700/215/600	700/215/600
	Package	mm	788x283x777	788x283x777	788x283x777	788x283x777	788x283x777
Net weight/Gross weight		kg	16/19	16/19	16/19	16/19	16/19
Loading quantity	40' GP	set	348	348	348	348	348
	40' HQ	set	348	348	348	348	348

Air Handler

60 Hz

Model			GMV-NR71A/A-D	GMV-NR90A/A-D	GMV-NR100A/A-D	GMV-NR112A/A-D	GMV-NR140A/A-D
Capacity	Cooling	kW	7.1	9	10	11.2	14
	Heating	kW	8	10	11	12.5	15
Power supply		V/Ph/Hz	208-230/1/60				
Power consumption		W	215	270	370	430	550
Airflow volume （H/M/L ）		m^3/h	1600	1700	1900	2300	2500
		CFM	942	1000	1118	1354	1471
Rated Current[2]	Cooling	A	1.1	1.35	2	2	2.5
	Heating	A	1.1	1.35	2	2	2.5
	Water Heating	A	/	/	/	/	/
ESP		Pa	25	37	37	37	50
Sound pressure level(H/M/L)		dB(A)	50	51	52	52	55
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ16	Φ16	Φ16	Φ16	Φ16
Drain pipe	External dia.	mm	Φ19	Φ19	Φ19	Φ19	Φ19
	Thickness	mm	/	/	/	/	/
Dimension (WxDxH)	Outline	mm	460x540x1105	460x540x1105	540x540x1224	540x540x1224	630x540x1224
	Package	mm	517x620x1170	517x620x1170	597x620x1289	597x620x1289	687x621x1295
Net weight/Gross weight		kg	54/59	57/62	66/72	68/73	78/85
Loading quantity	40'GP	set	164	164	85	85	85
	40'HQ	set	172	172	114	114	114

Floor Ceiling Type Indoor Unit

50/60 Hz

Model			GMV-ND28ZD/A-T	GMV-ND36ZD/A-T	GMV-ND50ZD/A-T	GMV-ND56ZD/A-T	GMV-ND63ZD/A-T
Capacity	Cooling	kW	2.8	3.6	5.0	5.6	6.3
	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 consumption		W	40	40	50	50	75
Airflow volume(H/M/L)		m^3/h	650/580/500	650/580/500	950/850/700	950/850/700	1400/1150/1000
		CFM	380/341/294	380/341/294	560/500/410	560/500/410	825/677/590
Rated Current	Cooling	A	0.3	0.3	0.4	0.4	0.6
	Heating	A	0.3	0.3	0.4	0.4	0.6
	Water Heating	A	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	36/34/32	36/34/32	42/38/33	42/38/33	44/42/39
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75	1.75
Dimension (WxDxH)	Outline	mm	1220x700x225				1420x700x245
	Package	mm	1343x823x315				1548x828x345
Net weight/Gross weight		kg	40/49	40/49	40/49	40/49	50/58
Loading quantity	40' GP	set	145	145	145	145	90
	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	GMV-ND160ZD/A-T
Capacity	Cooling	kW	7.1	9.0	11.2	12.5	14.0	16.0
	Heating	kW	8.0	10.0	12.5	14.0	16.0	18.0
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60					
Power consumption		W	75	140	160	160	160	200
Airflow volume(H/M/L)		m^3/h	1400/1150/1000	1600/1400/1200	2000/1800/1450	2000/1800/1450	2000/1800/1450	2300/2100/1900
		CFM	825/677/590	940/824/706	1175/1059/853	1175/1059/853	1175/1059/853	1354/1236/1119
Rated Current	Cooling	A	0.6	1.1	1.4	1.4	1.4	1.9
	Heating	A	0.6	1.1	1.4	1.4	1.4	1.9
	Water Heating	A	/	/	/	/	/	/
Sound pressure level(H/M/L)		dB(A)	44/42/39	50/47/43	51/46/42	52/49/45	52/49/45	52/49/45
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75
Dimension (WxDxH)	Outline	mm	1420x700x245			1700x700x245		
	Package	mm	1548x828x345			1828x828x345		
Net weight/Gross weight		kg	50/58	50/58	60/68	60/68	60/68	60/68
Loading quantity	40' GP	set	90	90	84	84	84	84
	40' HQ	set	98	98	98	98	98	98

Concealed Floor Standing Type

50/60 Hz

Model			GMV-ND22ZA/A-T	GMV-ND28ZA/A-T	GMV-ND36ZA/A-T	GMV-ND45ZA/A-T	GMV-ND56ZA/A-T	GMV-ND63ZA/A-T	GMV-ND71ZA/A-T
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	6.3	7.1
	Heating	kW	2.5	3.2	4	5	6.3	7.1	8
Power supply		V/Ph/Hz	220-240V～50Hz/208-230V～60Hz						
Power consumption		W	35	35	43	45	80	80	90
Airflow volume(H/M/L)		m^3/h	450/350/250	450/350/250	550/450/350	650/500/400	900/750/600	900/750/600	1100/900/700
		CFM	265/206/147	265/206/147	324/265/206	383/294/235	530/441/353	530/441/353	647/530/412
Rated Current	Cooling	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
	Heating	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
ESP		Pa	10/0～40	10/0～40	10/0～40	15/0～60	15/0～60	15/0～60	15/0～60
Sound pressure level(H/M/L)		dB(A)	30/28/25	30/28/25	33/31/28	33/31/28	35/33/30	35/33/30	37/35/33
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	700×615×200	700×615×200	700×615×200	900×615×200	1100×615×200	1100×615×200	1100×615×200
	Package	mm	893×743×305	893×743×305	893×743×305	1123×743×305	1323×743×305	1323×743×305	1323×743×305
Net weight/Gross weight		kg	23/30	23/30	23/30	27/36	32/41	32/41	32/41
Loading quantity	40'GP	set	273	273	273	217	175	175	175
	40'HQ	set	312	312	312	248	200	200	200

Floor Standing Type

50/60 Hz

Model			GMV-ND100L/A-T	GMV-ND140L/A-T
Capacity	Cooling	kW	10	14
	Heating	kW	11	15
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60	
Power consumption		W	200	200
Airflow volume(H/M/L)		m^3/h	1850/1600/1400	1850/1600/1400
		CFM	1089/942/824	1089/942/824
Rated Current	Cooling	A	1.5	1.5
	Heating	A	1.5	1.5
	Water Heating	A	/	/
ESP		Pa	0	0
Sound pressure level(H/M/L)		dB(A)	50/48/46	50/48/46
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	31	31
	Thickness	mm	4.5	4.5
Dimension (WxDxH)	Outline	mm	1870x580x400	
	Package	mm	2083x738x545	
Net weight/Gross weight		kg	54/74	57/77
Loading quantity	40' GP	set	67	67
	40' HQ	set	67	67

AHU KIT

50/60 Hz

Model				GMV-N36U/B-T		GMV-N71U/B-T			GMV-N140U/B-T			GMV-N280U/B-T					GMV-N560U/B-T		
Defaulted capacity of ex-factory	Capacity			36		71			140			280					560		
	Cooling		kW	3.6		7.1			14			28					56		
	Heating		kW	4		8			16			31.5					63		
Adjustable capacity	Capacity			28	36	45	56	71	90	112	140	224	280	335	400	450	504	560	840
	Cooling		kW	2.8	3.6	4.5	5.6	7.1	9	11.2	14	22.4	28	33.5	40	45	50.4	56	84
	Heating		kW	3.2	4	5	6.3	8	10	12.5	16	25	31.5	37.5	45	50	56.5	63	94.5
Power input			W	8		8			8			8					8		
Power Supply			V/Ph/Hz	220-240/1/50 & 208-230/1/60															
Size of connection pipe	AHU-KIT		mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ15.9	Φ15.9	Φ15.9
	Air handling unit	Liquid pipe	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ19.05
		Gas pipe	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6	Φ31.8
	Connection method			Brazing Connection		Brazing Connection			Brazing Connection			Brazing Connection					Brazing Connection		
Outline dimension (W×D×H)	EXV box		mm	203×326×85		203×326×85			203×326×85			203×326×85					246×500×120		
	Control box		mm	334×284×111		334×284×111			334×284×111			334×284×111					334×284×111		
Packing size (W×D×H)			mm	539×461×247		539×461×247			539×461×247			539×461×247					759×645×180		
Net weight/Gross weight			kg	9/12		9/12			9/12			9/12					12.5/17		
Loading Quantity	40'GP		set	981		981			981			981					702		
	40'HQ		set	1090		1090			1090			1090					756		

Modular Model				GMV-N560U/B-T+GMV-N140U/B-T	GMV-N560U/B-T+GMV-N280U/B-T	GMV-N560U/B-T+GMV-N560U/B-T	
Defaulted capacity of ex-factory	Capacity			840+140	840+280	840+560	840+840
	Cooling		kW	98	112	140	168
	Heating		kW	110.5	126	157.5	189
Power input			W	8+8	8+8	8+8	
Power Supply			V/Ph/Hz	220-240/1/50 & 208-230/1/60			
Size of connection pipe	Air handling unit	Liquid pipe	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05
		Gas pipe	mm	Φ38.1	Φ38.1	Φ41.3	Φ41.3
Outline dimension (W×D×H)		EXV box	mm	246×500×120+203×326×85	246×500×120+203×326×85	(246×500×120)×2	
		Control box	mm	(334×284×111)×2	(334×284×111)×2	(334×284×111)×2	
Net weight			kg	12.5+9	12.5+9	12.5+12.5	

Control System



VRF Selector

Model selection system is a necessary tool for the sales of VRF system in overseas market. In order to meet the demand of overseas market for model selection system, improve the competitive strength of Gree products in overseas market, Gree provides clients with intelligent, fast and multivariate model selection system.

Intelligent Model Selection

1) The system will take multiple aspects into consideration to provide clients with the optimal plan by combining performance, noise, comfort, reliability, cost, etc.

2) It can calculate according to user demand, ambient temperature, using location, static pressure, etc. to recommend the suitable IDU, ODU and pipe arrangement. It will check by combining the collocation rate, pipe arrangement, etc. of the whole system, and automatically adjust the unit model to get the optimal model selection plan.

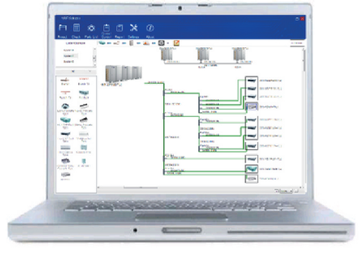
3) Using habit and using standard differs in different regions. The intelligent model selection system will conduct special process according to metric/inch system, unit parameters, different language system in different regions.

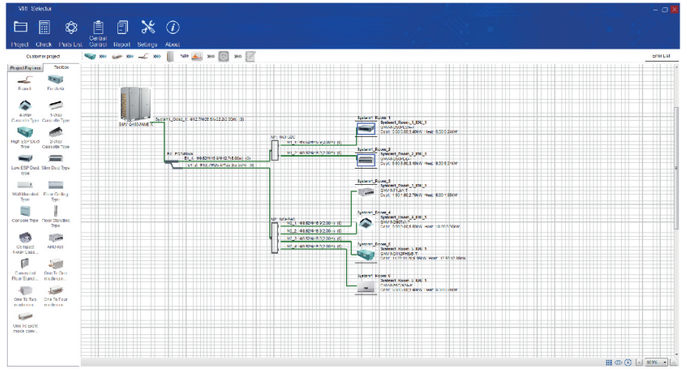
4) It will conduct automatic checking for the whole system, if anyone of the conditions cannot satisfy the user demand, the software will automatically calculate to find the suitable unit and pipe arrangement.



Fast Model Selection

The software can provide user with audio-visual model building experience via visible modeling method. Through the intelligent fast connection, multiple parts of VRF can be correctly and fast linked, which can greatly improve the modeling efficiency of user.



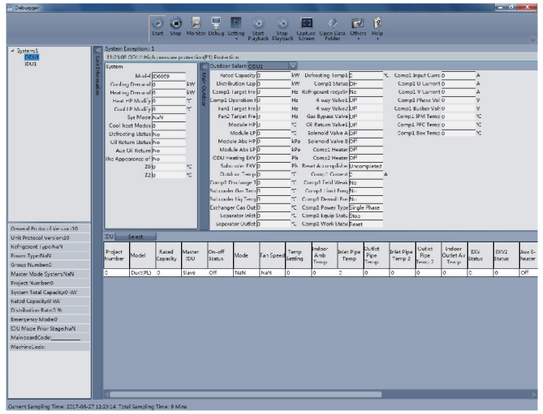


Intelligent Debugging Software

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;



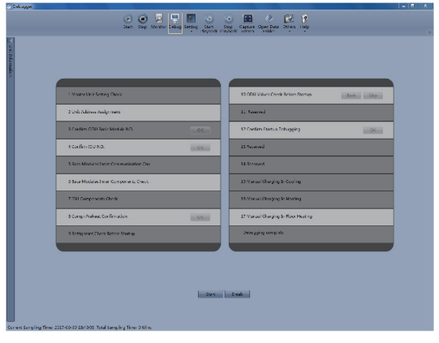
Control Functions

- 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.



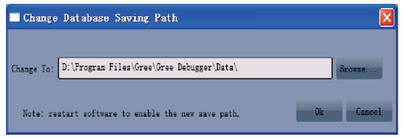
Project Debugging Functions

- 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;

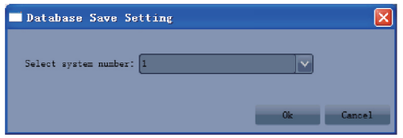


Auto Data-Saving Function

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



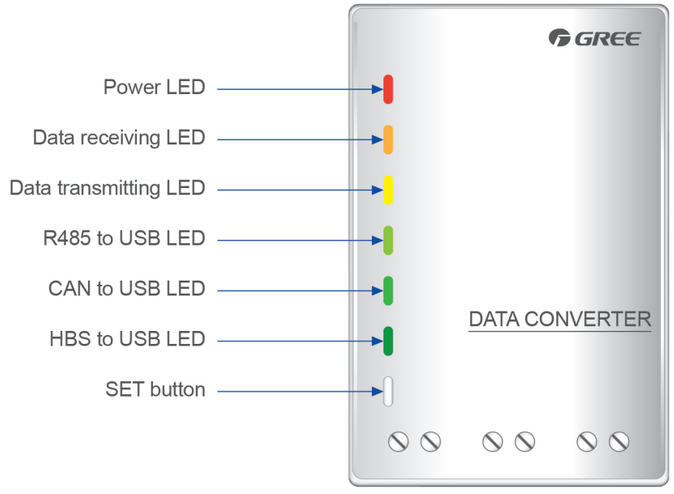
Step 1：Change Database Saving Path



Step 2：Database Save Setting

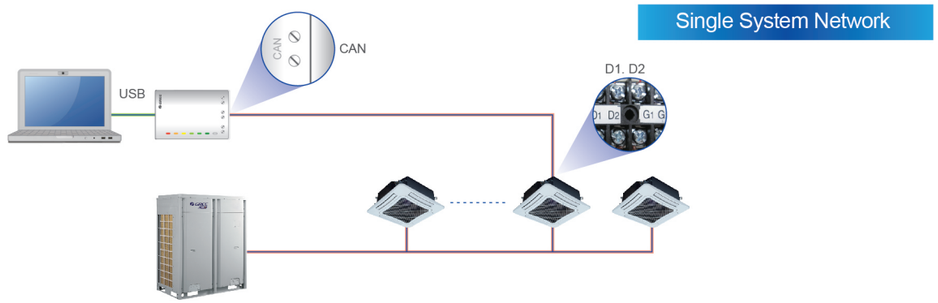
USB Data Converter

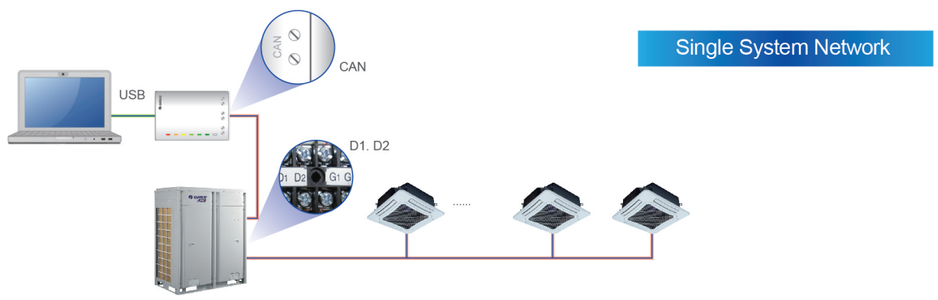
Users can use USB data converter to freely convert CAN/HBS/RS485 data into USB data, achieving data interchange between computer and air conditioner.

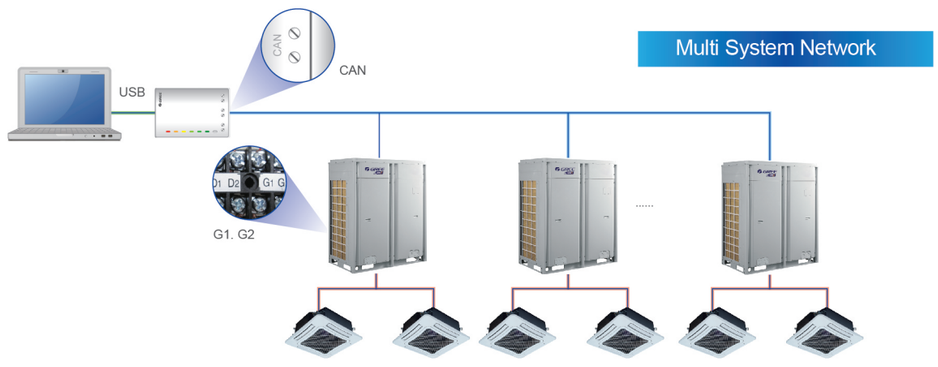


Auto Direction of Connection Way

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

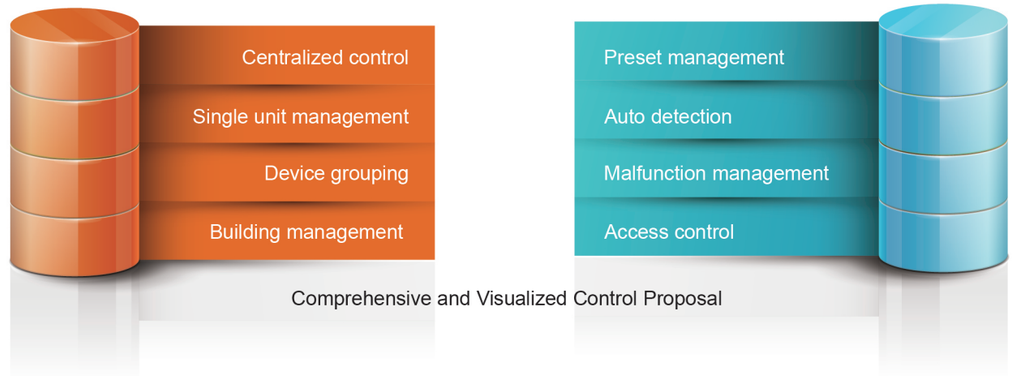






Intelligent Remote Eudemon

With the design philosophy of to be intelligent, smart, inclusive and compatible, Gree developed the Intelligent Remote Eudemon System for VRF units, providing users with a distributed remote monitoring system for VRF units. By adopting the latest technologies and combining the features of engineering construction and debugging, this system is more compatible while less difficult to be installed and debugged. It can be widely used in industrial parks, shopping centers, office buildings, apartment blocks, villa clusters or other commercial or residential occasions, satisfying the demands of large-scale or cross-city networking.



5 Key Functions

- **Device monitoring**

  It can monitor and control the parameters of every air conditioning device within the system, for example, on/off, running mode, set temperature, ambient temperature, etc., presenting the communication and malfunction data of air conditioners in a visual way.

- **Remote control**

  Administrator can log in the control system through web browser on any kinds of terminals (from a long distance). Based on user's property management payment or energy-saving needs, you can control the on/off, temperature, running mode or other controllable parameters of any indoor unit from a long distance.

- **Malfunction alarm**

  When an air conditioning device is malfunctioning, the system will report in real time and display malfunction details to users or after-sales service staff for the convenience of locating malfunction and timely maintenance.

- **Property management**

  Visual management: It provides three viewing and control modes in regard to devices, engineering and grouping. You can set "alias" for indoor units, change the details according to structural alteration and view clearly the condition of devices in each area, which is convenient for management.

- **Schedule management**

  It provides customized schedule preset mode and auto switch between "workday mode" and "holiday mode", satisfying different scheduling demands of commercial buildings, workplaces, family units, etc.

5 Key Features

- **Distributed design for balancing the load**

  With distributed structure, the gateway has independent logical memory capability and can perform data processing for the first time, reducing the pressure on server (Intelligent Remote Eudemon). Once customized preset is made, each gateway can work independently, no need to keep connecting to the software.

- **Adopt WEB technology based on HTML5, control the system anywhere**

  The software adopts B/S structure. With system's core functions installed on the server side, the front end adopts HMTL5 technology and the web browser is the client side. You can control the system on different platforms and terminals.

- **Design according to the project, increase interactive experience for convenient debugging and use**

  It adopts visual interactive design, supports one-button import of details, engineering information, and so on, making the modification and debugging more convenient, and the operation more visualized and reliable. On the basis of Ethernet, the building's local network can be utilized directly without the need to build an air conditioning network, saving materials and construction time.

- **Fast, reliable and in real time**

  Instead of using RS485 communication method, it adopts "CAN+Ethernet", which features high efficiency and large data volume. You can view units' condition in real time and control over 4,000 air conditioners in seconds.

- **Compatible with BMS system**

  The gateway provides BACnet/IP port, which also supports BMS connection. The distributed remote control system is independent from BMS system.

Intelligent Multi-function Gateway

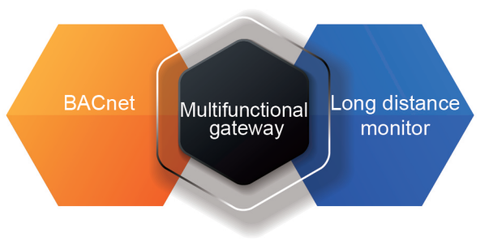


Dimension
296x177x56mm

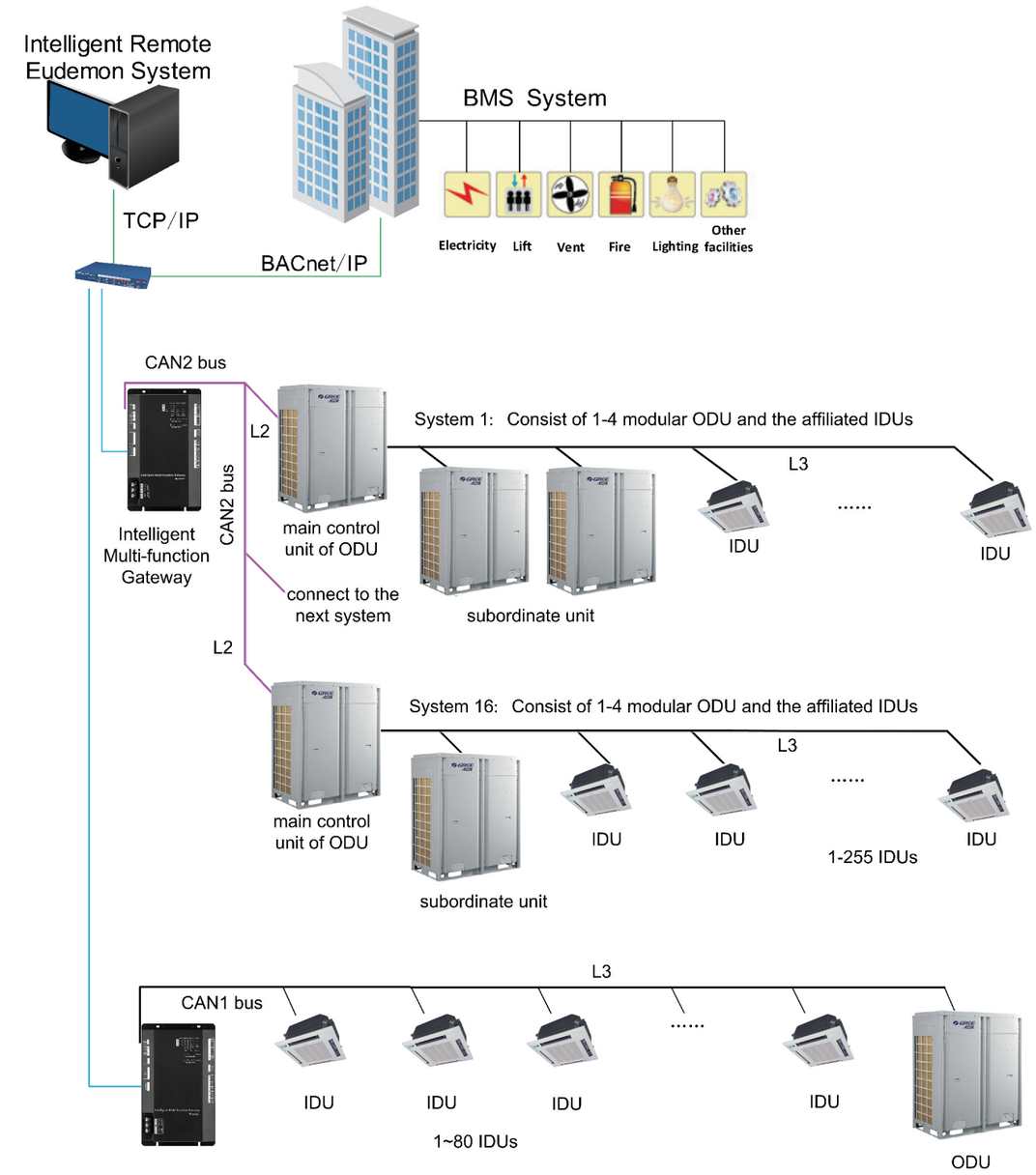
Functional features

- The multi-function gateway integrates remote monitoring gateway with BACnet/IP protocol function.

1.Ethernet interface, support TCP/IP and UDP functional protocol, can conduct real-time interaction with the upper-level unit;
2.Support standard BACnet/IP protocol;
3.User can self-define and collocate the gateway parameters for embedded webpage.



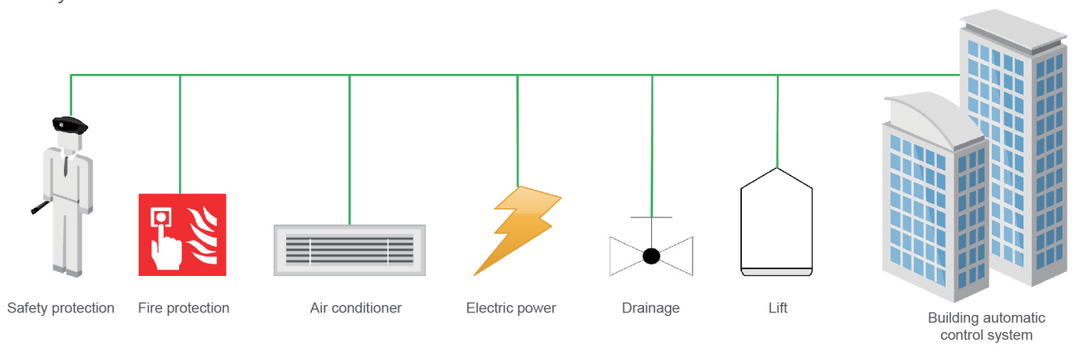
Distributed Structure



Note:
(1) 16 systems or 255 indoor units can be connected to one Intelligent Multi-function Gateway.
(2) 16 Intelligent Multi-function Gateways can be connected to one set of Intelligent Remote Eudemon (customized order is available).
(3) Intelligent Multi-function Gateway can also provide BACnet/IP port.

Building Protocol Gateway

Air conditioner is a kind of indispensable equipment in the building, which has higher and higher requirement of automation and intelligence. In order to meet the demand of users solve the problems of air conditioner monitoring and automatic control, Gree has developed multiple building protocol gateways for connecting to different BMS or BAS systems.



BACnet Gateway



Dimension
296×177×56mm

Functional features

- **Large network capacity**
  One BACnet Gateway can support 16 systems or 255 sets of IDU at most;
- **Group control function**
  BACnet Gateway supports group control ON/OFF of units;
- **Long distance monitor**
  BACnet Gateway supports the remote control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and shielding function, etc., and can achieve real-time monitor of operating status (ambient temperature, ON/OFF status of unit, etc.), error status (communication error, operational error, different sensor error of unit, etc.);
- **Easy control**
  BACnet Gateway supports collocating gateway IP and related data for embedded webpage, thus user can self-define the gateway IP according to actual situation;
- **I/O expansion**
  BACnet Gateway supports 5 digital input (DI) and output (DO) interfaces, in which DI1 is defined as fire alarm signal input interface, other I/O interfaces can be self-defined by user;

Strong points

- **Provide standard BACnet/IP protocol interface, open the table of protocol point**
  BACnet Gateway provides standard BACnet/IP protocol interface, open the table of BACnet protocol point (unit parameter example No.), for the integration of the building of user;
- **Adopt HTML5 technology, adapt to different environment**
  BACnet Gateway embedded webpage is developed by adopting HTML5 technology, which can set the gateway IP and related information in Windows system, Linux system, or Mac OS system.
- **With ETL and CE certification**
  BACnet Gateway has been rewarded with the north America ETL and EU CE safety certification;

Modbus Gateway(Pro)



Dimension
296×177×56mm

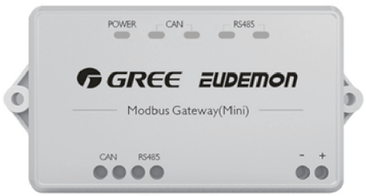
Functional features

- **Large network capacity**
  One Modbus Gateway (Pro) can support 16 systems or 255 sets of IDU at most;
- **Group control function**
  Modbus Gateway (Pro) supports group control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and locking functions;
- **Long distance monitor**
  Modbus Gateway (Pro) supports the remote control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and shielding function, etc., and can achieve real-time monitor of operating status (ambient temperature, ON/OFF status of unit, etc.), error status (communication error, operational error, different sensor error of unit, etc.);
- **I/O expansion**
  Modbus Gateway (Pro) supports 5 digital input (DI) and output (DO) interfaces, in which DI1 is defined as fire alarm signal input interface, other I/O interfaces can be self-defined by user;

Strong points

- **1 gateway can monitor 255 indoor units**
- **Linkable with other networks**
  5 ways of digital input and output enables flexible connection to other networks.
- **Fire alarm interface for auto stop**
  When fire alarm goes off, units can be automatically turned off through the fire alarm interface, which will lower the risk of damage for the units.
- **Provide standard Modbus RTU protocol interface, open the table of protocol point**
  Modbus Gateway (Mini) provides standard Modbus RTU protocol interface, open the table of Modbus protocol point (unit parameter example No.), for the integration of the building of user;
- **With ETL and CE certification**
  Modbus Gateway(Mini) has acquired the north America ETL and EU CE safety certification;

Modbus Gateway(Mini)



Dimension
90x55x20mm

Functional strong points

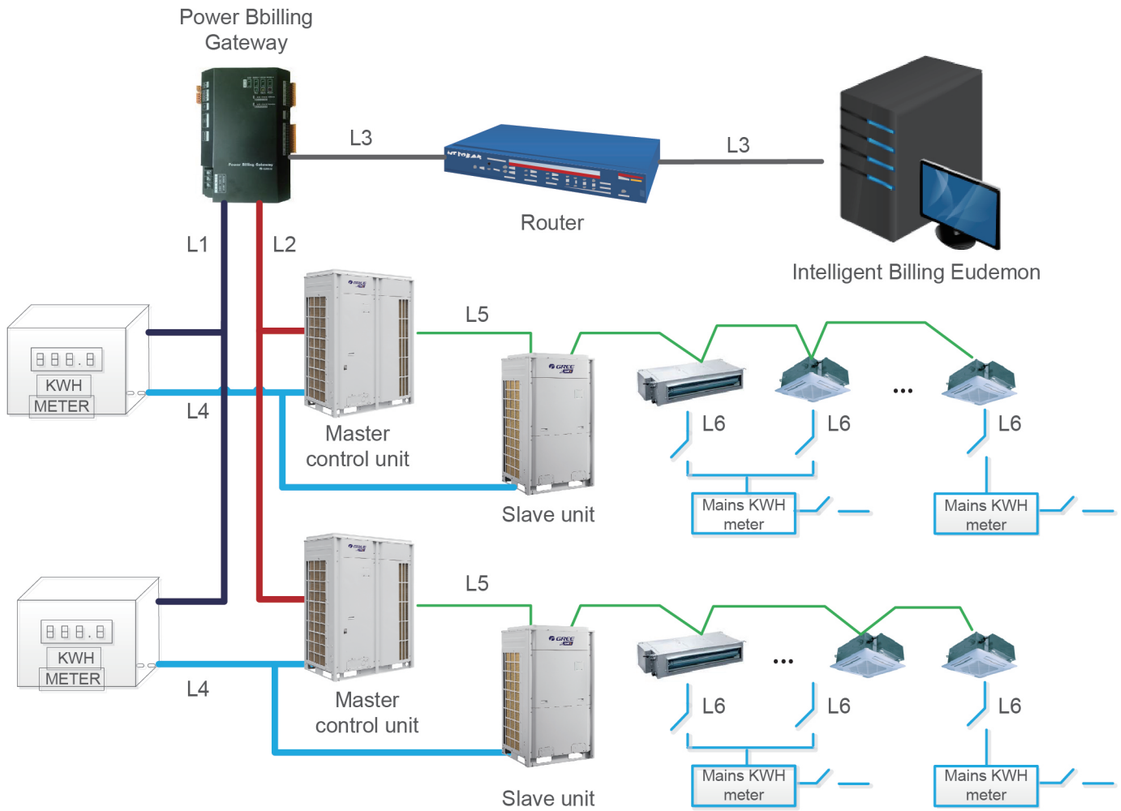
- **Network capacity**
  One Modbus Gateway (Mini) can support 15 systems or 128 sets of IDU at most;
- **Group control function**
  Modbus Gateway (Mini) supports group control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and locking functions.
- **Long distance monitor**
  Modbus Gateway (Mini) supports the remote control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and shielding function, etc., and can achieve real-time monitor of operating status (ambient temperature, ON/OFF status of unit, etc.), error status (communication error, operational error, different sensor error of unit, etc.);

Strong points

- **Compact size, easy installation**
  Dimension of Modbus Gateway (Mini) is 90*55*20mm, which can be placed in anywhere satisfies the using conditions, which can be fixed with only two screws;
- **Provide standard Modbus RTU protocol interface, open the table of protocol point**
  Modbus Gateway (Mini) provides standard Modbus RTU protocol interface, open the table of Modbus protocol point (unit parameter example No.), for the integration of the building of user;
- **With ETL and CE certification**
  Modbus Gateway(Mini) has acquired the north America ETL and EU CE safety certification;

Intelligent Billing Eudemon

Gree Intelligent Billing System is a solution to power consumption calculation and billing specialized for VRF units. This system adopts Gree's unique calculation method that makes the billing more reasonable. In design, it's tailored to the features of engineering construction, making the installation less difficult. It can be widely applied in shopping centers, apartment blocks, villa clusters or other commercial or residential occasions in different sizes and for different purposes.



L1: RS485 bus for communication between gateway and KWH meter;
L2: CAN2 bus for communication between gateway and unit;
L3: Cable;
L4: ODU power supply cord;
L5: CAN1 bus for communication between IDU and ODU;
L6: IDU power supply cord;

Note:
(1) 15 systems or 255 indoor units can be connected to one Power Billing Gateway;
(2) 16 Power Billing Gateways can be connected to one set of Intelligent Billing Eudemon;
(3) One multi VRF system should be configured with one KWH meter.

5 Key Functions

- **Billing management**

  Properly distribute the electricity automatically according to ON/OFF time, mode, set temperature, indoor ambient temperature, outdoor ambient temperature etc.; provide detailed bill, operational details, etc.

- **Arrearage shutdown**

  When the air conditioner is not available due to overdue bill or other reasons, the shielding function can limit the operation of some of IDU or deactivate some of the functions such as ON/OFF of unit, operating mode, fan speed, etc.

- **Long-distance control**

  The administrator can log in the system via browser of any terminals, and conduct long-distance control for ON/OFF of IDU, temperature, mode and related controllable parameters according to billing or using situation. Meanwhile, it supports management of logging of multiple users.

- **Error alarm**

  When the air conditioning equipment is faulted, the system will report in real time, and display the detailed information of error, and at the same time record to the system database as one of the billing basis.

- **Property management**

  Achieve visible management, you may name the project, floors, tenants, and even set "alias" for indoor units. Details can be imported by one button, convenient for building management.

4 Highlights

- **Distributed design for balancing the load and reducing the risk**

  With distributed structure, the logical operation for billing is built inside the gateway. The software provides centralized management. Each device runs independently, so failure of a certain device will not affect the stability of the entire system.

- **Adopt WEB technology based on HTML5, control the system anywhere**

  The software adopts B/S structure. With system's core functions installed on the server side, the front end adopts HMTL5 technology and the web browser is the client side. You can control the system on different platforms and terminals.

- **Design according to the project, increase interactive experience for convenient debugging and use**

  It adopts visual interactive design, supports one-button import of details, engineering information, and so on, making the modification and debugging more convenient, and the operation more visualized and reliable.

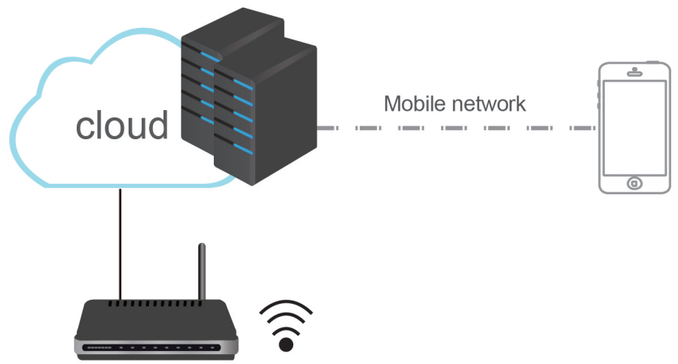
- **Compatible to different electric meters**

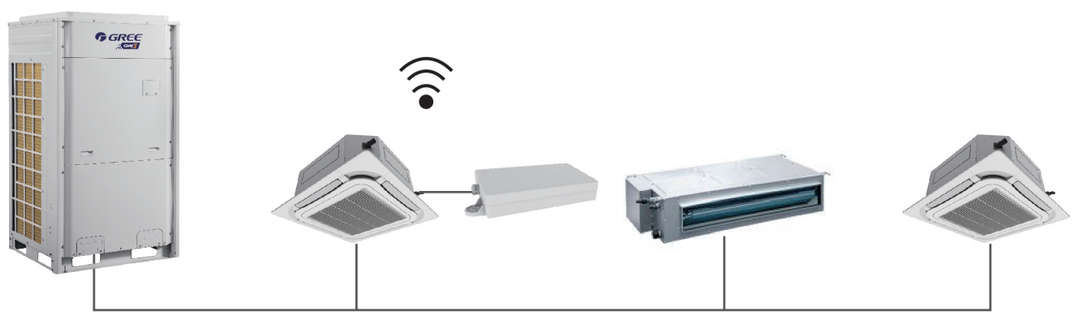
No.	Manufacturer	Electric Meter Model	Country of Origin	Satisfactory Regions (reference)
1	ENTES	EPR-04S-96	Turkey	Turkey, Middle East
2	WattNode	WNC-3D-240-MB	America	North America, Latin America
3	Siemens	PAC3200	Germany	Russia, Europe, Asia Pacific
4	Schneider	iEM3255	France	Australia, Europe
5	Wasion	DTS343	China	China

Note:
The billing eudemon is compatible to the above mentioned electric meters, either one of the electric meter can be adopted after being confirmed by the local dealer; the "Satisfactory Regions" in the list are only for reference.

G-Cloud

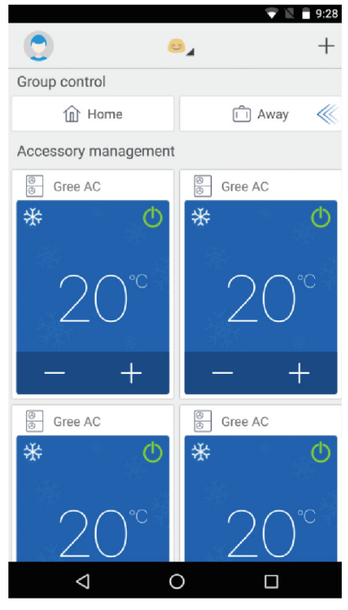
G-Cloud is a new generation WIFI smart controller of Gree commercial units. It adopts a way of operation different from remote control or wired control. It can display air conditioner running status directly to users, who can conduct point-to-point control over air conditioners through an APP. It is an important part of Gree smart home. G-Cloud is designed for intelligent home control, such as preset control, long-distance control, scene management, malfunction reminding and family access management.

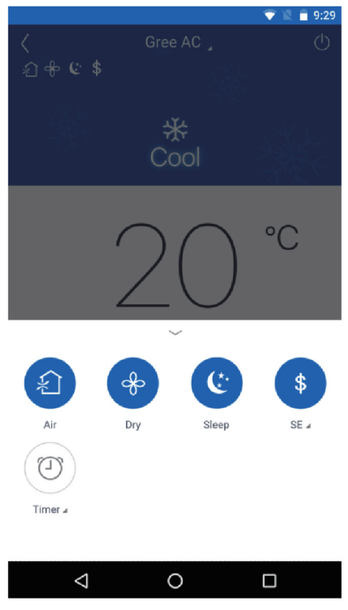




CAN1 network, multi VRF cloud control supports 80 indoor units in a single system, to realize long-distance control

System Chart





APP operation chart

- **Lightweight**
  Compact and easy to install, no need of external power source; power supplied by equipment, available for use right after connection; a shielded wire of 4 cores is required for connection; easy operation; GREE+APP easy user configuration; quick guidance is provided, with simple and clear display;

- **Smart and long-distance control**
  User can set the running status of the cooling system based on a set of rules; long-distance control allows you to master your home appliances at any time;

- **Capability**
  Multi VRF cloud control; one set of device is capable of controlling up to 80 sets of indoor units in a single system; applicable to villas, office buildings, shopping malls, hotels, etc;

- **Sensitive**
  Monitor the units and detect errors.

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.

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.

Remote Controller YAP1F



- 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.

Remote Controller YV1L1



- 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, I-feel and timer;
- With clock display, system parameters viewing and setting functions.

Wired Controller XK55

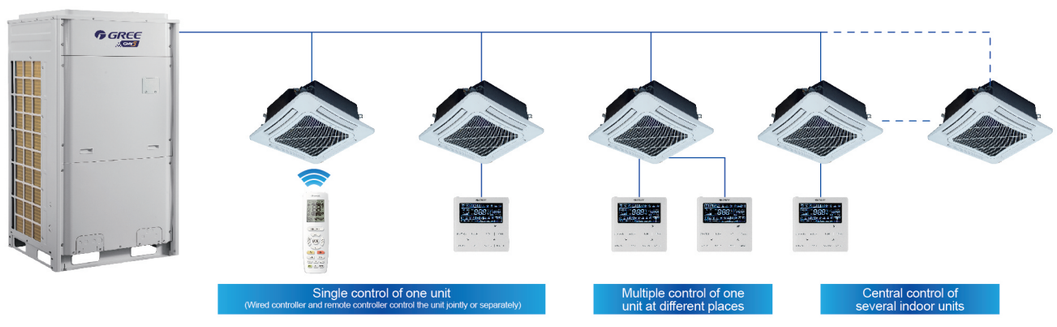


- Elegant appearance;
- High-resolution color LCD;
- Capacitive touch control; receive infrared remote controller signal;
- Various timing functions: three weekly timers and one countdown timer can be set simultaneously; mode, temperature and fan speed can be preset in weekly timer;
- Complete system 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.

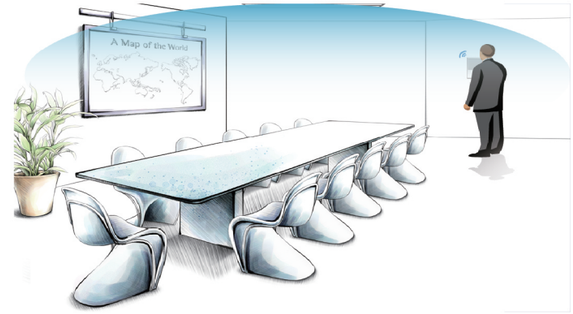
Wired Controller XK86



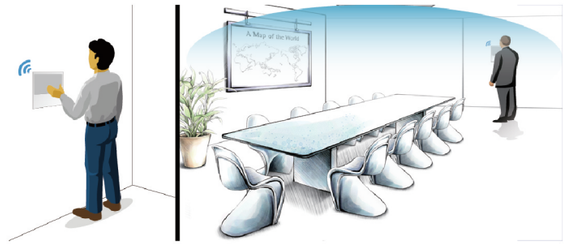
- Elegant and concise appearance;
- Touch buttons with back lighting LCD;
- Chinese and English display can be switched;
- With weekly timer function;
- Complete system functions with each function implemented in an individual page;
- Refreshing, auto dehumidifying, absence and other modes can be set;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



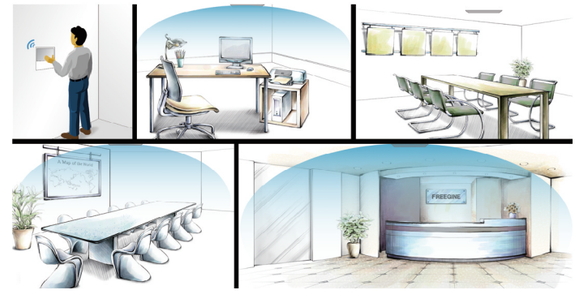
- **Single control of one unit**
  Each indoor unit has an independent controller.



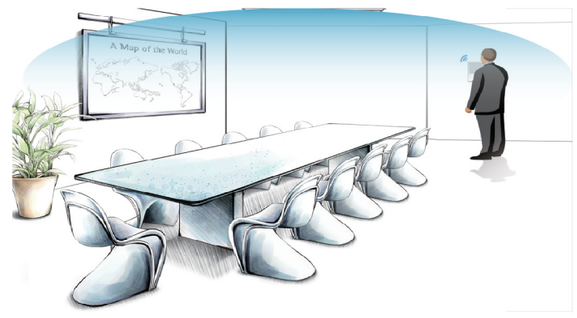
- **Multiple control of one unit**
  One indoor unit can be controlled by several wired controllers at different places.



- **Central control of several indoor units**
  One wired controller can control as many as 16 indoor units.

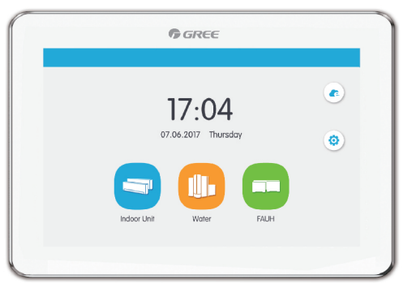


- **Joint control of remote controller and wired controller**
  Users can control one unit with two types of controllers: a remote controller which is convenient and flexible; or a wired controller which includes every function of an air conditioner.



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.);
- 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 100~240V wide voltage range;
- With project setting, parameter viewing, malfunction record and access management functions.

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



- 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;
- 100~240V 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.

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.);
- 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 100~240V wide voltage range;

Central Controller CE57-24/F(C)



- 10 inch color touch screen;
- With functions of integrated control, group management, schedule management and single indoor unit control;
- With shielding functions for single, group and all indoor units;
- Support indoor unit denomination and icon selection;
- 1275 air conditioning devices at the most can be controlled;
- Open internet interface, connecting to the building automation system (BAS);
- With functions of engineering setting, parameters check, error record, data export and authority management.

Control System Lineup

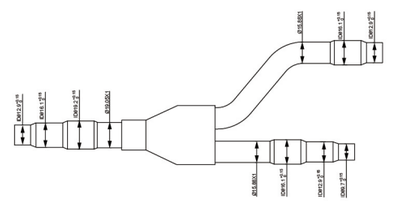
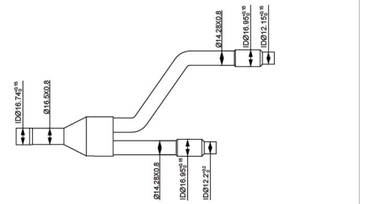
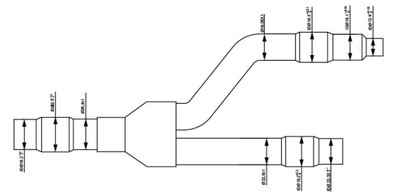
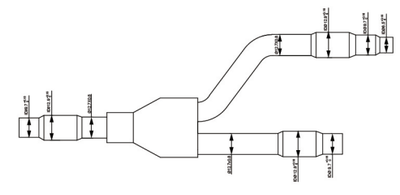
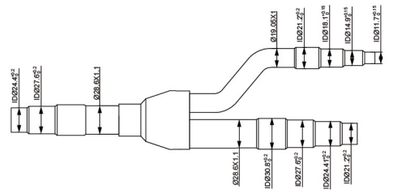
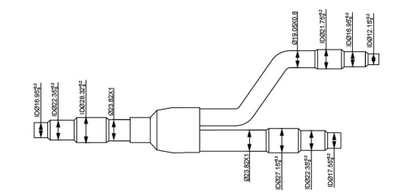
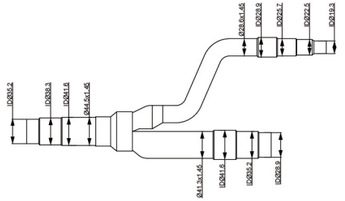
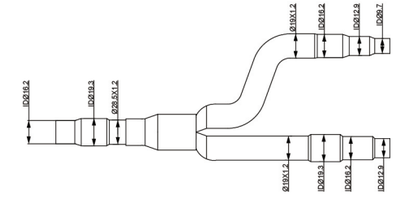
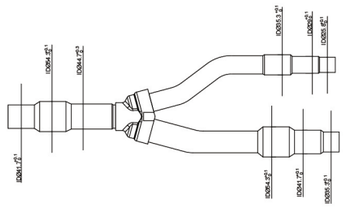
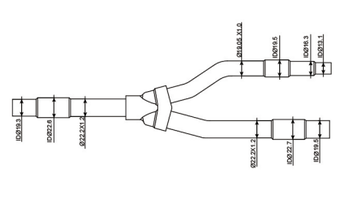
Controlling systems \ Outdoor series				GMV5	GMV5 MINI	GMV5 SLIM	GMV5C	GMV5 MAX	GMV5 HR	GMV Water
Long-distance monitor	Intelligent Remote Eudemon	FE30-24/DF(B)		○	○	○	○	○	○	
		ME30-24/DF(B)								
	Gateway of building protocol	ME30-24/E5(M)		○	○	○	○	○	○	○
		ME30-24/E6(M)		○	○	○	○	○	○	○
		ME30-24/D4(B)		○	○	○	○	○	○	○
Intelligent Billing Eudemon		FE11-24/D4(B)		○	○	○	○	○	○	
		ME11-24/D4(B)								
G-Cloud		ME31-00/C3		○	○	○	○	○	○	
Other modules	Optoelectronic isolated converter	GD02		○	○	○	○	○	○	
	Optoelectronic isolated signal mutliplier	RS485-W		○	○	○	○	○	○	

Controlling system \ Indoor series			Cassette Type	(High ESP、Low ESP、Slim Ducted) Duct Type	Fresh Air Processing	Wall mounted Type	Floor Ceiling Type	Console Type	Floor Standing Type	Air Handler	Concealed Floor Standing Type
Wireless Controller	YAP1F		●	○	○	●	●	●	●	○	○
	YV1L1		○	○	○	○	○	○	○	○	○
Wired controller	XK46		○	●	●	○	○	○	○	●	●
	XK79		○	○	○	○	○	○	○	○	○
	XK55		○	○	○	○	○	○	○	○	○
	XK86		○	○	○	○	○	○	○	○	○
	JS05(receiver)			○	○						○
Central Controller	CE52-24/F(C)		○	○	○	○	○	○	○	○	○
	CE57-24/F(C)		○	○	○	○	○	○	○	○	○
Smart Zone Controller	CE53-24/F(C)		○	○	○	○	○	○	○	○	○
E-Smart Zone Controller	CE54-24/F(C)		○	○	○	○	○	○	○	○	○

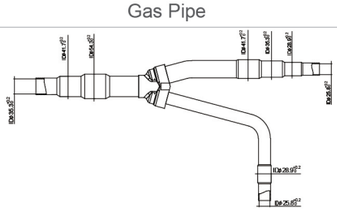
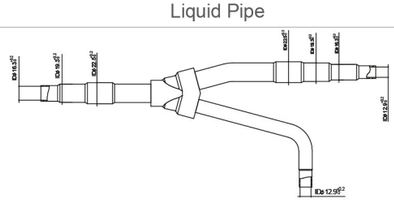
Note: ● means standard, ○ means optional.

Branching Joint (For GMV5 units)

For Indoor & Outdoor Units

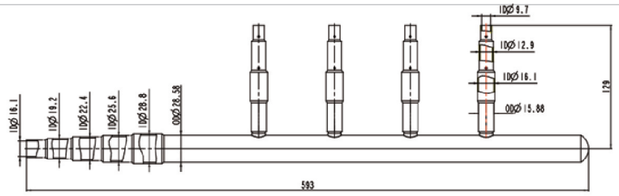
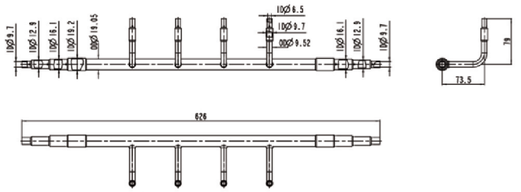
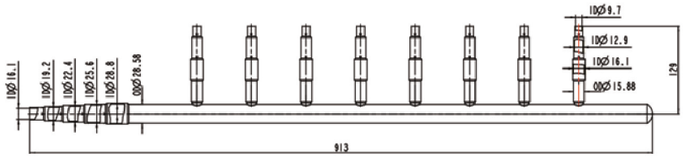
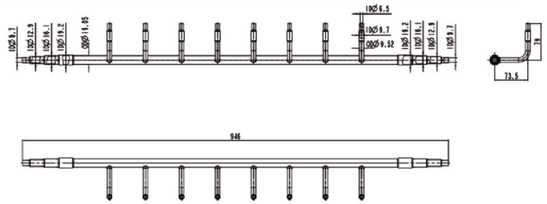
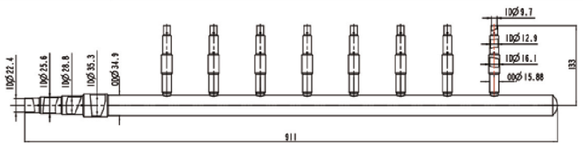
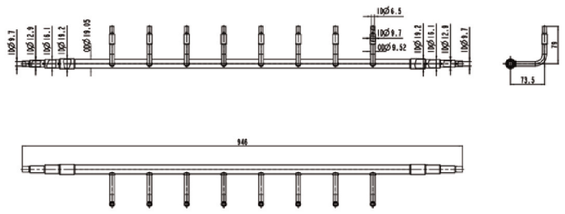
Model	Total Capacity (xkW)	Appearance	
		Gas Pipe	Liquid Pipe
FQ01A/A	X＜20		
FQ01B/A	20≤X≤30		
FQ02/A	30＜X≤70		
FQ03/A	70<X≤135		
FQ04/A	135＜X		

For Outdoor Units

Model	Appearance	
	Gas Pipe	Liquid Pipe
ML01A		

Branching Joint (For GMV5 units)

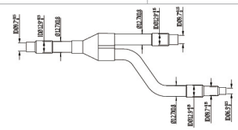
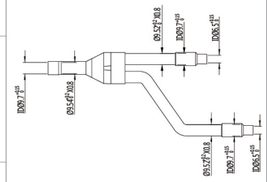
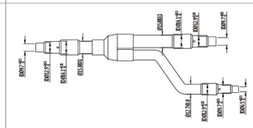
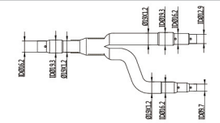
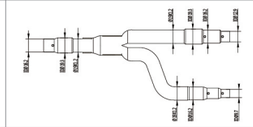
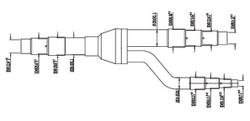
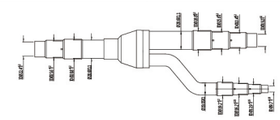
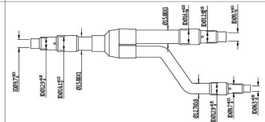
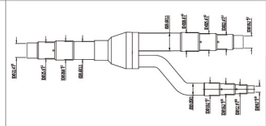
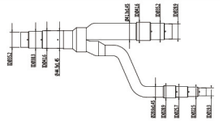
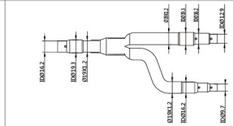
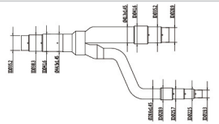
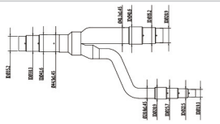
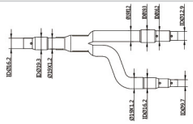
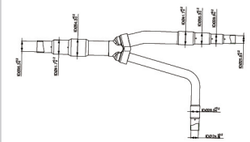
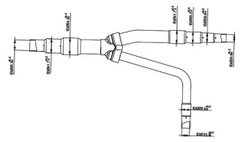
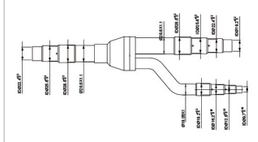
For Indoor Units

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

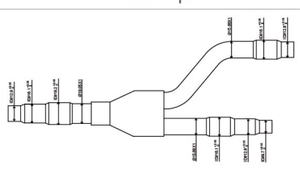
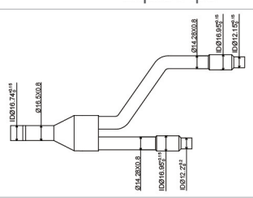
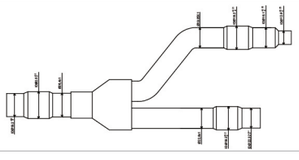
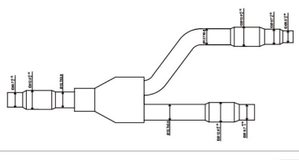
Total rated capacity of downstream indoor units X(kW)	Upstream connection pipe dimension		Model of manifold pipe
	Gas pipe(mm)	Liquid pipe(mm)	
X≤40.0	≤Φ25.4	≤Φ12.7	FQ14/H1
X≤68.0	≥Φ28.6	≥Φ15.9	FQ18/H1
68.0＜X	≤Φ31.8	≤Φ19.05	FQ18/H2

Branching Joint (For GMV5 HR)

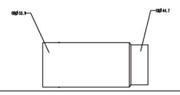
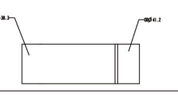
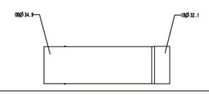
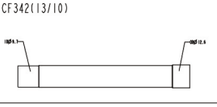
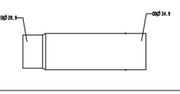
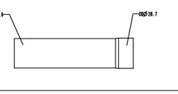
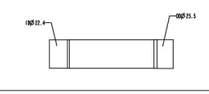
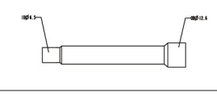
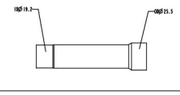
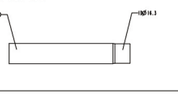
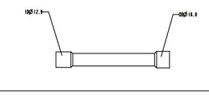
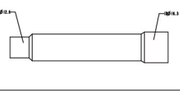
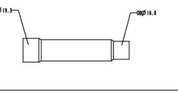
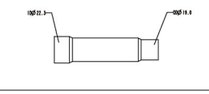
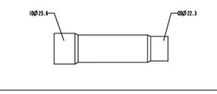
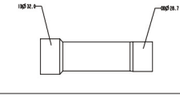
For Outdoor Units and Mode Exchanger

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

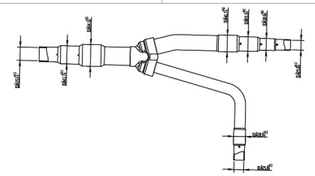
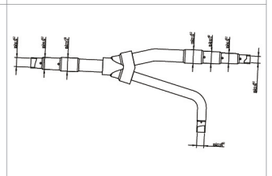
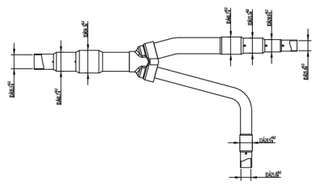
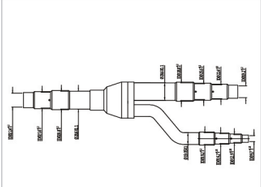
For Indoor & Mode Exchanger

Model	Total capacity of the downstream indoor units X(Kw)	Appearance	
		Gas Pipe	Liquid Pipe
FQ01A/A	X≤14.2		
FQ01B/A	14.2＜X≤28.0		

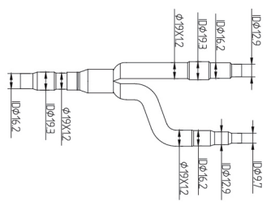
Reducer/expander pipe dimensions

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

For Outdoor Units

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

Branching Joint (For AHU KIT)

Model	Appearance
	Liquid Pipe
FQ01U/A	

Energy Recovery Ventilation(ERV)

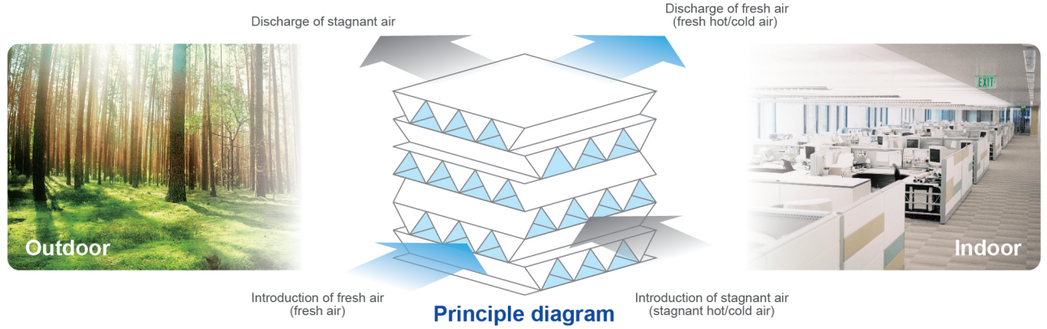


- Air flow: 350~3000m³/ h
- Energy Recovery Ventilation System can introduce the fresh air freely on the condition that all the windows closed or exhausted fan uninstalled. It can solve the problem of stagnant air effectively.

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

Adopt Advanced Heat Exchange Core

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.



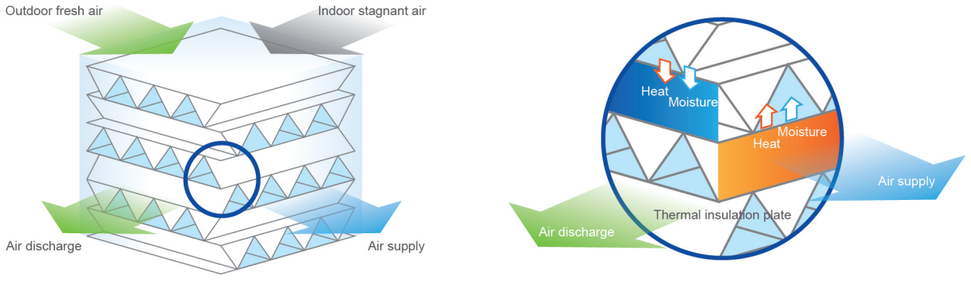
Principle diagram

Double-way Ventilation for Fresh Air

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

No Cross Contamination for Ensuring Healthy Fresh Air

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



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.

Energy Recovery Ventilation(ERV)

Model			FHBQ-D3.5-K	FHBQ-D5-K	FHBQ-D8-K	FHBQ-D10-K	FHBQ-D15-M	FHBQ-D20-M	FHBQ-D30-M
Air flow volume	H/M/L	m³/ h	350	500	800	1000	1500	2000	3000
ESP	H/M/L	Pa	100	100	110	110	150	150	220
Temperature exchange efficiency	H/M/L	%	71	68	70	73	73	71	70
Enthalpy exchange efficiency(H/M/L)	Heating	%	65	62	63	66	65	62	62
	Cooling	%	61	57	60	62	60	58	58
Power supply		Ph/V/Hz	1/220/50	1/220/50	1/220/50	1/220/50	3/380/50	3/380/50	3/380/50
Power input		kW	0.17	0.26	0.40	0.44	0.80	0.95	2.80
Sound Pressure Level		dB(A)	37	39	45	46	48	50	54
Dimension (W×D×H)	Outline	mm	800×879×306	800×879×306	832×1016×380	832×1016×380	1210×1215×452	1210×1215×452	1340×1550×572
	Package	mm	1050×1165×315	1050×1165×315	1087×1320×400	1087×1320×400	1540×1550×470	1540×1550×470	1610×1710×700
Net weight		kg	45	45.0	57.0	57.0	110.0	110.0	215.0
Gross weight		kg	53	53.0	66.5	66.5	130.0	130.0	236.0
Loading quantity	40'GP	set	147	147	85	85	37	37	24
	40'HQ	set	168	168	104	104	44	44	24
Standard wired remote controller			Z4E35M	Z4E35M	Z4E35M	Z4E35M	Z4E35M	Z4E35M	/

Model			FHBQ-D3.5-D*1	FHBQ-D5-D	FHBQ-D8-D*1	FHBQ-D10-D	FHBQ-D15-D*1	FHBQ-D20-D*1
Air flow volume	H/M/L	m³/ h	350	500	800	1000	1500	2000
ESP	H/M/L	Pa	100	100	100	110	150	150
Temperature exchange efficiency	H/M/L	%	71	68	70	75	73	71
Enthalpy exchange efficiency(H/M/L)	Heating	%	65	62	63	66	65	58
	Cooling	%	61	57	60	62	60	62
Power supply		Ph/V/Hz	1/220/60	1/220/60	1/220/60	1/220/60	3/220/60	3/220/60
Power input		kW	0.35	0.262	0.50	0.50	1.10	1.45
Sound Pressure Level		dB(A)	45	39	50	46	60	61
Dimension (W×D×H)	Outline	mm	800×879×306	800×879×306	832×1016×380	832×1016×380	1210×1215×452	1210×1215×452
	Package	mm	1050x1165x315	1050×1165×315	1087×1320×400	1087×1320×400	1540×1550×470	1540×1550×470
Net weight		kg	43	45	57	57	110	110
Gross weight		kg	51	53	67	67	130	130
Loading quantity	40'GP	set	147	147	85	85	37	37
	40'HQ	set	168	168	104	104	44	44
Standard wired remote controller			Z4E35M	Z4E35M	Z4E35M	Z4E35M	Z4E35M	Z4E35M

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

Control System Lineup

Control system / Product series			ERV
Wired controller	Z4E35M		●
Interface of the main board	BMS		●
Optoelectronic isolated converter	RS232-RS422\485		○
Optoelectronic isolated signal multiplier	RS-422\485		○

Note: ● means standard, ○ means optional.

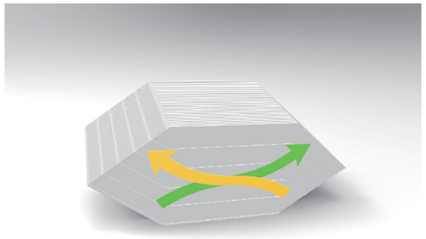
Energy Recovery Ventilation(ERV)



Gree Energy Recovery Ventilation System is designed especially for providing healthy and fresh indoor air, constant air volume and comfortable temperature and humidity with less power consumption. With F7-grade filter, it can effectively remove PM10, PM2.5 and other particles in the air; through the total heat exchange core that is made of high-polymer material, the air led from the outside will have efficient heat exchange with the discharged air. Heat exchange efficiency is up to 78%. It is applicable to houses, villas, banks, office buildings and other places with fresh air demand.

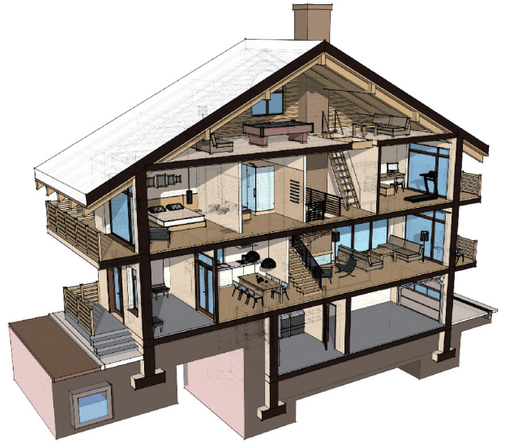
Adopts Hexahedral Total Heat Exchange Core

It adopts hexahedral total heat exchange core, which provides reverse ventilation passage for fresh air and discharged air while preventing the mixture of fresh air and discharged air. Temperature exchange efficiency is 78% at most.



Air Volume Multi-selection Control

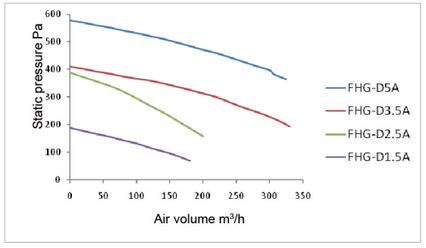
5 selections of air volume are available. Each selection differs obviously from another. It can satisfy different fresh air requirements under different housing areas and different pipe dimensions.



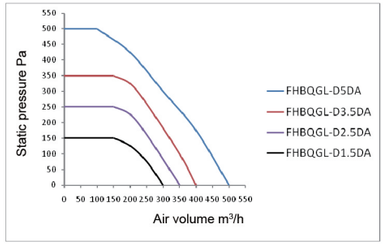
350 m^3/h	High
300 m^3/h	Medium high
250 m^3/h	Medium
200 m^3/h	Medium low
150 m^3/h	Low

Constant Fresh Air Volume

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



Air volume/static pressure curve of common AC motor

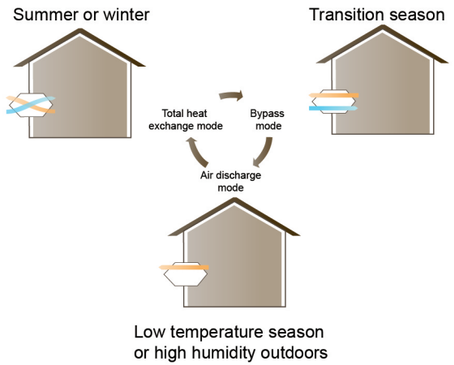


Air volume/static pressure curve of DC motor

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

Comfortable Temperature and Humidity

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

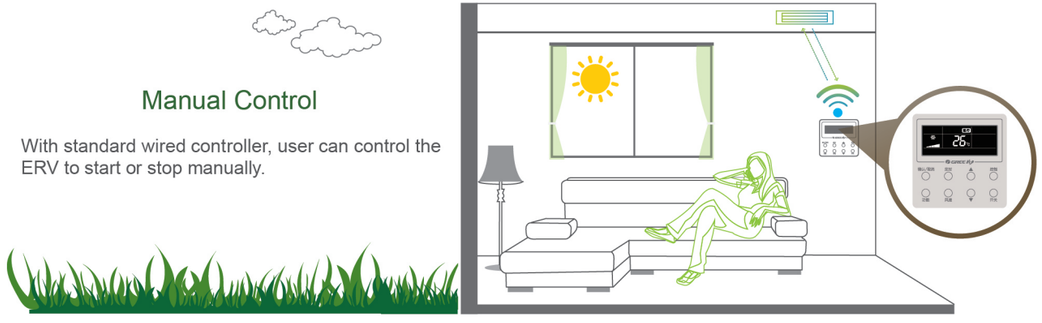


Intelligent Control

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

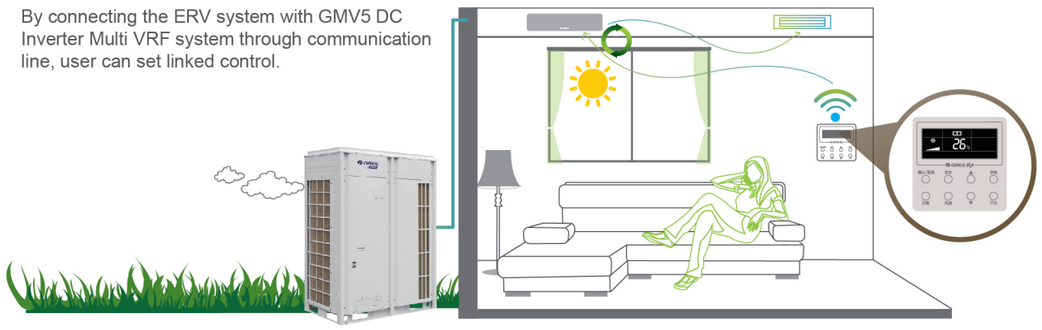
Manual Control

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



Linked Control

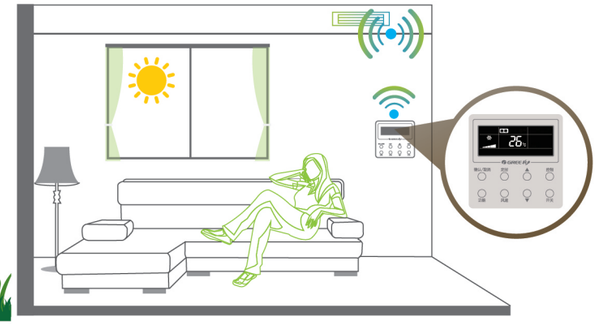
By connecting the ERV system with GMV5 DC Inverter Multi VRF system through communication line, user can set linked control.



Auto Control

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

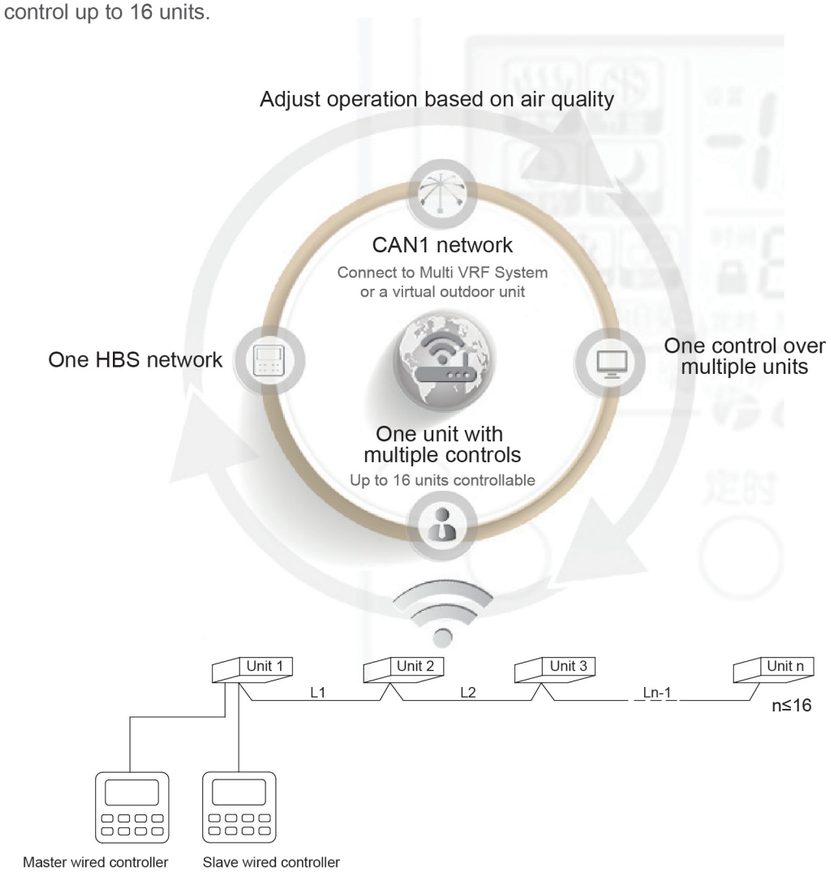
●When the air quality detection box detects that indoor air quality is bad, the ERV system will start up automatically and introduce fresh air into the room;
●When the air quality detection box detects that indoor air quality is good, the ERV system will be shut off automatically. You can enjoy fresh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



Note on auto control function: when you use the air quality box, it can display indoor air quality grade, CO2 and PM2.5 value, as well as the indoor temperature and humidity.

"One unit with multiple controls" and "one control over multiple units"

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



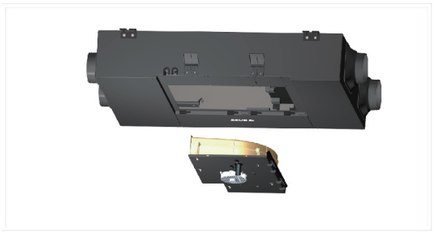
Smart Structural Design

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











Control System Lineup

Control system \ Product series			ERV 
Wired Controller	XK112		●
Centralized Controller	CE53-24F(C)		○

Note：● means standard, ○ means optional.

Specifications

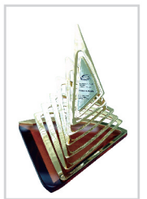
Model				FHBQGL-D1.5DA-S	FHBQGL-D2.5DA-S	FHBQGL-D3.5DA-S	FHBQGL-D5DA-S
Rated voltage			V	220~240V	220~240V	220~240V	220~240V
Rated Frequency			Hz	50/60	50/60	50/60	50/60
Power input			kW	0.05	0.1	0.15	0.3
Current input			A	0.35	0.7	1	1.9
Indoor unit	Airflow volume		CFM	88	147	206	294
			m^3/h	150	250	350	500
	ESP	Rated	Pa	100	100	100	100
	Thermal exchange efficiency		%	78	75	65	75
	Sound power level		dB(A)	39	44	49	55
	Dimension	Outline	mm	1160×700×220	1160×700×220	1200×785×240	1385×785×240
	(W×D×H)	Package	mm	1465×870×270	1465×870×270	1525×970×290	1708×970×290
	Net Weight/Gross weight		kg	50/58.5	50/58.5	60/70.5	71.5/82.5
Ventiduct	Outer diameter		mm	160	160	160	200
Loading quantity	20'GP/40'GP/40'HQ		set	82/172/195	82/172/195	57/121/140	54/117/131

Note

Note

Note

Award and Certification

















ISO 9001 Quality System Certificate

ISO 14001 Environment Management System Certificate

ISO 18001 Occupation Healthy Safety System Certificate

Canadian CSA Certificate

German TÜV Certificate

3C Certificate

European Communities CE Certificate

American UL Certificate

Russian Safety Certificate

EQM

SASO Certificate

Mexico NOM Safety Certificate

German GS Certificate

European EMC Certificate

Argentina Safe Certificate

China EMC Certificate

Hongkong Energy-saving Certificate

Hongkong Safety Certificate

Australian SAA Safe Certificate

Australia SAA Certificate

CQC Certificate

America ETL Certificate

Canadian ETL Certificate

Thailand TIS Certificate