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Distributor information

GREE
AIR CONDITIONER

MIDDLE EAST

GREE Multi VRF 5



GMV5

DC Inverter Multi VRF System

CONTENTS

01 GMV5

29 GMV5 Mini & Slim

41 GMV5 CP

49 GMV5 MAX

57 GMV5 Heat Recovery

71 GMV Water

101 Control System

129 Energy Recovery Ventilation (ERV)

135 ERV + DX Coil



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 the best air conditioning experience.



GMV5



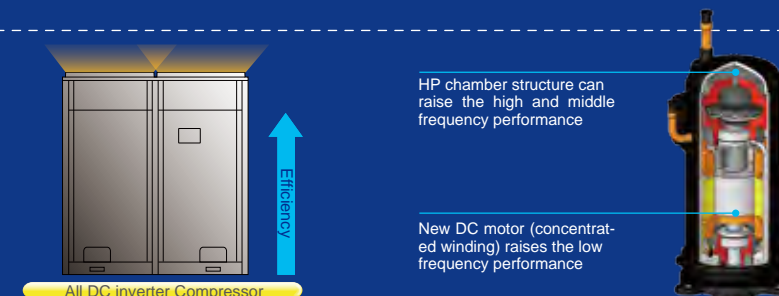
Key Features

All DC Inverter Technology to Improve Compression Efficiency

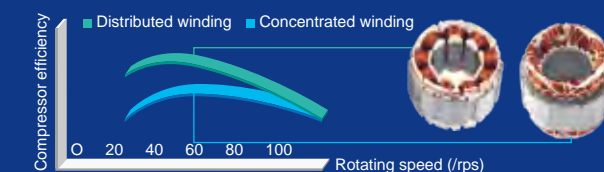
All DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyon motor is adopted to provide better performance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

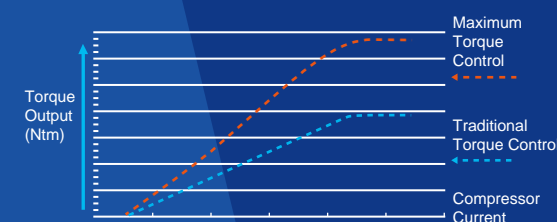


- High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.



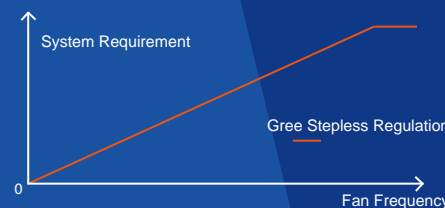
Technology of Maximum Torque Control with Minimum Current

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

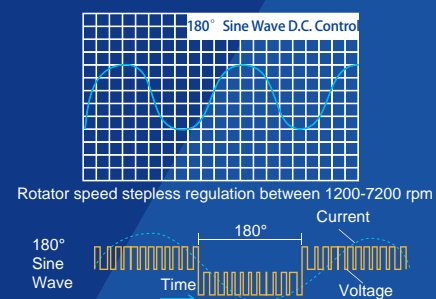
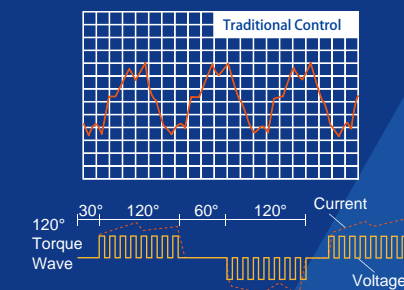


Low-frequency Torque Control

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.

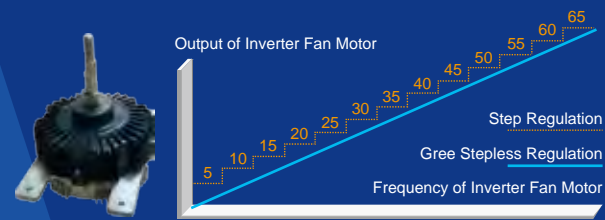


- 180° Sine Wave DC Speed Varying Technology
It can satisfy various places' demands for different temperature and is able to save a great deal of electricity and provide users with utmost comfort at the same time.



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.



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.



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.

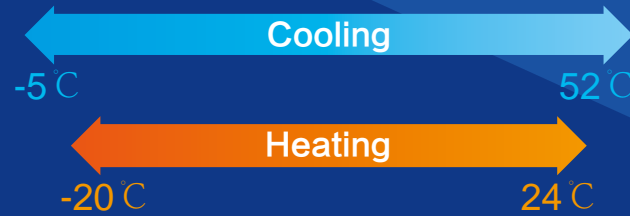
Performance Index	Company A Multi-VRF Network	GMV5 DC Inverter CAN Network
Reliability	Software check	Hardware check, more reliable
	One unit's communication error may lead to breakdown of the whole network	If one unit has errors, it will exit from the network without any influence to other units.
Communication 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 expanded to **-5℃~52℃ in cooling** and **-20℃~24℃ in heating**.



Note*: The cooling operation range of GMV5(Kuwait) series is -5℃~55℃.

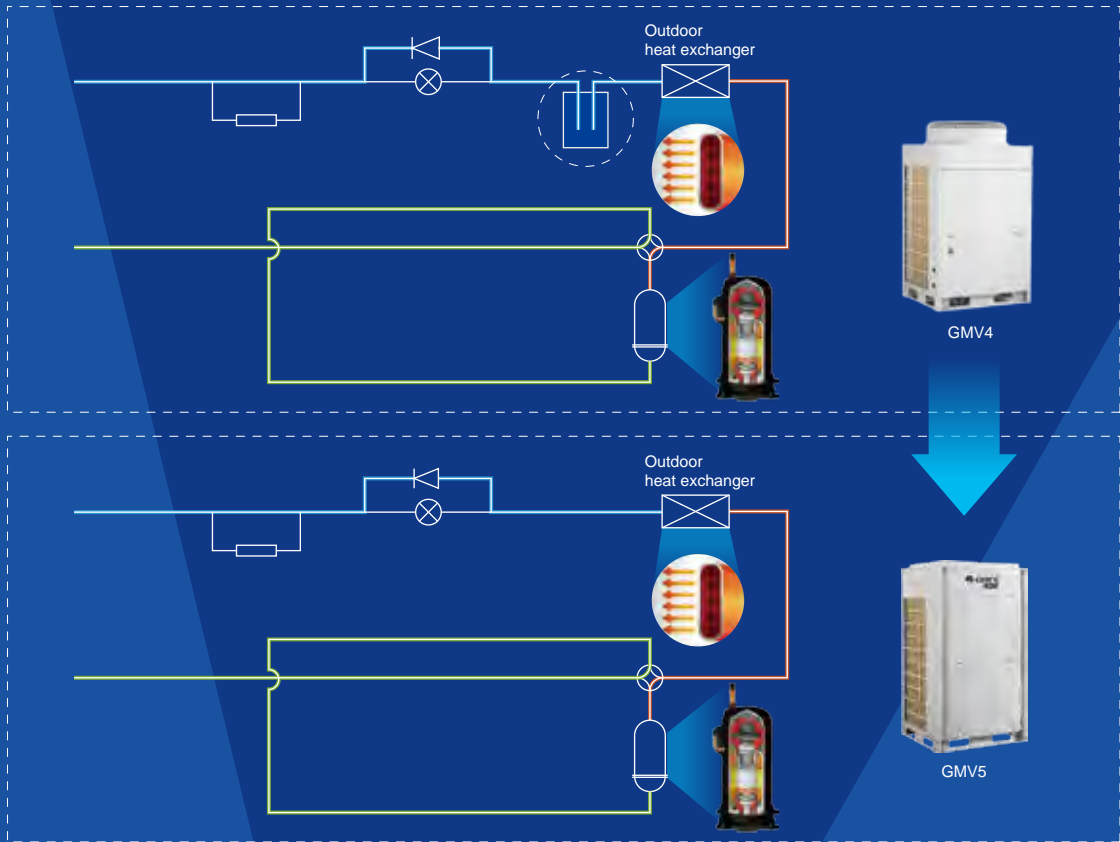
Wider Applicable Location

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



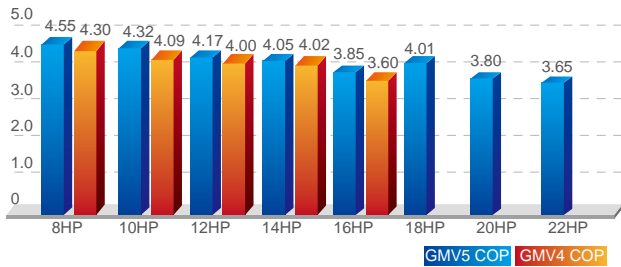
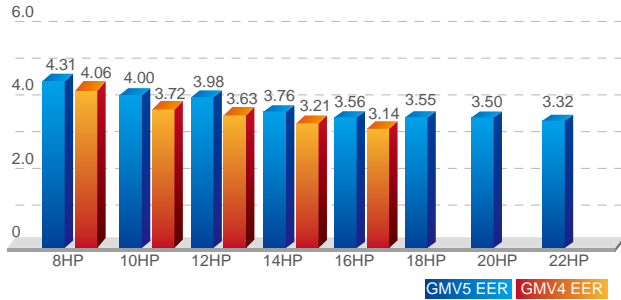
Refrigerant Storage and Distribution

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, take model GMV-**WM/B-X for example, 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%

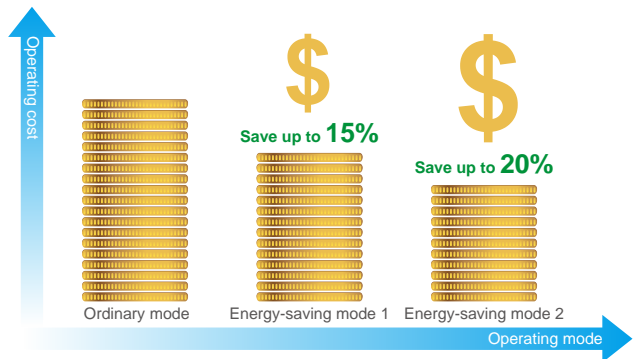
The GMV5 system has 2 modes for energy saving, which can be chosen to meet different electricity demands.

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.

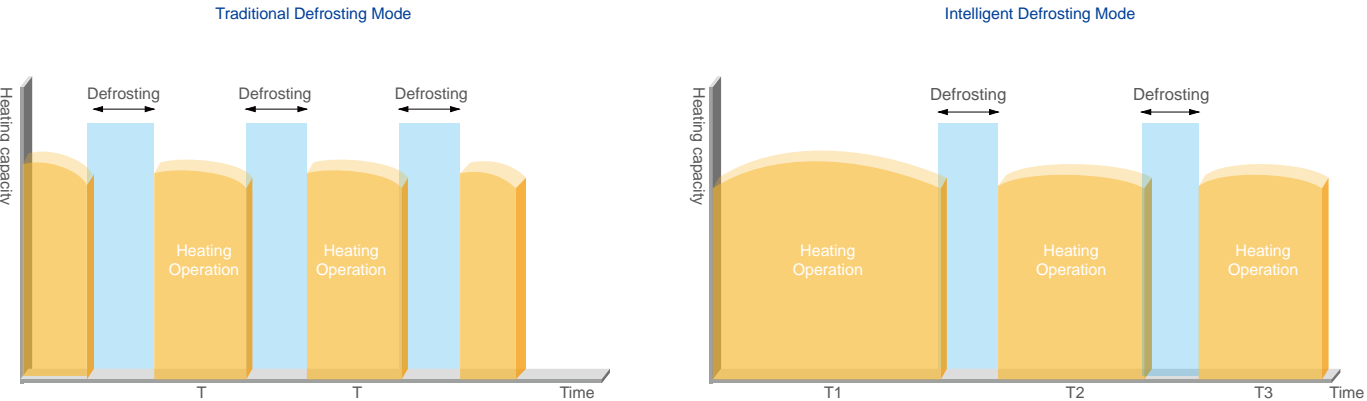
Mode 2:

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



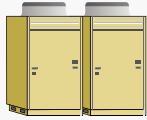
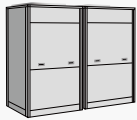
Intelligent Defrosting Control

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.



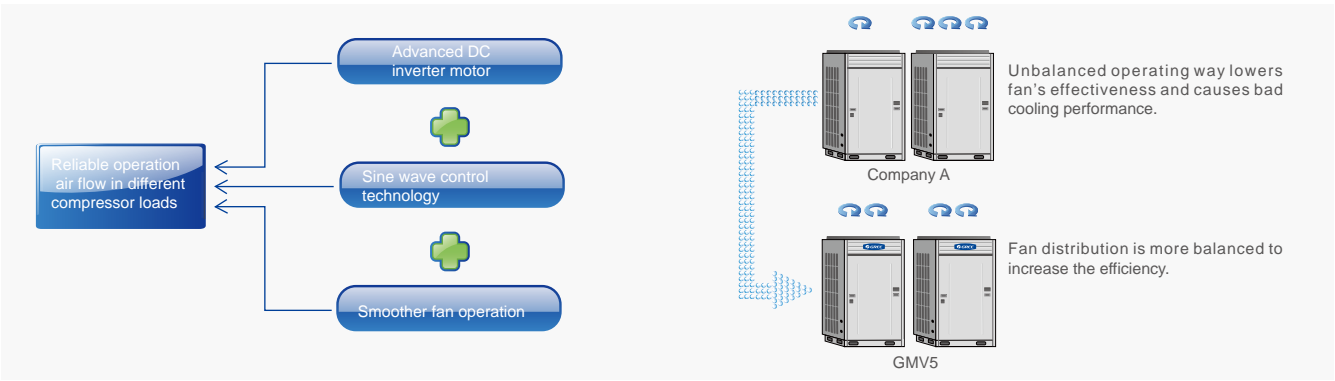
Accurate Intelligent Allocation Technology of Capacity and Output of Optimal Portion to Ensure Highest Efficiency

- 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 damaged soon.	Unit costs less energy and can always be kept in good condition.

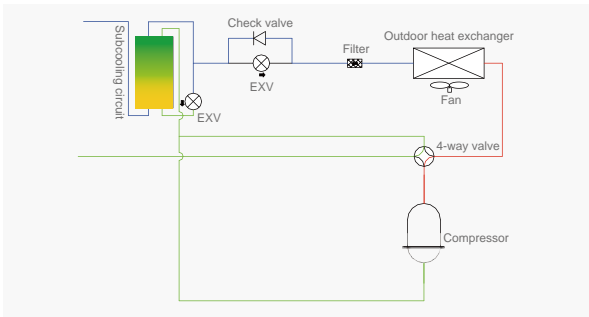
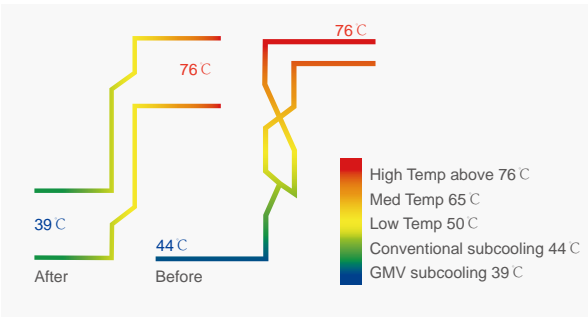
Output of Optimal Portion to Ensure Highest Efficiency

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.

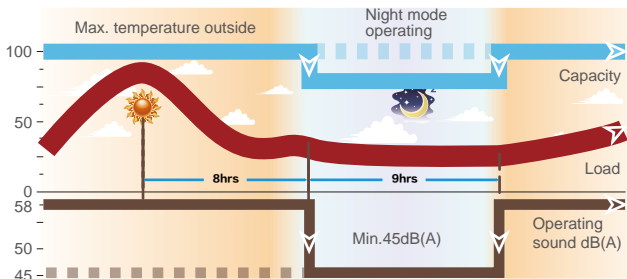
Comfortable Design for a Better Life

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 lowest noise, making users feel more comfortable.

Outdoor Unit Quiet Mode and Quiet Control

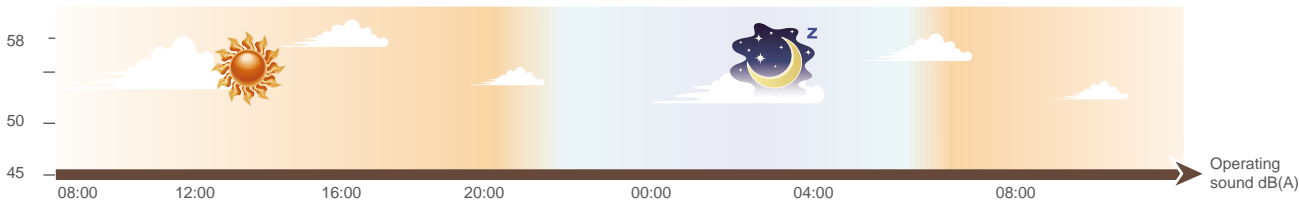
Quiet at Night

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.



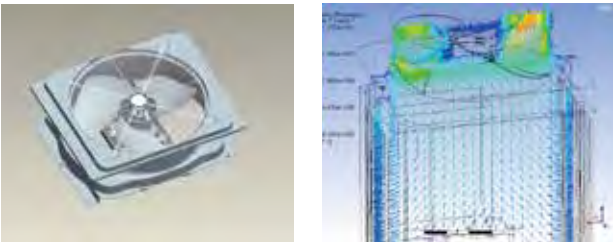
Quiet in Compulsion

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).

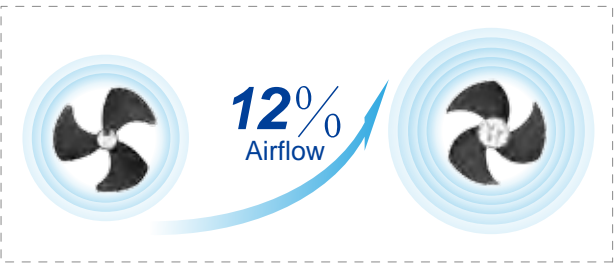


Quiet Control

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).

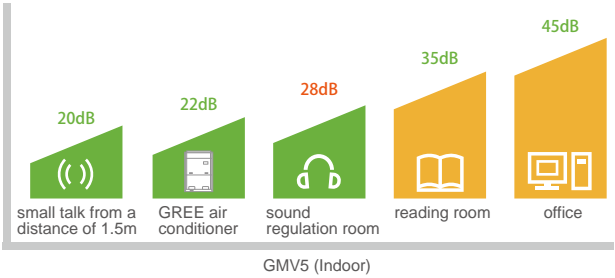


2. Aerodynamics 3D Axial Fan
Compared with conventional fan, it can increase air volume by 12%, improving efficiency as well as reducing noise.



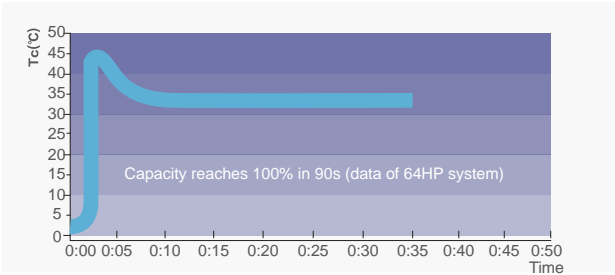
Quiet Indoor Unit

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).



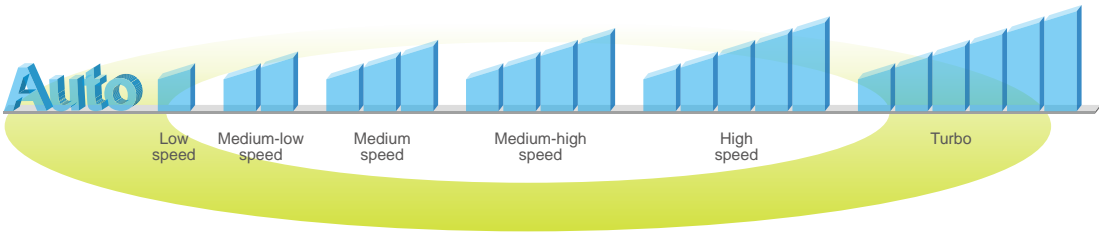
Fast Start-up in Heating

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

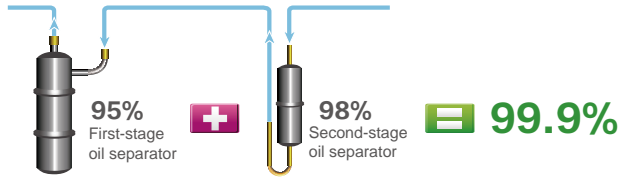
Indoor fan speed can be set in 7 levels by wired controller. They are auto, low speed, medium-low speed, medium speed, medium-high speed, high speed and turbo.



Excellent Performance Ensured by Advanced Technology

Two-stage Oil Separation Control Technology (Patented)

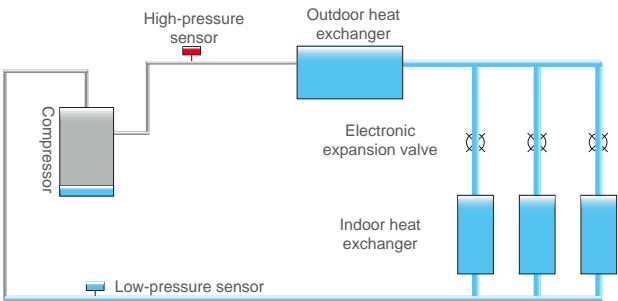
First-stage oil separator adopts a filtration expansion valve with separation efficiency of 98%; Second-stage oil separator will separate the remained 2% refrigerant oil with separation efficiency of 95%. General oil separation efficiency reaches 99.9%.



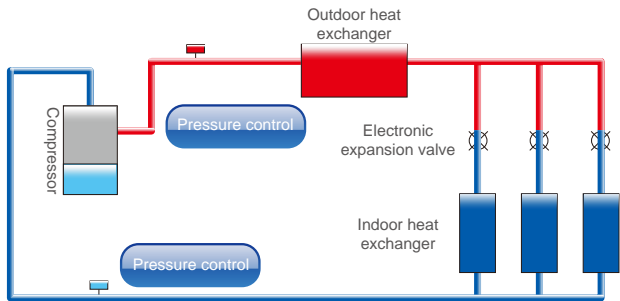
Oil Return Control Technology

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.



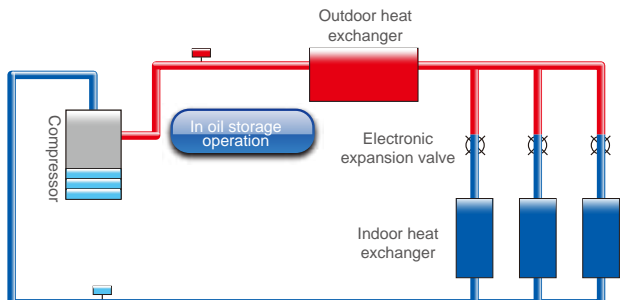
Oil storage status before oil return



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.

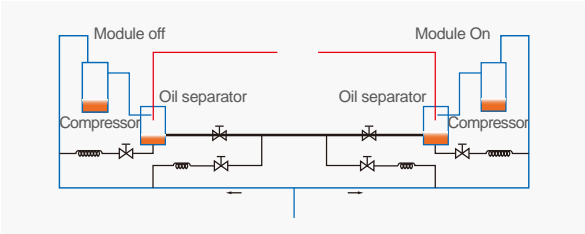


Oil storage operation

Oil Balance Control Technology

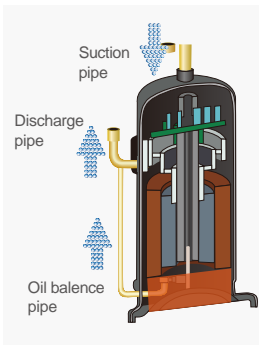
Oil Balance Between Each Module

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

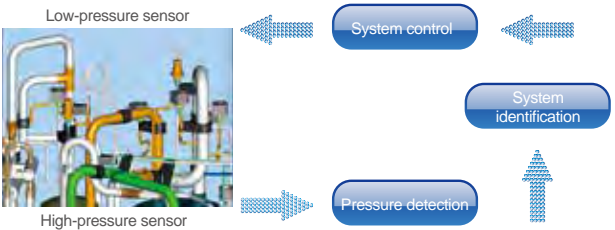
Refrigerant is taken into the compressor by the suction pipe and then runs through the cooling system. It can control the oil level and minimum oil volume required by each compressor so as to realize oil balance between each compressor.



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.

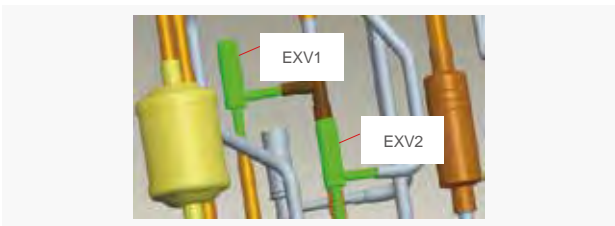


Temperature Sensor Detection Control

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

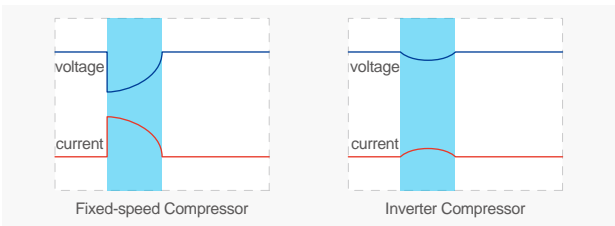
Multi Electronic Expansion Valves Control

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

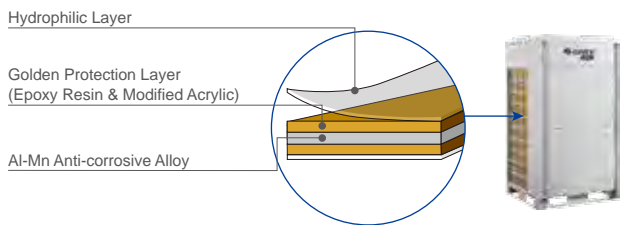
The operating priority sequence of the outdoor unit modules will be changed without restart when the system accumulatively operates for 8 hours, which can maximize the service life of the system.



Highly Anticorrosive Golden Fins

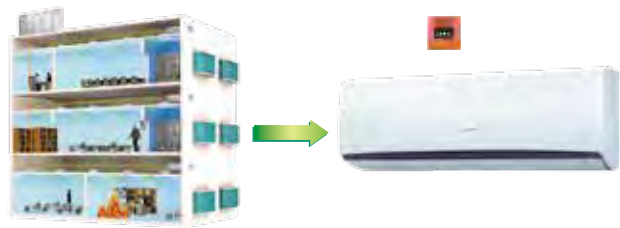
The primary material of Golden Fin is Al-Mn(Aluminum-Manganese) anti-rust alloy, which is coated with the Golden Protection Layer(Components: Epoxy Resin & Modified Acrylic, Sillcon free), the anti-corrosive performance in salt-spray testing is 200%~300% higher than normal Blue Fin*.

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



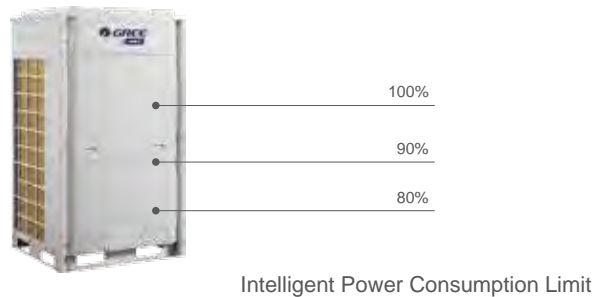
Emergency Auto-Off Control

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% or 80% of the capacity of complete unit. In this case, user can have more selection at the power consumption limited time period.



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

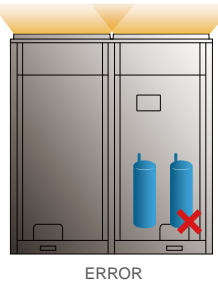
Emergency Function

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.



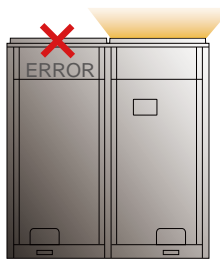
Emergency Operation of Compressor

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



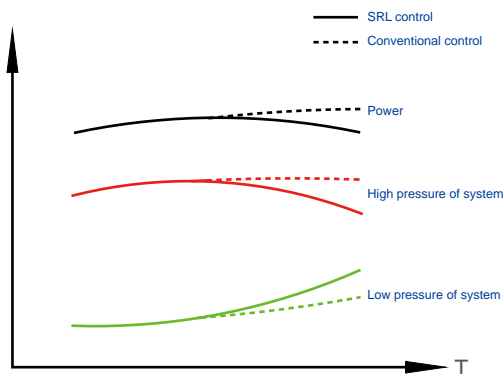
Emergency Operation of Fan

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.

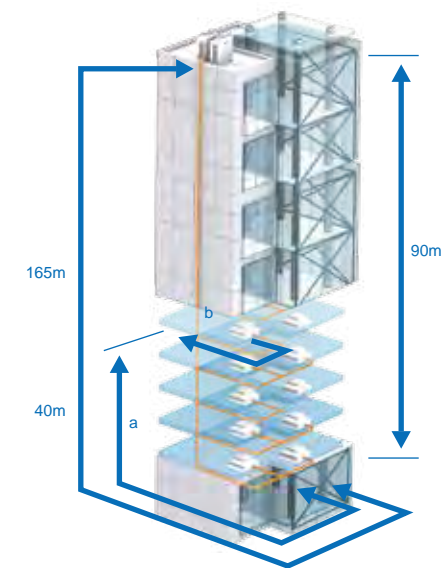


1000m Pipe Design for Flexible Installation

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 first branch and the nearest indoor unit.
a-b≤40m



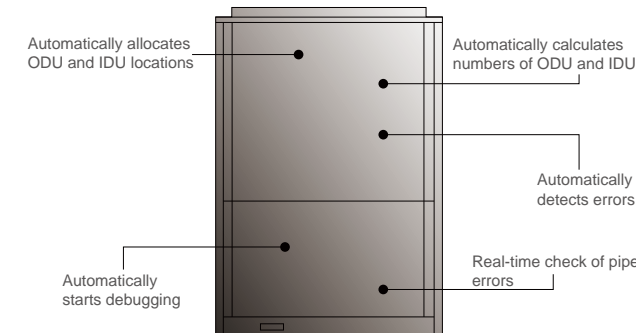
Engineering Debugging for Convenient Construction

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:

- ① Button debugging of outdoor unit
- ② Special GMV debugging system
- ③ CE41-24/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



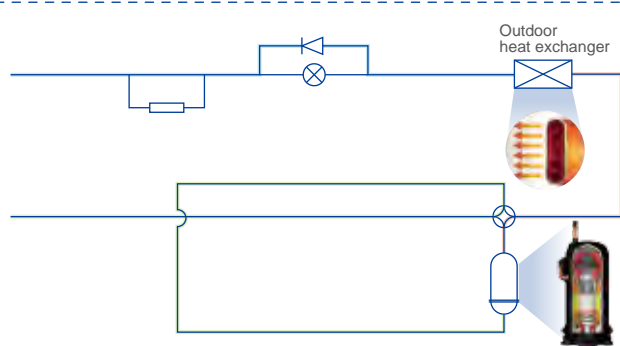
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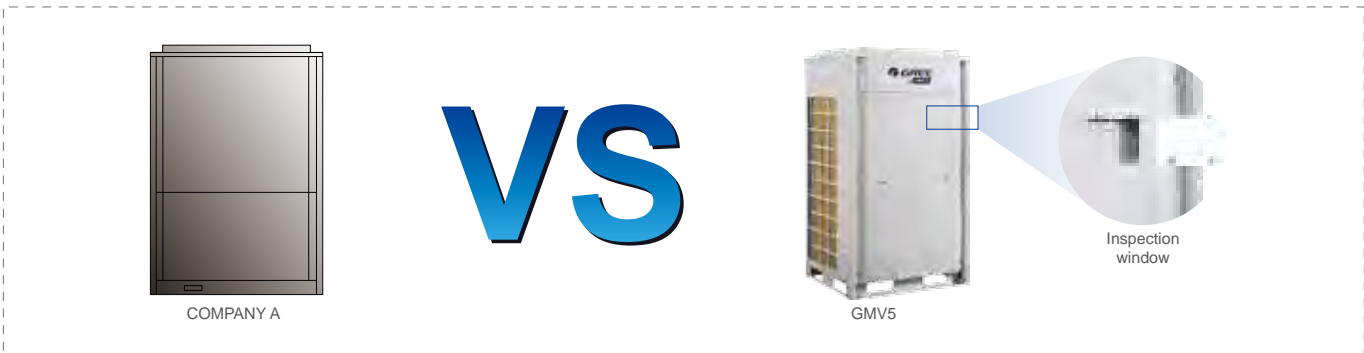
Auto-refrigerant Recovery for Easy Maintenance

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.



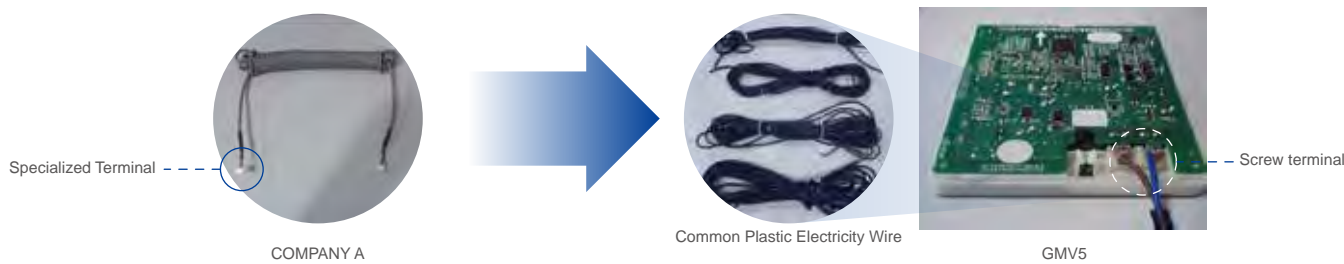
Inspection Window for Convenient Checking

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.



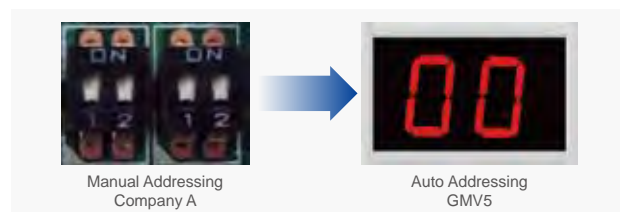
Flexible Wiring

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.

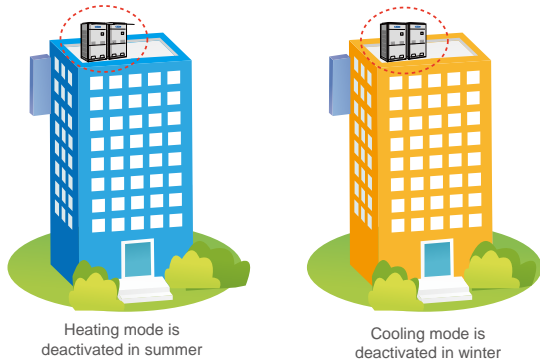


Professional Hotel Functions

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

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

Model	GMV-224WME-X	GMV-280WME-X (GMV-280WME1-X)	GMV-335WME-X	GMV-400WME-X	GMV-450WME-X (GMV-450WME1-X)	GMV-504WME-X	GMV-560WME-X	GMV-615WME-X
GMV-224WME-X	●							
GMV-280WME-X (GMV-280WME1-X)		●						
GMV-335WME-X			●					
GMV-400WME-X				●				
GMV-450WME-X (GMV-450WME1-X)					●			
GMV-504WME-X						●		
GMV-560WME-X							●	
GMV-615WME-X								●
GMV-680WME-X		●		●				
GMV-730WME-X		●			●			
GMV-785WME-X		●				●		
GMV-850WME-X		●					●	
GMV-900WME-X		●						●
GMV-960WME-X			●					●
GMV-1010WME-X				●				●
GMV-1065WME-X					●			●
GMV-1130WME-X						●		●
GMV-1180WME-X							●	●
GMV-1235WME-X								●●
GMV-1300WME-X		●			●		●	
GMV-1350WME-X		●			●			●
GMV-1410WME-X			●		●			●
GMV-1460WME-X		●					●	●
GMV-1515WME-X		●						●●
GMV-1580WME-X			●					●●
GMV-1630WME-X				●				●●
GMV-1685WME-X					●			●●
GMV-1750WME-X						●		●●
GMV-1800WME-X							●	●●
GMV-1845WME-X								●●●
GMV-1908WME-X		●			●		●	●
GMV-1962WME-X		●				●	●	●
GMV-2016WME-X		●					●●	●
GMV-2072WME-X		●					●	●●
GMV-2128WME-X		●						●●●
GMV-2184WME-X			●					●●●
GMV-2240WME-X				●				●●●
GMV-2295WME-X					●			●●●
GMV-2350WME-X						●		●●●
GMV-2405WME-X							●	●●●
GMV-2460WME-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.

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

Model	GMV-224WM/E-X(S)	GMV-280WM/E-X(S) GMV-280WM/E1-X(S)	GMV-335WM/E-X(S)	GMV-400WM/E-X(S)	GMV-450WM/E-X(S) GMV-450WM/E1-X(S)	GMV-504WM/E-X(S)	GMV-560WM/E-X(S)	GMV-615WM/E-X(S)
GMV-224WM/E-X(S)	●							
GMV-280WM/E-X(S) GMV-280WM/E1-X(S)		●						
GMV-335WM/E-X(S)			●					
GMV-400WM/E-X(S)				●				
GMV-450WM/E-X(S) GMV-450WM/E1-X(S)					●			
GMV-504WM/E-X(S)						●		
GMV-560WM/E-X(S)							●	
GMV-615WM/E-X(S)								●
GMV-680WM/E-X(S)		●		●				
GMV-730WM/E-X(S)		●			●			
GMV-785WM/E-X(S)		●				●		
GMV-850WM/E-X(S)		●					●	
GMV-900WM/E-X(S)		●						●
GMV-960WM/E-X(S)			●					●
GMV-1010WM/E-X(S)				●				●
GMV-1065WM/E-X(S)					●			●
GMV-1130WM/E-X(S)						●		●
GMV-1180WM/E-X(S)							●	●
GMV-1235WM/E-X(S)								●●
GMV-1300WM/E-X(S)		●			●		●	
GMV-1350WM/E-X(S)		●			●			●
GMV-1410WM/E-X(S)			●		●			●
GMV-1460WM/E-X(S)		●					●	●
GMV-1515WM/E-X(S)		●						●●
GMV-1580WM/E-X(S)			●					●●
GMV-1630WM/E-X(S)				●				●●
GMV-1685WM/E-X(S)					●			●●
GMV-1750WM/E-X(S)						●		●●
GMV-1800WM/E-X(S)							●	●●
GMV-1854WM/E-X(S)								●●●
GMV-1908WM/E-X(S)		●			●		●	●
GMV-1962WM/E-X(S)		●				●	●	●
GMV-2016WM/E-X(S)		●					●●	●
GMV-2072WM/E-X(S)		●					●	●●
GMV-2128WM/E-X(S)		●						●●●
GMV-2184WM/E-X(S)			●					●●●
GMV-2240WM/E-X(S)				●				●●●
GMV-2295WM/E-X(S)					●			●●●
GMV-2350WM/E-X(S)						●		●●●
GMV-2405WM/E-X(S)							●	●●●
GMV-2460WM/E-X(S)								●●●●

Note: Due to the same capacity. GMV-280WM/E1-X(S) model and GMV-280WM/E-X(S) can replace each other for operation. GMV-450WM/E1-X(S) model and GMV-450WM/E-X(S) model can replace each other for operation.

GMV5

GMV5 (Kuwait) Outdoor Units Lineup (380-415V, 50/60Hz)

Model	GMV-224WM/B-X(K)	GMV-280WM/B-X(K)	GMV-335WM/B-X(K)
GMV-224WM/B-X(K)	<div></div>		
GMV-280WM/B-X(K)		<div></div>	
GMV-335WM/B-X(K)			<div></div>
GMV-450WM/B-X(K)	<div></div>		
GMV-504WM/B-X(K)	<div></div>	<div></div>	
GMV-560WM/B-X(K)	<div></div>		<div></div>
GMV-615WM/B-X(K)		<div></div>	<div></div>
GMV-680WM/B-X(K)			<div></div>
GMV-730WM/B-X(K)	<div></div>	<div></div>	
GMV-785WM/B-X(K)	<div></div>		<div></div>
GMV-850WM/B-X(K)	<div></div>	<div></div>	<div></div>
GMV-900WM/B-X(K)		<div></div>	<div></div>
GMV-960WM/B-X(K)		<div></div>	<div></div>
GMV-1010WM/B-X(K)			<div></div>
GMV-1065WM/B-X(K)	<div></div>	<div></div>	<div></div>
GMV-1130WM/B-X(K)	<div></div>		<div></div>
GMV-1180WM/B-X(K)	<div></div>	<div></div>	<div></div>
GMV-1235WM/B-X(K)		<div></div>	<div></div>
GMV-1300WM/B-X(K)		<div></div>	<div></div>
GMV-1350WM/B-X(K)			<div></div>

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

Specifications of Outdoor Units

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
Cooling capacity	Nom.*	kW	22.4	28.0	28.0	33.5	40.0
Heating capacity	Nom.*	kW	22.4	28.0	28.0	33.5	40.0
	Max.	kW	25.0	31.5	31.5	37.5	45.0
EER	Nom.*	Ducted	kW/kW	4.73	4.48	3.05	3.99
		Cassette	kW/kW	3.27	3.05	2.66	2.80
COP	Nom.*	Ducted	kW/kW	5.20	5.56	4.10	5.25
		Cassette	kW/kW	3.54	3.66	3.24	3.64
	Max.		kW/kW	5.20	5.56	4.10	4.73
Power consumption of cool- ing	Nom.*	Ducted	kW	4.74	6.25	9.18	8.40
		Cassette	kW	6.85	9.18	10.53	11.96
Power consumption of heat- ing	Nom.*	Ducted	kW	4.30	5.04	6.83	6.38
		Cassette	kW	6.33	7.65	8.64	9.20
	Max.		kW	4.81	5.67	7.68	9.51
Power supply		V/Ph/Hz	380V-415V 3N~ 50/60Hz				
Max. circuit/Fuse current		A	16.1/20.0	20.9/25.0	20.9/25.0	24.6/32.0	28.8/40.0
Maximum drive IDU NO.		unit	13	16	16	19	23
Refrigerant charge volume		kg	5.9	9.0	6.7	8.2	9.8
Sound pressure level(cooling)		dB(A)	60	61	61	63	63
Sound power level(cooling)	Ducted	dB(A)	85	86	85	80	86
	Cassette	dB(A)	84	86	85	82	85
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	930x765x1605	930x765x1605	930x765x1605	1340x765x1605	1340x765x1605
	Package	mm	1010x840x1775	1010x840x1775	1010x840x1775	1420x840x1775	1420x840x1775
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
Cooling capacity	Nom.*	kW	45.0	45.0	50.4	56.0	61.5
Heating capacity	Nom.*	kW	45.0	45.0	50.4	56.0	61.5
	Max.	kW	50.0	50.0	56.5	63.0	69.0
EER	Nom.*	Ducted	kW/kW	3.51	3.35	3.25	3.00
		Cassette	kW/kW	2.80	2.58	3.40	2.90
COP	Nom.*	Ducted	kW/kW	4.60	4.20	5.50	4.60
		Cassette	kW/kW	3.56	3.27	4.20	4.00
	Max.		kW/kW	4.60	4.20	4.01	3.80
Power consumption of cooling	Nom.*	Ducted	kW	12.82	13.43	15.51	18.67
		Cassette	kW	16.07	17.44	14.82	19.31
Power consumption of heating	Nom.*	Ducted	kW	9.78	10.71	9.16	12.17
		Cassette	kW	12.64	13.76	12.00	14.00
	Max.		kW	10.86	11.90	14.10	16.60
Power supply		V/Ph/Hz	380V-415V 3N~ 50/60Hz				
Max. circuit/Fuse current		A	33.2/40.0	33.2/40.0	44.7/50.0	50.0/60.0	53.6/60.0
Maximum drive IDU NO.		unit	26	26	29	32	35
Refrigerant charge volume		kg	10.3	10.3	11.3	14.3	14.3
Sound pressure level(cooling)		dB(A)	63	63	63	63	64
Sound power level (cooling)	Ducted	dB(A)	80	89	86	92	92
	Cassette	dB(A)	89	86	85	89	91
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	1340x765x1740	1340x765x1605	1340x765x1740	1340x765x1740	1340x765x1740
	Package	mm	1420x840x1910	1420x840x1775	1420x840x1910	1420x840x1910	1420x840x1910
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

Note: Nom.* is based on the standard test of EN14511 and certified by EUROVENT.

Model	Power supply	Capacity			Power input			Dimension(WxDxH)	Airflow volume	ESP	Connecting pipe			Min. circuit current	Max. fuse current	Weight
		Cooling	Heating		Cooling	Heating					Liquid	Gas	Oil balance			
		Nom.	Nom.	Max.	Nom.*	Nom.*	Max.									
	V/Ph/Hz	kW	kW	kW	kW	kW	kW	mm	m³/h	Pa	mm	mm	mm	A	A	kg
GMV-680WME-X	380V-415V 3N~50/60Hz	68.0	68.0	76.5	16.78	15.18	15.18	(930x765x1605) +(1340x765x1605)	11400+14000	82	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25 + 40	235+360
GMV-730WME-X		73.0	73.0	81.5	19.07	16.54	16.53	(930x765x1605) +(1340x765x1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25 + 40	235+360
GMV-785WME-X		78.4	78.4	88.0	21.76	14.83	19.77	(930x765x1605) +(1340x765x1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+44.7	25 + 50	235+360
GMV-850WME-X		84.0	84.0	94.5	24.92	17.84	22.27	(930x765x1605) +(1340x765x1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+50.0	25 + 63	235+385
GMV-900WME-X		89.5	89.5	100.5	31.88	19.34	24.57	(930x765x1605) +(1340x765x1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+53.6	25 + 63	235+385
GMV-960WME-X		95.0	95.0	106.5	34.03	20.81	26.04	(1340x765x1605) +(1340x765x1740)	14000+16000	82	Φ19.05	Φ31.8	Φ9.52	24.6+53.6	32 + 63	285+385
GMV-1010WME-X		101.5	101.5	114.0	36.14	23.18	28.41	(1340x765x1605) +(1340x765x1740)	14000+16000	82	Φ19.05	Φ38.1	Φ9.52	28.8+53.6	40 + 63	360+385
GMV-1065WME-X		106.5	106.5	119.0	38.45	24.54	29.76	(1340x765x1740) x2	16000x2	82	Φ19.05	Φ38.1	Φ9.52	33.2+53.6	40 + 63	360+385
GMV-1130WME-X		111.9	111.9	125.5	41.14	22.83	33.00	(1340x765x1740) x2	16000x2	82	Φ19.05	Φ38.1	Φ9.52	44.7+53.6	50 + 63	360+385
GMV-1180WME-X		117.5	117.5	132.0	44.30	25.84	35.50	(1340x765x1740) x2	16000x2	82	Φ19.05	Φ38.1	Φ9.52	50.0+53.6	63 + 63	385x2
GMV-1235WME-X		123.0	123.0	138.0	51.26	27.34	37.80	(1340x765x1740) x2	16000x2	82	Φ19.05	Φ38.1	Φ9.52	53.6+53.6	63 + 63	385x2
GMV-1300WME-X		129.0	129.0	144.5	37.74	28.71	33.13	(930x765x1605) +(1340x765x1740) x2	11400+16000x2	82	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+50.0	25 + 40 + 63	235+360 +385
GMV-1350WME-X		134.5	134.5	150.5	44.70	30.21	35.43	(930x765x1605) +(1340x765x1740) x2	11400+16000x2	82	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+53.6	25 + 40 + 63	235+360 +385
GMV-1410WME-X		140.0	140.0	156.5	46.85	31.68	36.90	(1340x765x1605) +(1340x765x1740) x2	14000+16000x2	82	Φ19.05	Φ41.3	Φ9.52	24.6+33.2+53.6	32 + 40 + 63	285+360 +385
GMV-1460WME-X		145.5	145.5	163.5	50.55	31.51	41.17	(930x765x1605) +(1340x765x1740) x2	11400+16000x2	82	Φ19.05	Φ41.3	Φ9.52	20.9+50.0+53.6	25 + 63 + 63	235+385 x2
GMV-1515WME-X		151.0	151.0	169.5	57.51	33.01	43.47	(930x765x1605) +(1340x765x1740) x2	11400+16000x2	82	Φ19.05	Φ41.3	Φ9.52	20.9+53.6+53.6	25 + 63 + 63	235+385 x2
GMV-1580WME-X		156.5	156.5	175.5	59.66	34.48	44.94	(1340x765x1605) +(1340x765x1740) x2	14000+16000x2	82	Φ19.05	Φ41.3	Φ9.52	24.6+53.6+53.6	32 + 63 + 63	285+385 x2
GMV-1630WME-X		163.0	163.0	183.0	61.79	36.85	47.31	(1340x765x1605) +(1340x765x1740) x2	14000+16000x2	82	Φ19.05	Φ41.3	Φ9.52	28.8+53.6+53.6	40 + 63 + 63	360+385 x2
GMV-1685WME-X		168.0	168.0	188.0	64.08	38.21	48.66	(1340x765x1740) x3	16000x3	82	Φ19.05	Φ41.3	Φ9.52	33.2+53.6+53.6	40 + 63 + 63	360+385 x2
GMV-1750WME-X		173.4	173.4	194.5	66.77	36.50	51.90	(1340x765x1740) x3	16000x3	82	Φ19.05	Φ41.3	Φ9.52	44.7+53.6+53.6	50 + 63 + 63	360+385 x2
GMV-1800WME-X		179.0	179.0	201.0	69.93	39.51	54.40	(1340x765x1740) x3	16000x3	82	Φ19.05	Φ41.3	Φ9.52	50.0+53.6+53.6	63 + 63 + 63	385x3
GMV-1845WME-X		184.5	184.5	207.0	76.89	41.01	56.70	(1340x765x1740) x3	16000x3	82	Φ19.05	Φ41.3	Φ9.52	53.6+53.6+53.6	63+63+63	385x3
GMV-1908WME-X		190.5	190.5	213.5	63.37	42.38	52.03	(930x765x1605) +(1340x765x1740) x3	11400+16000x3	82	Φ22.2	Φ44.5	Φ9.52	20.9+33.2 +50.0+53.6	25+40+63+63	235+360 +385x2
GMV-1962WME-X		195.9	195.9	220.0	66.06	40.67	55.27	(930x765x1605) +(1340x765x1740) x3	11400+16000x3	82	Φ22.2	Φ44.5	Φ9.52	20.9+44.7 +50.0+53.6	25+50+63+63	235+360 +385x2
GMV-2016WME-X		201.5	201.5	226.5	69.22	43.68	57.77	(930x765x1605) +(1340x765x1740) x3	11400+16000x3	82	Φ22.2	Φ44.5	Φ9.52	20.9+50.0 +50.0+53.6	25+63+63+63	235+385 x3
GMV-2072WME-X		207.0	207.0	232.5	76.18	45.18	60.07	(930x765x1605) +(1340x765x1740) x3	11400+16000x3	82	Φ22.2	Φ44.5	Φ9.52	20.9+50.0 +53.6+53.6	25+63+63+63	235+385 x3
GMV-2128WME-X		212.5	212.5	238.5	83.14	46.68	62.37	(930x765x1605) +(1340x765x1740) x3	11400+16000x3	82	Φ22.2	Φ44.5	Φ9.52	20.9+53.6 +53.6+53.6	25+63+63+63	235+385 x3
GMV-2184WME-X		218.0	218.0	244.5	85.29	48.15	63.84	(1340x765x1605) +(1340x765x1740) x3	14000+16000x3	82	Φ22.2	Φ44.5	Φ9.52	24.6+53.6 +53.6+53.6	32+63+63+63	285+385 x3
GMV-2240WME-X		224.5	224.5	252.0	87.42	50.52	66.21	(1340x765x1605) +(1340x765x1740) x3	14000+16000x3	82	Φ22.2	Φ44.5	Φ9.52	28.8+53.6 +53.6+53.6	40+63+63+63	360+385 x3
GMV-2295WME-X		229.5	229.5	257.0	89.71	51.88	67.56	(1340x765x1740) x4	16000x4	82	Φ22.2	Φ44.5	Φ9.52	33.2+53.6 +53.6+53.6	40+63+63+63	360+385 x3
GMV-2350WME-X	234.9	234.9	263.5	92.40	50.17	70.80	(1340x765x1740) x4	16000x4	82	Φ22.2	Φ44.5	Φ9.52	44.7+53.6 +53.6+53.6	50+63+63+63	360+385 x3	
GMV-2405WME-X	240.5	240.5	270.0	95.56	53.18	73.30	(1340x765x1740) x4	16000x4	82	Φ22.2	Φ44.5	Φ9.52	50.0+53.6 +53.6+53.6	63+63+63+63	385x4	
GMV-2460WME-X	246.0	246.0	276.0	102.53	54.68	75.60	(1340x765x1740) x4	16000x4	82	Φ22.2	Φ44.5	Φ9.52	53.6+53.6 +53.6+53.6	63+63+63+63	385x4	



GMV5E (SASO) 380-415V, 50/60Hz

Model			GMV-224WM/E-X(S)	GMV-280WM/E1-X(S)	GMV-280WM/E-X(S)	GMV-335WM/E-X(S)	GMV-400WM/E-X(S)
Capacity range		HP	8	10	10	12	14
Cooling-35°C ⁽¹⁾	Capacity	kW	22.20	27.90	27.90	33.30	40.00
		Btu/h	76000	95000	95000	114000	136000
	Power input	kW	5.42	7.45	6.90	8.86	10.65
	EER	(Btu/h)/W	14.0	12.7	13.7	12.9	12.7
Cooling-46°C ⁽²⁾	Capacity	kW	18.9	23.7	23.7	28.5	34.0
		Btu/h	65000	81000	81000	97000	116000
	Power input	kW	6.35	8.25	7.80	10.00	11.40
	EER	(Btu/h)/W	10.24	9.82	10.38	9.70	10.18
Heating ⁽³⁾	Capacity	kW	25.00	31.50	31.50	37.50	45.00
		Btu/h	85000	107000	107000	128000	153000
	Power input	kW	5.5	7.3	7.3	9.0	11.1
	COP	kW/kW	4.55	4.32	4.32	4.17	4.05
Connected indoor unit	Maximum quantity		13	16	16	19	23
Compressors	Type		Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll+Inverter scroll
	Quantity		1	1	1	1	2
Fan motors	Type		Axial-flow	Axial-flow	Axial-flow	Axial-flow	Axial-flow
	Quantity		1	1	1	2	2
	Static pressure	Pa	82	82	82	82	82
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Factory charge	kg	5.9	6.7	9.0	8.2	9.8
Pipe connections	Liquid pipe	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7
	Gas pipe	mm	Φ19.05	Φ22.2	Φ22.2	Φ25.4	Φ25.4
Airflow rate		m³/h	11400	11400	11400	14000	14000
Sound pressure level		dB(A)	60	61	61	63	63
Net dimensions(WxHxD)		mm	930×1605×765	930×1605×765	930×1605×765	1340×1605×765	1340×1605×765
Packed dimensions(WxHxD)		mm	1010×1775×840	1010×1775×840	1010×1775×840	1420×1775×840	1420×1775×840
Net weight		kg	225	225	235	285	360
Gross weight		kg	235	235	245	300	375
Ambient temp. operation range	Cooling	°C	-5~52	-5~52	-5~52	-5~52	-5~52
	Heating	°C	-20~24	-20~24	-20~24	-20~24	-20~24

Model			GMV-450WM/E1-X(S)	GMV-450WM/E-X(S)	GMV-504WM/E-X(S)	GMV-560WM/E-X(S)	GMV-615WM/E-X(S)
Capacity range		HP	16	16	18	20	22
Cooling-35°C ⁽¹⁾	Capacity	kW	45.00	45.00	50.00	56.00	61.50
		Btu/h	152000	152000	172000	190000	208000
	Power input	kW	13.03	12.57	15.00	16.50	18.50
	EER	(Btu/h)/W	11.6	12.1	11.5	11.5	11.2
Cooling-46°C ⁽²⁾	Capacity	kW	38.0	38.0	40.0	47.5	49.0
		Btu/h	130000	130000	136000	162000	168000
	Power input	kW	14.00	12.77	14.00	16.80	18.00
	EER	(Btu/h)/W	9.30	10.20	9.70	9.60	9.30
Heating ⁽³⁾	Capacity	kW	50.0	50.0	56.5	63.0	69.0
		Btu/h	170000	170000	192000	215000	235000
	Power input	kW	13.0	13.0	14.1	16.6	18.9
	COP	kW/kW	3.85	3.85	4.00	3.80	3.65
Connected indoor unit	Maximum quantity		26	26	29	33	36
Compressors	Type		Inverter scroll+Inverter scroll	Inverter scroll+Inverter scroll	Inverter scroll+Inverter scroll	Inverter scroll+Inverter scroll	Inverter scroll+Inverter scroll
	Quantity		2	2	2	2	2
Fan motors	Type		Axial-flow	Axial-flow	Axial-flow	Axial-flow	Axial-flow
	Quantity		2	2	2	2	2
	Static pressure	Pa	82	82	82	82	82
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Factory charge	kg	10.3	10.3	11.3	14.3	14.3
Pipe connections	Liquid pipe	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
	Gas pipe	mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ28.6
Airflow rate		m³/h	14000	16000	16000	16000	16000
Sound pressure level		dB(A)	63	63	63	63	64
Net dimensions(WxHxD)		mm	1340×1605×765	1340×1740×765	1340×1740×765	1340×1740×765	1340×1740×765
Packed dimensions(WxHxD)		mm	1420×1775×840	1420×1910×840	1420×1910×840	1420×1910×840	1420×1910×840
Net weight		kg	360	360	360	385	385
Gross weight		kg	375	375	375	400	400
Ambient temp. operation range	Cooling	°C	-5~52	-5~52	-5~52	-5~52	-5~52
	Heating	°C	-20~24	-20~24	-20~24	-20~24	-20~24

Note: (1) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB;
(2) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB;
(3) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB.

Model	Power supply	Capacity		Power input		Dimension (WxDxD)	Airflow volume	ESP	Sound pressure level	Operation sound pressure level at night	Connecting pipe			Min. circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating						Liquid	Gas	Oil balance			
		V/PhHz	kW	kW	kW	mm	m³/h	Pa	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-680WM/E-X(S)	380V-415V 3N ~ 50/60 Hz	67.90	76.50	17.55	18.40	(930x765x1605) +(1340x765x1605)	11400+14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25+40	235+360
GMV-730WM/E-X(S)		72.90	81.50	19.47	20.30	(930x765x1605) +(1340x765x1740)	11400+16000		65	43	Φ19.05	Φ31.8		20.9+33.2	25+40	235+360
GMV-785WM/E-X(S)		77.90	88.00	21.90	21.40	(930x765x1605) +(1340x765x1740)	11400+16000		66	43	Φ19.05	Φ31.8		20.9+42.9	25+50	235+360
GMV-850WM/E-X(S)		83.90	94.50	23.40	23.90	(930x765x1605) +(1340x765x1740)	11400+16000		67	43	Φ19.05	Φ31.8		20.9+46.5	25+63	235+385
GMV-900WM/E-X(S)		89.40	100.50	25.40	26.20	(930x765x1605) +(1340x765x1740)	11400+16000		67	43	Φ19.05	Φ31.8		20.9+48.3	25+63	235+385
GMV-960WM/E-X(S)		94.80	106.50	27.36	27.90	(1340x765x1605) +(1340x765x1740)	14000+16000		68	43	Φ19.05	Φ31.8		24.7+48.3	32+63	285+385
GMV-1010WM/E-X(S)		101.50	114.00	29.15	30.00	(1340x765x1605) +(1340x765x1740)	14000+16000		68	43	Φ19.05	Φ38.1		28.8+48.3	40+63	360+385
GMV-1065WM/E-X(S)		106.50	119.00	31.07	31.90	(1340x765x1740) x2	16000+16000		68	43	Φ19.05	Φ38.1		33.2+48.3	40+63	360+385
GMV-1130WM/E-X(S)		111.50	125.50	33.50	33.00	(1340x765x1740) x2	16000+16000		68	43	Φ19.05	Φ38.1		42.9+48.3	50+63	360+385
GMV-1180WM/E-X(S)		117.50	132.00	35.00	35.50	(1340x765x1740) x2	16000+16000		69	43	Φ19.05	Φ38.1		46.5+48.3	63+63	385+385
GMV-1235WM/E-X(S)		123.00	138.00	37.00	37.80	(1340x765x1740) x2	16000+16000		69	43	Φ19.05	Φ38.1		48.3+48.3	63+63	385+385
GMV-1300WM/E-X(S)		128.90	144.50	35.97	36.90	(930x765x1605) +(1340x765x1740) x2	11400+16000+16000		69	45	Φ19.05	Φ38.1		20.9+33.2+46.5	25+40+63	235+360+385
GMV-1350WM/E-X(S)		134.40	150.50	37.97	39.20	(930x765x1605) +(1340x765x1740) x2	11400+16000+16000		69	45	Φ19.05	Φ38.1		20.9+33.2+48.3	25+40+63	235+360+385
GMV-1410WM/E-X(S)		139.80	156.50	39.93	40.90	(1340x765x1605) +(1340x765x1740) x2	14000+16000+16000		69	45	Φ19.05	Φ41.3		24.7+33.2+48.3	32+40+63	285+360+385
GMV-1460WM/E-X(S)		145.40	163.50	41.90	42.80	(930x765x1605) +(1340x765x1740) x2	11400+16000+16000		69	45	Φ19.05	Φ41.3		20.9+46.5+48.3	25+63+63	235+385+385
GMV-1515WM/E-X(S)		150.90	169.50	43.90	45.10	(930x765x1605) +(1340x765x1740) x2	11400+16000+16000		70	45	Φ19.05	Φ41.3		20.9+48.3+48.3	25+63+63	235+385+385
GMV-1580WM/E-X(S)		156.30	175.50	45.86	46.80	(1340x765x1605) +(1340x765x1740) x2	14000+16000+16000		70	45	Φ19.05	Φ41.3		24.7+48.3+48.3	32+63+63	285+385+385
GMV-1630WM/E-X(S)		163.00	183.00	47.65	48.90	(1340x765x1605) +(1340x765x1740) x2	14000+16000+16000		70	45	Φ19.05	Φ41.3		28.8+48.3+48.3	40+63+63	360+385+385
GMV-1685WM/E-X(S)		168.00	188.00	49.57	50.80	(1340x765x1740) x3	16000+16000+16000		70	45	Φ19.05	Φ41.3		33.2+48.3+48.3	40+63+63	360+385+385
GMV-1750WM/E-X(S)		173.00	194.50	52.00	51.90	(1340x765x1740) x3	16000+16000+16000		70	45	Φ19.05	Φ41.3		42.9+48.3+48.3	50+63+63	360+385+385
GMV-1800WM/E-X(S)		179.00	201.00	53.50	54.40	(1340x765x1740) x3	16000+16000+16000		71	45	Φ19.05	Φ41.3		46.5+48.3+48.3	63+63+63	385+385+385
GMV-1845WM/E-X(S)		184.50	207.00	55.50	56.70	(1340x765x1740) x3	16000+16000+16000		71	45	Φ19.05	Φ41.3		48.3+48.3+48.3	63+63+63	385+385+385
GMV-1908WM/E-X(S)		190.40	213.50	54.47	55.80	(930x765x1605) +(1340x765x1740) x3	11400+16000 +16000+16000		72	47	Φ22.2	Φ44.5		20.9+33.2 +46.5+48.3	25+40+63+63	235+360 +385+385
GMV-1962WM/E-X(S)		195.40	220.00	56.90	56.90	(930x765x1605) +(1340x765x1740) x3	11400+16000 +16000+16000		73	47	Φ22.2	Φ44.5		20.9+42.9 +46.5+48.3	25+50+63+63	235+360 +385+385
GMV-2016WM/E-X(S)		201.40	226.50	58.40	59.40	(930x765x1605) +(1340x765x1740) x3	11400+16000 +16000+16000		73	47	Φ22.2	Φ44.5		20.9+46.5 +46.5+48.3	25+63+63+63	235+385 +385+385
GMV-2072WM/E-X(S)		206.90	232.50	60.40	61.70	(930x765x1605) +(1340x765x1740) x3	11400+16000 +16000+16000		73	47	Φ22.2	Φ44.5		20.9+46.5 +48.3+48.3	25+63+63+63	235+385 +385+385
GMV-2128WM/E-X(S)		212.40	238.50	62.40	64.00	(930x765x1605) +(1340x765x1740) x3	11400+16000 +16000+16000		73	47	Φ22.2	Φ44.5		20.9+48.3 +48.3+48.3	25+63+63+63	235+385 +385+385
GMV-2184WM/E-X(S)		217.80	244.50	64.36	65.70	(1340x765x1605) +(1340x765x1740) x3	14000+16000 +16000+16000		74	47	Φ22.2	Φ44.5		24.7+48.3 +48.3+48.3	32+63+63+63	285+385 +385+385
GMV-2240WM/E-X(S)		224.50	252.00	66.15	67.80	(1340x765x1605) +(1340x765x1740) x3	14000+16000 +16000+16000		74	47	Φ22.2	Φ44.5		28.8+48.3 +48.3+48.3	40+63+63+63	360+385 +385+385
GMV-2295WM/E-X(S)		229.50	257.00	68.07	69.70	(1340x765x1740) x4	16000+16000 +16000+16000		74	47	Φ22.2	Φ44.5		33.2+48.3 +48.3+48.3	40+63+63+63	360+385 +385+385
GMV-2350WM/E-X(S)		234.50	263.50	70.50	70.80	(1340x765x1740) x4	16000+16000 +16000+16000		75	47	Φ22.2	Φ44.5		42.9+48.3 +48.3+48.3	50+63+63+63	360+385 +385+385
GMV-2405WM/E-X(S)		240.50	270.00	72.00	73.30	(1340x765x1740) x4	16000+16000 +16000+16000		75	47	Φ22.2	Φ44.5		46.5+48.3 +48.3+48.3	63+63+63+63	385+385 +385+385
GMV-2460WM/E-X(S)		246.00	276.00	74.00	75.60	(1340x765x1740) x4	16000+16000 +16000+16000		75	47	Φ22.2	Φ44.5		48.3+48.3 +48.3+48.3	63+63+63+63	385+385 +385+385

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

Model			GMV-224WM/B-X(K)		GMV-280WM/B-X(K)		GMV-335WM/B-X(K)	
Capacity range		HP	8		10		12	
Cooling-35°C ⁽¹⁾	Capacity	kW	22.4		28.0		33.5	
		Btu/h	76430		95540		114300	
	Power input	kW	5.86		7.80		9.88	
	EER	(Btu/h)/W	13.03		12.35		11.60	
Cooling-46°C ⁽²⁾	Capacity	Btu/h	20.16		23.80		28.48	
		Btu/h	68800		81200		97150	
	Power input	kW	6.70		7.99		9.40	
	EER	(Btu/h)/W	9.5		9.4		9.6	
Heating ⁽³⁾	Capacity	kW	25.0		31.5		37.5	
		Btu/h	85300		107480		127950	
	Power input	kW	5.1		6.6		8.5	
	COP	kW/kW	4.90		4.77		4.41	
Connected indoor unit	Maximum quantity		13		16		19	
Compressors	Type	Inverter scroll		Inverter scroll		Inverter scroll		
	Quantity	1		1		1		
Fan motors	Type		Axial-flow		Axial-flow		Axial-flow	
	Quantity		1		2		2	
	Static pressure	Pa	82		82		82	
	Type		R410A		R410A		R410A	
Refrigerant	Factory charge	kg	9		9.7		9.7	
	Liquid pipe	mm	Φ9.52		Φ9.52		Φ12.7	
Pipe connections	Gas pipe	mm	Φ19.05		Φ22.2		Φ25.4	
	Airflow rate		m³/h		11400		14000	
Sound pressure level		dB(A)	61		63		63	
Net dimensions(WxHxD)		mm	930x1605x765		1340x1605x765		1340x1605x765	
Packed dimensions(WxHxD)		mm	1010x1775x840		1420x1775x840		1420x1775x840	
Net weight		kg	235		290		290	
Gross weight		kg	245		305		305	
Ambient temp. operation range	Cooling	°C	-5~55		-5~55		-5~55	
	Heating	°C	-20~24		-20~24		-20~24	

Note: (1) Indoor temperature: 26.6°CDB, 19.4°CWb; outdoor temperature: 35°CDB;
(2) Indoor temperature: 26.6°CDB, 19°CWb; outdoor temperature: 46°CDB;
(3) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWb.

Model	Power supply	Capacity		Power input		Dimension(WxDxH)	Airflow volume	ESP	Sound pressure level	Operation sound pressure level at night	Connecting pipe			Min. circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating						Liquid	Gas	Oil balance			
	V/Ph/Hz	kW	kW	kW	kW	mm	m³/h	Pa	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-450WM/B-X(K)	380V-415V 3N ~ 50/60Hz	45.0	50.0	11.72	10.20	(930×765×1605)×2	11400+11400	82	63	43	Φ12.7	Φ28.6	Φ9.52	16.1+16.1	20+20	235+235
GMV-504WM/B-X(K)		50.4	56.5	13.66	11.70	(930×765×1605)+(1340×765×1605)	11400+14000		64	43	Φ15.9	Φ28.6		16.1+20.9	20+25	235+290
GMV-560WM/B-X(K)		56.0	63.0	15.74	13.60	(930×765×1605)+(1340×765×1605)	11400+14000		64	43	Φ15.9	Φ28.6		16.1+24.7	20+32	235+290
GMV-615WM/B-X(K)		61.5	69.0	17.68	15.10	(1340×765×1605)×2	14000+14000		65	43	Φ15.9	Φ28.6		20.9+24.7	25+32	290+290
GMV-680WM/B-X(K)		68.0	76.5	19.76	17.00	(1340×765×1605)×2	14000+14000		65	43	Φ15.9	Φ28.6		24.7+24.7	32+32	290+290
GMV-730WM/B-X(K)		73.0	81.5	19.52	16.80	(930×765×1605)×2+(1340×765×1605)	11400+11400+14000		66	45	Φ19.05	Φ31.8		16.1+16.1+20.9	20+20+25	235+235+290
GMV-785WM/B-X(K)		78.4	88.0	21.60	18.70	(930×765×1605)×2+(1340×765×1605)	11400+11400+14000		66	45	Φ19.05	Φ31.8		16.1+16.1+24.7	20+20+32	235+235+290
GMV-850WM/B-X(K)		84.0	94.5	23.54	20.20	(930×765×1605)+(1340×765×1605)×2	11400+14000+14000		67	45	Φ19.05	Φ31.8		16.1+20.9+24.7	20+25+32	235+290+290
GMV-900WM/B-X(K)		89.5	100.5	25.48	21.70	(1340×765×1605)×3	14000+14000+14000		67	45	Φ19.05	Φ31.8		20.9+20.9+24.7	25+25+32	290+290+290
GMV-960WM/B-X(K)		95.0	106.5	27.56	23.60	(1340×765×1605)×3	14000+14000+14000		68	45	Φ19.05	Φ31.8		20.9+24.7+24.7	25+32+32	290+290+290
GMV-1010WM/B-X(K)		101.5	114.0	29.64	25.50	(1340×765×1605)×3	14000+14000+14000		68	45	Φ19.05	Φ38.1		24.7+24.7+24.7	32+32+32	290+290+290
GMV-1065WM/B-X(K)		106.5	119.0	29.40	25.30	(930×765×1605)×2+(1340×765×1605)×2	11400+11400+14000+14000		68	47	Φ19.05	Φ38.1		16.1+16.1+20.9+24.7	20+20+25+32	235+235+290+290
GMV-1130WM/B-X(K)		111.9	125.5	31.48	27.20	(930×765×1605)×2+(1340×765×1605)×2	11400+11400+14000+14000		68	47	Φ19.05	Φ38.1		16.1+16.1+24.7+24.7	20+20+32+32	235+235+290+290
GMV-1180WM/B-X(K)		117.5	132.0	33.42	28.70	(930×765×1605)+(1340×765×1605)×3	11400+14000+14000+14000		69	47	Φ19.05	Φ38.1		16.1+20.9+24.7+24.7	20+25+32+32	235+290+290+290
GMV-1235WM/B-X(K)		123.0	138.0	35.36	30.20	(1340×765×1605)×4	14000+14000+14000+14000		69	47	Φ19.05	Φ38.1		20.9+20.9+24.7+24.7	25+25+32+32	290+290+290+290
GMV-1300WM/B-X(K)		129.0	144.5	37.44	32.10	(1340×765×1605)×4	14000+14000+14000+14000		69	47	Φ19.05	Φ38.1		20.9+24.7+24.7+24.7	25+32+32+32	290+290+290+290
GMV-1350WM/B-X(K)		134.5	150.5	39.52	34.00	(1340×765×1605)×4	14000+14000+14000+14000		68	47	Φ19.05	Φ38.1		24.7+24.7+24.7+24.7	32+32+32+32	290+290+290+290

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	28.0	33.5	40.0	45.0	50.4	56.0	61.5
	Heating	kW	25.0	31.5	37.5	45.0	50.0	56.5	63.0	69.0
EER		W/W	4.31	4.00	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	380V-415V 3N~ 50/60Hz							
Max. circuit/Fuse current		A	15.7/20.0	20.9/25.0	24.7/32.0	28.8/40.0	33.2/40.0	45.4/50.0	51.1/63.0	59.2/63.0
Power consumption	Cooling	kW	5.20	7.00	8.41	10.65	12.65	14.20	16.00	18.50
	Heating	kW	5.5	7.3	9.0	11.1	13.0	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 (WxDxH)	Outline	mm	930x765x1605			1340x765x1605		1340x765x1740		
	Package	mm	1010x840x1775			1420x840x1775		1420x840x1910		
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

Model	Power supply	Capacity		Power input		Dimension(WxDxH)	Airflow volume	ESP	Sound pressure level	Operation sound pressure level at night	Connecting pipe			Min. circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating						Liquid	Gas	Oil balance			
	V/Ph/Hz	kW	kW	kW	kW	mm	m³/h	Pa	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-680WM/B-X	380V-415V 3N ~ 50/60Hz	68.0	76.5	17.65	18.40	(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		73.0	81.5	19.65	20.30	(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	88.0	21.20	21.40	(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/B-X		84.0	94.5	23.00	23.90	(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/B-X		89.5	100.5	25.50	26.20	(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/B-X		95.0	106.5	26.91	27.90	(1340×765×1605) +(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	24.7+59.2	32 + 63	285+385
GMV-1010WM/B-X		101.5	114.0	29.15	30.00	(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-1065WM/B-X		106.5	119.0	31.15	31.90	(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/B-X		111.9	125.5	32.70	33.00	(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/B-X		117.5	132.0	34.50	35.50	(1340×765×1740) ×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	51.1+59.2	63 + 63	385+385
GMV-1235WM/B-X		123.0	138.0	37.00	37.80	(1340×765×1740) ×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	59.2+59.2	63 + 63	385+385
GMV-1300WM/B-X		129.0	144.5	35.65	36.90	(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/B-X		134.5	150.5	38.15	39.20	(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/B-X		140.0	156.5	39.56	40.90	(1340×765×1605) ×2+(1340×765×1740)	14000×2+16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	24.7+33.2+59.2	32 + 40 + 63	285+360+385
GMV-1460WM/B-X		145.5	163.5	41.50	42.80	(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/B-X		151.0	169.5	44.00	45.10	(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/B-X		156.5	175.5	45.41	46.80	(1340×765×1605) +(1340×765×1740) ×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	24.7+59.2+59.2	32 + 63 + 63	285+385×2
GMV-1630WM/B-X		163.0	183.0	47.65	48.90	(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/B-X		168.0	188.0	49.65	50.80	(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/B-X		173.4	194.5	51.20	51.90	(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/B-X		179.0	201.0	53.00	54.40	(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-1845WM/B-X		184.5	207.0	55.50	56.70	(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/B-X		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	Φ22.2	Φ44.5	Φ9.52	20.9+33.2+51.1+59.2	25+40+63+63	225+360+385×2
GMV-1962WM/B-X		195.9	220.0	55.70	56.90	(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/B-X	201.5	226.5	57.50	59.40	(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/B-X	207.0	232.5	60.00	61.70	(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/B-X	212.5	238.5	62.50	64.00	(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/B-X	218.0	244.5	63.91	65.70	(1340×765×1605) +(1340×765×1740) ×3	14000+16000×3	82	74	47	Φ22.2	Φ44.5	Φ9.52	24.7+59.2+59.2+59.2	32+63+63+63	285+385×3	
GMV-2240WM/B-X	224.5	252.0	66.15	67.80	(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/B-X	229.5	257.0	68.15	69.70	(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/B-X	234.9	263.5	69.70	70.80	(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/B-X	240.5	270.0	71.50	73.30	(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/B-X	246.0	276.0	74.00	75.60	(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 Mini & Slim



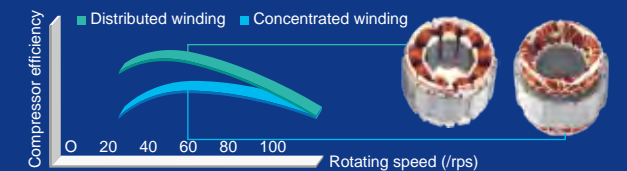
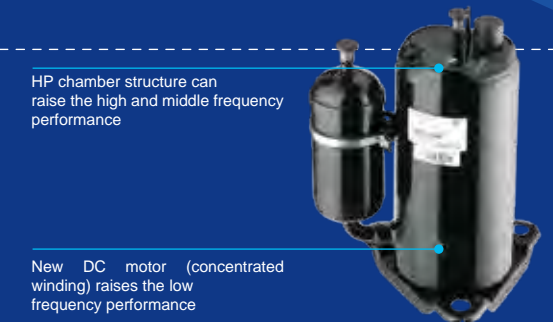
Key Features

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 permasyon motor is adopted to provide better performance than traditional DC inverter compressor.

All DC Inverter Compressor

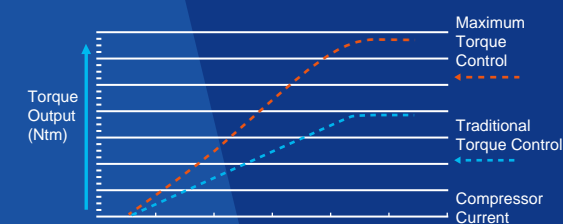
- All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.



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

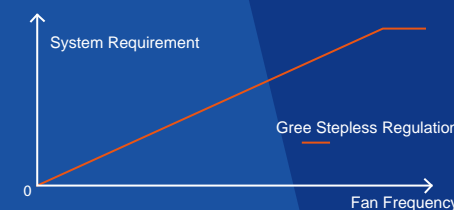
Technology of Maximum Torque Control with Minimum Current

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



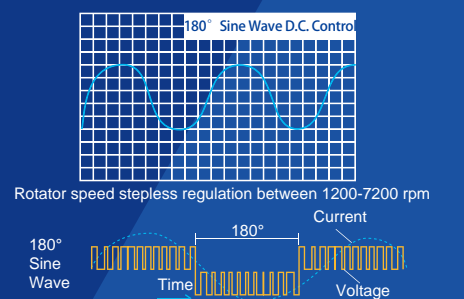
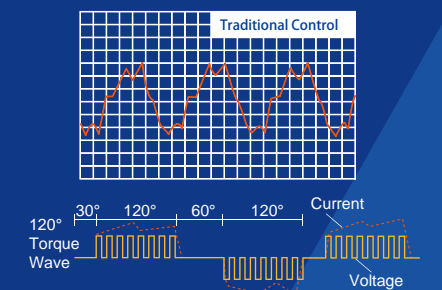
Low-frequency Torque Control

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.



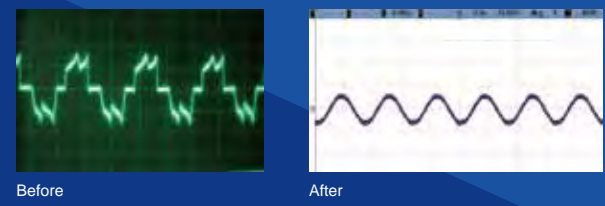
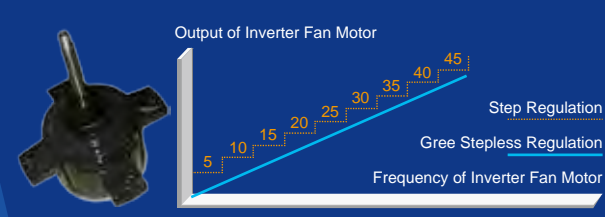
180° Sine Wave DC Speed Varying Technology

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.



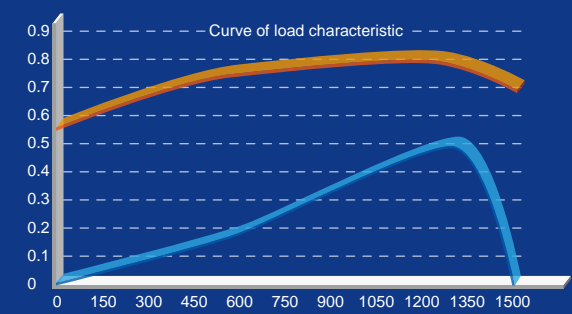
Sensorless DC Inverter Fan Motor

- 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

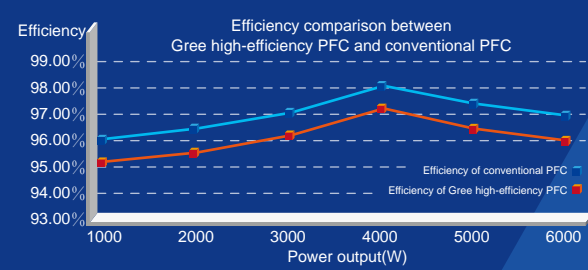
The indoor unit adopts high-efficiency brushless DC motor. Compared with conventional motor, the efficiency of brushless DC motor is improved by more than **30%**. Meanwhile, the design of evaporation capacity flow is optimized through emulation software of refrigeration system and the heat exchange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

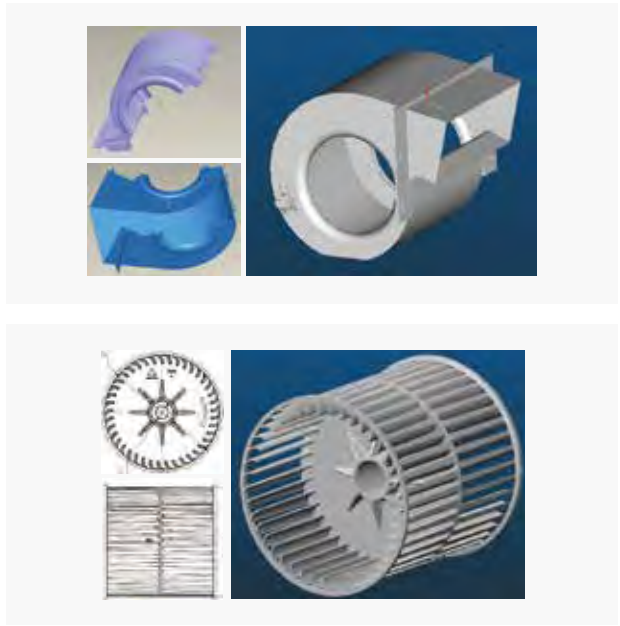
Low Noise of Outdoor Unit

- 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 of fan system and compressor system, and multiple kinds of quiet modes of outdoor unit.



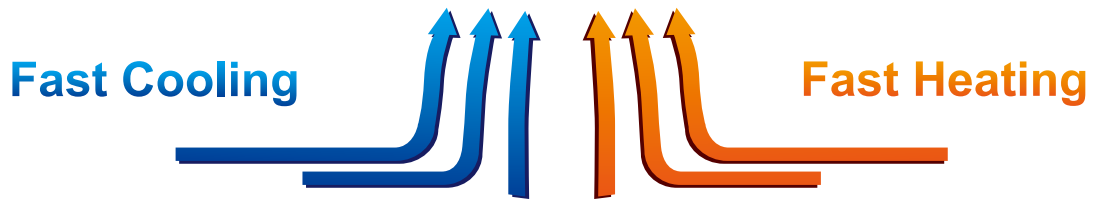
Low Noise of Indoor Unit

- 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.



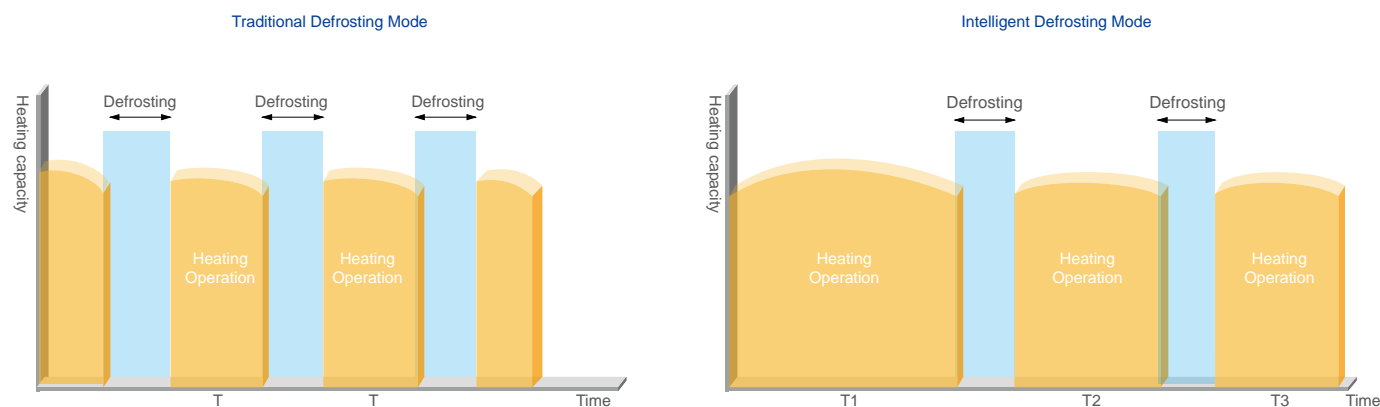
Intelligent Temperature Control Technology

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

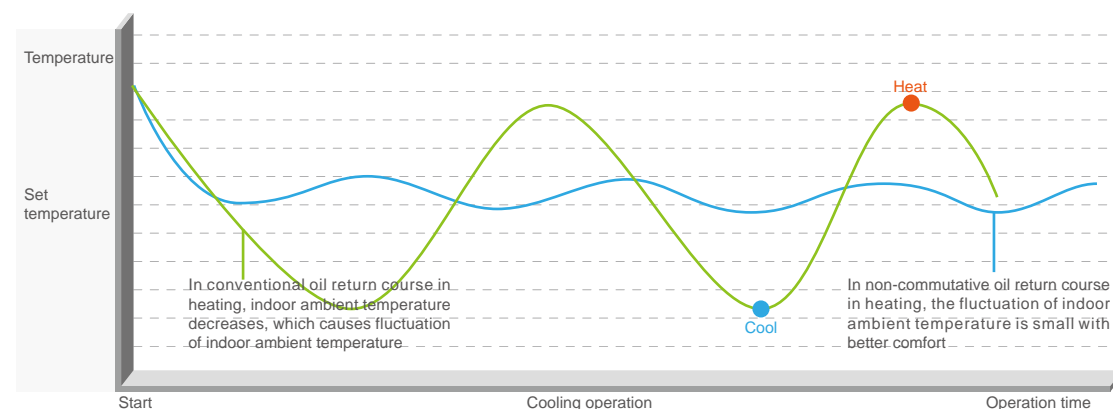
During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness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



Note: This feature is fit for heat pump models only.

Non-commutative Oil Return Technology in Heating

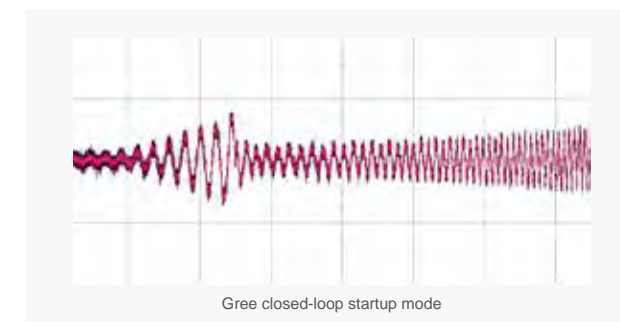
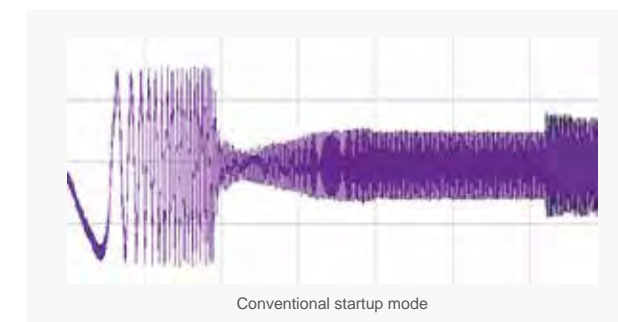
The unit can achieve non-commutative oil return in heating when outdoor ambient temperature is within 0~20°C. Thanks to this technology, indoor ambient temperature is more stable and comfort is improved in heating mode.



Reliable Operation

Compressor Closed-loop Startup Technology with More Reliable Startup

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



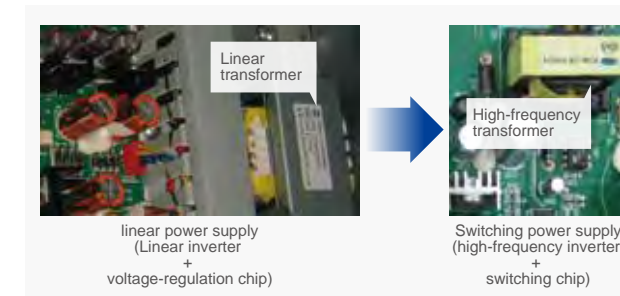
High Anti-interference Ability

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



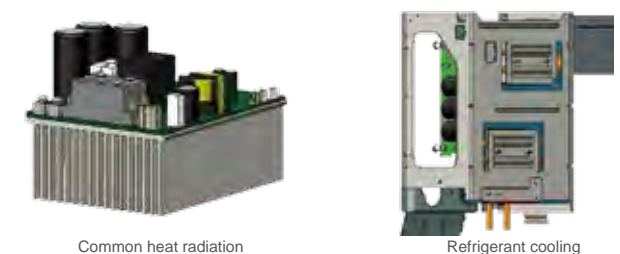
Advanced High-frequency Transformer with More Stable Voltage

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



Refrigerant Cooling Technology

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



Easy Installation and Transportation

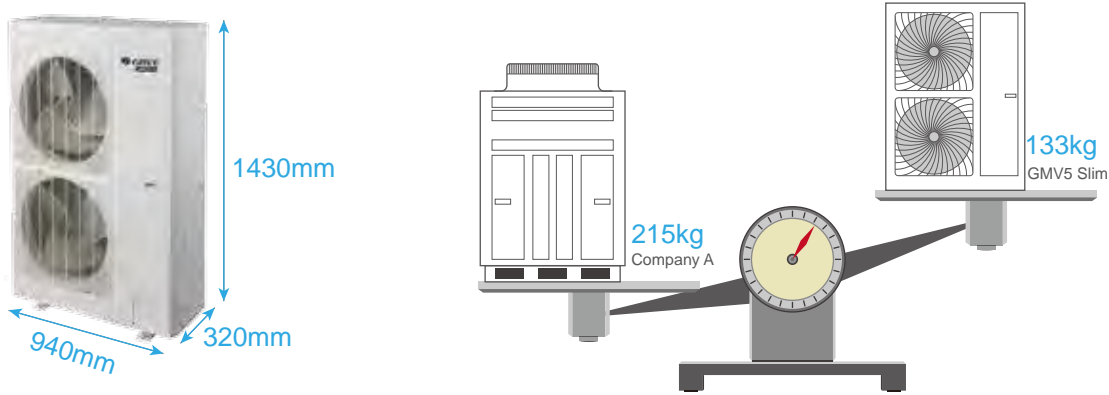
Ultra-long Connecting Pipe for More Convenient Connection

Under the subcooling control technology gained by adding subcooler, the indoor unit and outdoor unit of GMV5 mini can operate reliably with longer connecting 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. Do not 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)

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

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

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

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

HP	Model	Product
8	GMV-224WL/C-X	
	GMV-H224WL/A-X	
10	GMV-280WL/C-X	
	GMV-H280WL/A-X	
12	GMV-335WL/C-X	
	GMV-H335WL/A-X	

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

Model			GMV-80WL/C-T	GMV-100WL/C-T	GMV-121WL/C-T
Capacity range		HP	3.0	3.5	4.0
Capacity	Cooling	kW	8.0	10.0	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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz		
Max. circuit/Fuse current		A	25	25	32
Power consumption	Cooling	kW	2.05	2.70	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	2.0
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	980x360x790	980x360x790	980x360x790
	Package	mm	1097x477x937	1097x477x937	1097x477x937
Net weight/Gross weight		kg	80/90	80/90	85/95
Loading quantity	40' GP	set	96	96	96
	40' HQ	set	96	96	96

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

Model			GMV-120WL/C-T	GMV-140WL/C-T	GMV-141WL/C-T	GMV-160WL/C-T
Capacity range		HP	4	5	5	6
Capacity	Cooling	kW	12.1	14.0	14.1	16.0
	Heating	kW	14.0	16.5	16.0	18.0
EER		W/W	3.99	3.90	3.60	3.37
COP		W/W	4.28	4.18	3.85	3.87
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz			
Max. circuit/Fuse current		A	32	40	40	40
Power consumption	Cooling	kW	3.03	3.59	3.92	4.75
	Heating	kW	3.27	3.95	4.16	4.65
Maximum drive IDU NO.		unit	7	8	8	9
Refrigerant charge volume		kg	3.3	3.3	3.3	3.3
Sound pressure level		dB(A)	57	58	58	58
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Dimension(WxDxH)	Outline	mm	900x340x1345	900x340x1345	940x460x820	900x340x1345
	Package	mm	998x458x1500	998x458x1500	1023x563x973	998x458x1500
Net weight/Gross weight		kg	112/123	112/123	98/108	112/123
Loading quantity	40' GP	set	57	57	88	57
	40' HQ	set	57	57	88	57

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



Model			GMV-120WL/C-T(S)	GMV-140WL/C-T(S)	GMV-160WL/C-T(S)
Capacity range		HP	4	5	6
Cooling-35°C ⁽¹⁾	Capacity	kW	12.30	13.95	15.75
		Btu/h	42000	48000	54000
	Power input	kW	2.8	3.6	4.4
	EER	(Btu/h)/W	15.00	13.33	12.27
Cooling-46°C ⁽²⁾	Capacity	kW	10.80	12.30	13.35
		Btu/h	37000	42000	46000
	Power input	kW	3.50	4.30	5.35
	EER	(Btu/h)/W	10.57	9.77	8.60
Heating ⁽³⁾	Capacity	kW	13.95	16.50	18.00
		Btu/h	47000	56000	61000
	Power input	kW	3.3	4.0	4.7
	COP	(Btu/h)/W	14.24	14.00	12.98
		W/W	4.23	4.12	3.83
Connected indoor unit	Total capacity		12.30	13.95	15.75
	Maximum quantity		7	8	9
Compressors	Type		Inverter rotary	Inverter rotary	Inverter rotary
	Quantity		1	1	1
Fan motors	Type		Axial-flow	Axial-flow	Axial-flow
	Quantity		2	2	2
	Static pressure	Pa	0	0	0
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	3.3	3.3	3.3
Connecting pipe ⁽⁴⁾	Liquid pipe	mm	Φ9.52	Φ9.52	Φ9.52
	Gas pipe	mm	Φ15.9	Φ15.9	Φ19.05
Airflow rate		m³/h	6000	6300	6600
Sound pressure level ⁽⁵⁾		dB(A)	57	58	58
Net dimensions (W×H×D)		mm	900×1345×340	900×1345×340	900×1345×340
Packed dimensions(W×H×D)		mm	998×1500×458	998×1500×458	998×1500×458
Net weight		kg	112	112	112
Gross weight		kg	123	123	123
Ambient temp. operation range	Cooling	℃	-5~52	-5~52	-5~52
	Heating	℃	-20~27	-20~27	-20~27

Note: (1) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010; power input indoor units (duct type) included. As per AHR/SASO.
(2) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(3) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included. As per Estidama.
(4) Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the V6 Series Engineering Data Book for connection piping diameters.
(5) Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

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	14.0	16.0
	Heating	kW	14.0	16.5	18.0
EER		W/W	3.99	3.90	3.37
COP		W/W	4.28	4.18	3.87
Power supply		V/Ph/Hz	380V-415V 3N~ 50/60Hz		
Max. circuit/Fuse current		A	16/5	16/5	16/5
Power consumption	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	900x340x1345	900x340x1345	900x340x1345
	Package	mm	998x458x1500	998x458x1500	998x458x1500
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

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



Model			GMV-H224WL/A-X	GMV-H280WL/A-X	GMV-H335WL/A-X
Capacity range		HP	8	10	12
Cooling-35℃ ⁽¹⁾	Capacity	kW	22.2	27.9	33.3
		Btu/h	76000	95000	114000
	Power input	kW	5.8	7.2	9.1
	EER	(Btu/h)/W	13.1	13.2	12.5
Cooling-46℃ ⁽²⁾	Capacity	kW	18.9	22.8	28.5
		Btu/h	65000	78000	97000
	Power input	kW	6.6	7.9	9.2
	EER	(Btu/h)/W	9.8	9.8	10.5
Heating ⁽³⁾	Capacity	kW	24.0	30.0	35.1
		Btu/h	82000	102000	120000
	Power input	kW	5.4	6.9	8.2
	COP	(Btu/h)/W	15.2	14.8	14.6
		W/W	4.44	4.35	4.28
	Connected indoor unit	Total capacity		22.2	27.9
Maximum quantity		13	17	20	
Compressors	Type		Inverter rotary+	Inverter scroll+	Inverter scroll+
	Quantity		1	1	1
Fan motors	Type		Axial-flow	Axial-flow	Axial-flow
	Quantity		2	2	2
	Static pressure	Pa	0	0	0
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	5.5	7.1	8.0
Connecting pipe ⁽⁴⁾	Liquid pipe	mm	Φ9.52	Φ9.52	Φ12.7
	Gas pipe	mm	Φ19.05	Φ22.2	Φ25.4
Airflow rate		m³/h	8000	11000	11000
Sound pressure level ⁽⁵⁾		dB(A)	60	62	63
Net dimensions(WxHxD)		mm	940x1430x320	940x1615x460	940x1615x460
Packed dimensions(WxHxD)		mm	1038x1580x438	1038x1765x578	1038x1765x578
Net weight		kg	133	166	177
Gross weight		kg	144	183	194
Ambient temp. operation range	Cooling	℃	-5-52	-5-52	-5-52
	Heating	℃	-20-27	-20-27	-20-27

Note: (1) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010; power input indoor units (duct type) included. As per AHRI/SASO.
(2) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(3) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included. As per Estidama.
(4) Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the V6 Series Engineering Data Book for connection piping diameters.
(5) Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Slim

50/60Hz (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	3.60	3.50
COP		W/W	4.9	4.9	4.9
Max. circuit/Fuse current		A	20/5	25/5	32/5
Power supply		V/Ph/Hz	380V-415V 3N~ 50/60Hz		
Power consumption	Cooling	kW	6.12	7.78	9.57
	Heating	kW	4.90	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 (WxDxH)	Outline	mm	940x320x1430	940x460x1615	940x460x1615
	Package	mm	1038x438x1580	1038x578x1765	1038x578x1765
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

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



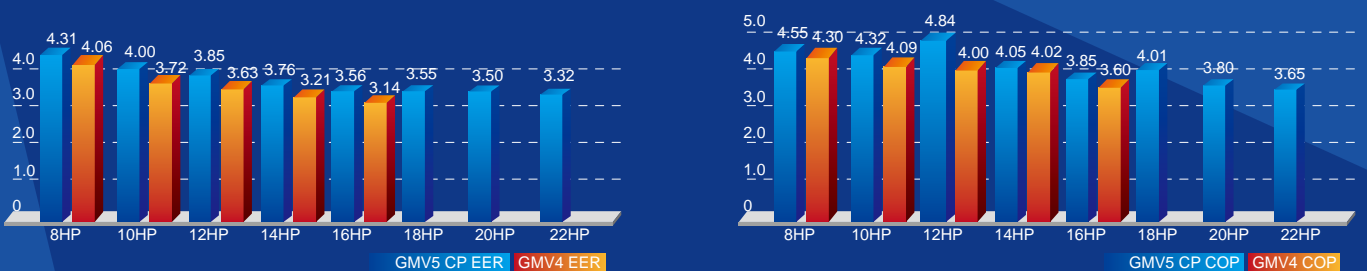
GMV5 CP



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

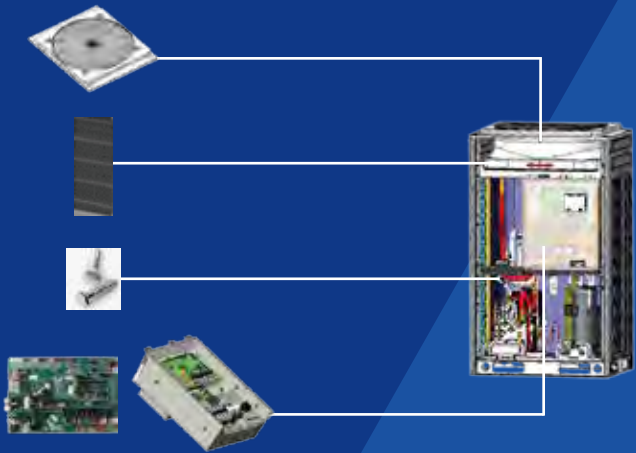
The GMV5 CP unit adopts corrosion-resistance materials on both metal and electronic parts, which enables it to be installed near the sea.

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.

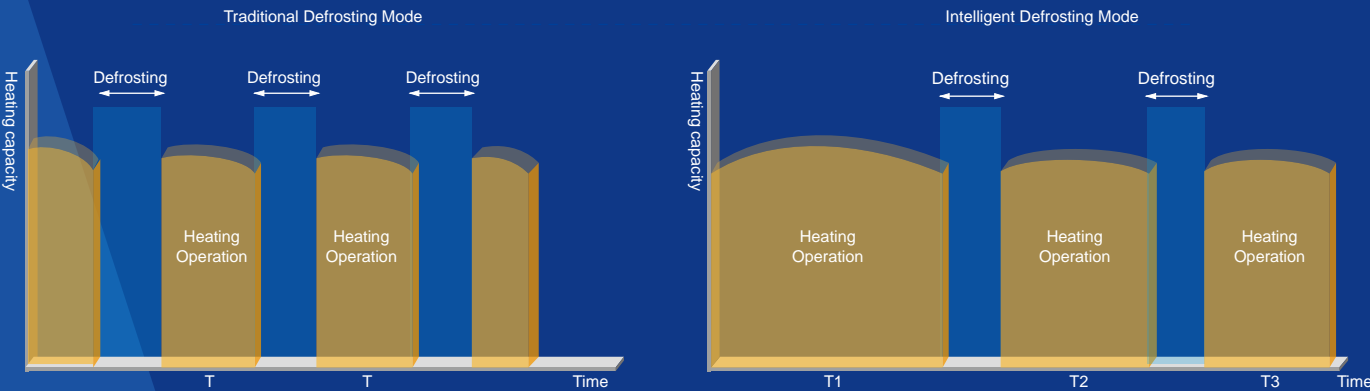
All screws are anti-rust.

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.



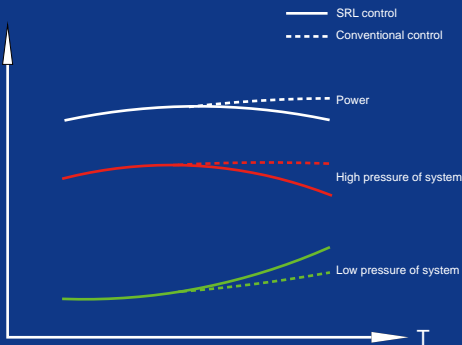
Lower Power Consumption Operation Mode

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.



SRL (Self-reaction Load) Self-adaptive Control

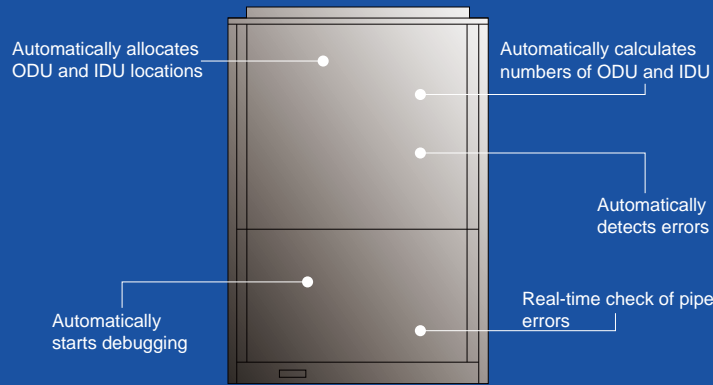
SRL (Self-reaction Load) can intelligently detect and control system parameters and automatically adapt to indoor cold/heat load requirement for reducing unit's power and improving the energy efficiency.



Engineering Debugging for Convenient Construction

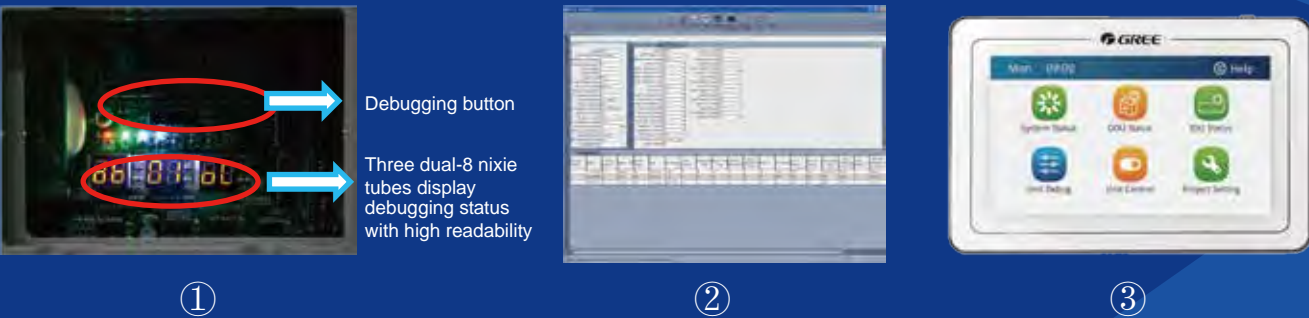
1) GMV5 CP has five auto debugging features:

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



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

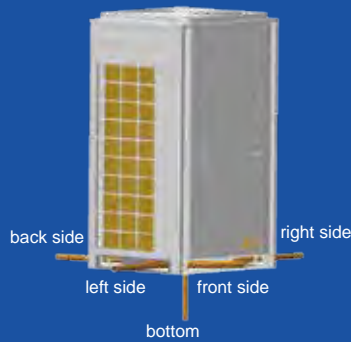
- ① Button debugging of outdoor unit
- ② Special GMV debugging system
- ③ CE41-24/F(C) debugger has functions of debugging of complete unit, independent debugging of indoor unit, malfunction display, data record and so on. It's no need to connect special software and PC. Moreover, it can connect external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



Five-way Piping Connection

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

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






No Need Wired Controller for Debugging

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

ODU Combination Lineup

Model	GMV-224WMB1-X	GMV-280WMB1-X	GMV-335WMB1-X	GMV-400WMB1-X	GMV-450WMB1-X	GMV-504WMB1-X	GMV-560WMB1-X	GMV-615WMB1-X
GMV-224WMB1-X	●							
GMV-280WMB1-X		●						
GMV-335WMB1-X			●					
GMV-400WMB1-X				●				
GMV-450WMB1-X					●			
GMV-504WMB1-X						●		
GMV-560WMB1-X							●	
GMV-615WMB1-X								●
GMV-680WMB1-X		●		●				
GMV-730WMB1-X		●			●			
GMV-785WMB1-X		●				●		
GMV-850WMB1-X		●					●	
GMV-900WMB1-X		●						●
GMV-960WMB1-X			●					●
GMV-1010WMB1-X				●				●
GMV-1065WMB1-X					●			●
GMV-1130WMB1-X						●		●
GMV-1180WMB1-X							●	●
GMV-1235WMB1-X								●●
GMV-1300WMB1-X		●			●		●	
GMV-1350WMB1-X		●			●			●
GMV-1410WMB1-X			●		●			●
GMV-1460WMB1-X		●					●	●
GMV-1515WMB1-X		●						●●
GMV-1580WMB1-X			●					●●
GMV-1630WMB1-X				●				●●
GMV-1685WMB1-X					●			●●
GMV-1750WMB1-X						●		●●
GMV-1800WMB1-X							●	●●
GMV-1845WMB1-X								●●●
GMV-1908WMB1-X		●			●		●	●
GMV-1962WMB1-X		●				●	●	●
GMV-2016WMB1-X		●					●●	●
GMV-2072WMB1-X		●					●	●●
GMV-2128WMB1-X		●						●●●
GMV-2184WMB1-X			●					●●●
GMV-2240WMB1-X				●				●●●
GMV-2295WMB1-X					●			●●●
GMV-2350WMB1-X						●		●●●
GMV-2405WMB1-X							●	●●●
GMV-2460WMB1-X								●●●●

GMV5 CP Lineup

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

Specifications 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	28.0	33.5	40.0
	Heating	kW	25.0	31.5	37.5	45.0
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	380V-415V 3N~ 50/60Hz			
Max. circuit/Fuse current		A	15.7/20.0	20.9/25.0	22.5/32.0	28.8/40.0
Power consumption	Cooling	kW	5.20	7.00	8.70	10.65
	Heating	kW	5.50	7.30	7.75	11.10
Maximum drive IDU NO.		unit	13	16	19	23
Refrigerant charge volume		kg	5.9	6.7	9.0	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 (WxDxH)	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	45.0	50.4	56.0	61.5
	Heating	kW	50.0	56.5	63.0	69.0
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	380V-415V 3N~ 50/60Hz			
Max. circuit/Fuse current		A	33.2/40.0	45.4/50.0	51.1/63.0	59.2/63.0
Power consumption	Cooling	kW	12.65	14.20	16.00	18.50
	Heating	kW	13.0	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 (WxDxH)	Outline	mm	1340x765x1605	1340x765x1740	1340x765x1740	1340x765x1740
	Package	mm	1420x840x1775	1420x840x1910	1420x840x1910	1420x840x1910
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 V/Ph/Hz	Capacity		Power input		Dimension(W×D×H)	Airflow volume m ³ /h	ESP Pa	Sound pressure level dB(A)	Operation sound pressure level at night dB(A)	Connecting pipe			Min. circuit current A	Max. fuse current A	Weight kg
		Cooling	Heating	Cooling	Heating						Liquid	Gas	Oil			
		kW	kW	kW	kW	mm					mm	mm	mm			
GMV-680WM/B1-X	380V - 415V 3N~ 50 /60Hz	68.0	76.5	17.7	18.4	(930x765x1605) +(1340x765x1605)	11400+ 14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25 + 40	225+360
GMV-730WM/B1-X		73.0	81.5	19.7	20.3	(930x765x1605) +(1340x765x1605)	11400+ 14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25 + 40	225+360
GMV-785WM/B1-X		78.4	88.0	21.2	21.4	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	66	43	Φ19.05	Φ31.8	Φ9.52	20.9+45.4	25 + 50	225+360
GMV-850WM/B1-X		84.0	94.5	23.0	23.9	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+51.1	25 + 63	225+385
GMV-900WM/B1-X		89.5	100.5	25.5	26.2	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+59.2	25 + 63	225+385
GMV-960WM/B1-X		95.0	106.5	27.2	26.7	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	22.5+59.2	32 + 63	235+385
GMV-1010WM/B1-X		101.5	114.0	29.2	30.0	(1340x765x1605) +(1340x765x1740)	14000+ 16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+59.2	40 + 63	360+385
GMV-1065WM/B1-X		106.5	119.0	31.2	31.9	(1340x765x1605) +(1340x765x1740)	14000+ 16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+59.2	40 + 63	360+385
GMV-1130WM/B1-X		111.9	125.5	32.7	33.0	(1340x765x1740) x2	16000x2	82	68	43	Φ19.05	Φ38.1	Φ9.52	45.4+59.2	50 + 63	360+385
GMV-1180WM/B1-X		117.5	132.0	34.5	35.5	(1340x765x1740) x2	16000x2	82	69	43	Φ19.05	Φ38.1	Φ9.52	51.1+59.2	63 + 63	385x2
GMV-1235WM/B1-X		123.0	138.0	37.0	37.8	(1340x765x1740) x2	16000x2	82	69	43	Φ19.05	Φ38.1	Φ9.52	59.2+59.2	63 + 63	385x2
GMV-1300WM/B1-X		129.0	144.5	35.7	36.9	(930x765x1605)+(1340x765x1740) 5x1605)+(1340x765x1740)	11400+14000 +16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+51.1	25 + 40 + 63	225+360 +385
GMV-1350WM/B1-X		134.5	150.5	38.2	39.2	(930x765x1605)+(1340x765x1740) 5x1605)+(1340x765x1740)	11400+14000 +16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+59.2	25 + 40 + 63	225+360 +385
GMV-1410WM/B1-X		140.0	156.5	39.9	39.7	(930x765x1605)+(1340x765x1740) 5x1605)+(1340x765x1740)	11400+14000 +16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	22.5+33.2+59.2	32 + 40 + 63	235+360 +385
GMV-1460WM/B1-X		145.5	163.5	41.5	42.8	(930x765x1605) +(1340x765x1740) x2	11400+ 16000x2	82	69	45	Φ19.05	Φ41.3	Φ9.52	20.9+51.1+59.2	25 + 63 + 63	225+385x2
GMV-1515WM/B1-X		151.0	169.5	44.0	45.1	(930x765x1605) +(1340x765x1740) x2	11400+ 16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	20.9+59.2+59.2	25 + 63 + 63	225+385x2
GMV-1580WM/B1-X		156.5	175.5	45.7	45.6	(930x765x1605) +(1340x765x1740) x2	11400+ 16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	22.5+59.2+59.2	32 + 63 + 63	235+385x2
GMV-1630WM/B1-X		163.0	183.0	47.7	48.9	(1340x765x1605) +(1340x765x1740) x2	14000+ 16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	28.8+59.2+59.2	40 + 63 + 63	360+385x2
GMV-1685WM/B1-X		168.0	188.0	49.7	50.8	(1340x765x1605) +(1340x765x1740) x2	14000+ 16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	33.2+59.2+59.2	40 + 63 + 63	360+385x2
GMV-1750WM/B1-X		173.4	194.5	51.2	51.9	(1340x765x1740) x3	16000x3	82	70	45	Φ19.05	Φ41.3	Φ9.52	45.4+59.2+59.2	50 + 63 + 63	360+385x2
GMV-1800WM/B1-X		179.0	201.0	53.0	54.4	(1340x765x1740) x3	16000x3	82	71	45	Φ19.05	Φ41.3	Φ9.52	51.1+59.2+59.2	63 + 63 + 63	385x3
GMV-1845WM/B1-X		184.5	207.0	55.5	56.7	(1340x765x1740) x3	16000x3	82	71	45	Φ19.05	Φ41.3	Φ9.52	59.2+59.2+59.2	63+63+63	385x3
GMV-1908WM/B1-X		190.5	213.5	54.2	55.8	(930x765x1605)+(1340x765x1605)+(1340x765x1740) x2	11400+14000 +16000x2	82	72	47	Φ22.2	Φ44.5	Φ9.52	20.9+33.2+51.1+59.2	25+40+63+63	225+360 +385x2
GMV-1962WM/B1-X		195.9	220.0	55.7	56.9	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+45.4+51.1+59.2	25+50+63+63	225+360 +385x2
GMV-2016WM/B1-X		201.5	226.5	57.5	59.4	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+51.1+51.1+59.2	25+63+63+63	225+385x3
GMV-2072WM/B1-X		207.0	232.5	60.0	61.7	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+51.1+59.2+59.2	25+63+63+63	225+385x3
GMV-2128WM/B1-X		212.5	238.5	62.5	64.0	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+59.2+59.2+59.2	25+63+63+63	225+385x3
GMV-2184WM/B1-X		218.0	244.5	64.2	64.5	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	74	47	Φ22.2	Φ44.5	Φ9.52	22.5+59.2+59.2+59.2	32+63+63+63	235+385x3
GMV-2240WM/B1-X		224.5	252.0	66.2	67.8	(1340x765x1605) +(1340x765x1740) x3	14000+ 16000x3	82	74	47	Φ22.2	Φ44.5	Φ9.52	28.8+59.2+59.2+59.2	40+63+63+63	360+385x3
GMV-2295WM/B1-X		229.5	257.0	68.2	69.7	(1340x765x1605) +(1340x765x1740) x3	14000+ 16000x3	82	74	47	Φ22.2	Φ44.5	Φ9.52	33.2+59.2+59.2+59.2	40+63+63+63	360+385x3
GMV-2350WM/B1-X		234.9	263.5	69.7	70.8	(1340x765x1740) x4	16000x4	82	75	47	Φ22.2	Φ44.5	Φ9.52	45.4+59.2+59.2+59.2	50+63+63+63	360+385x3
GMV-2405WM/B1-X		240.5	270.0	71.5	73.3	(1340x765x1740) x4	16000x4	82	75	47	Φ22.2	Φ44.5	Φ9.52	51.1+59.2+59.2+59.2	63+63+63+63	385x4
GMV-2460WM/B1-X		246.0	276.0	74.0	75.6	(1340x765x1740) x4	16000x4	82	75	47	Φ22.2	Φ44.5	Φ9.52	59.2+59.2+59.2+59.2	63+63+63+63	385x4

GMV5 MAX



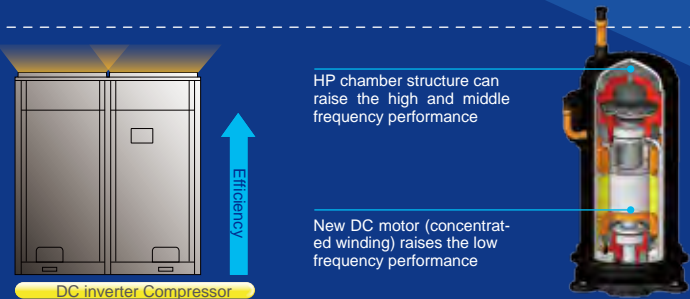
Key Features

DC Inverter Technology to Improve Compression Efficiency

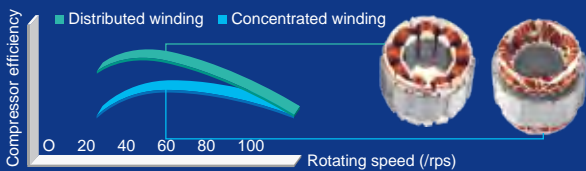
DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyon motor is adopted to provide better performance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

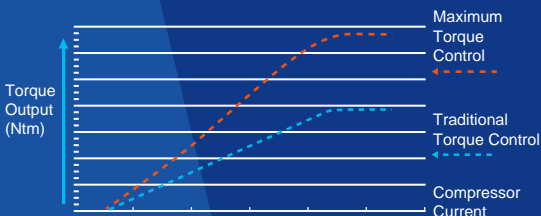


- High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.



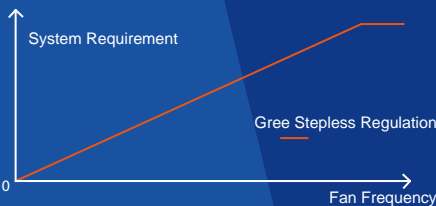
Technology of Maximum Torque Control with Minimum Current

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

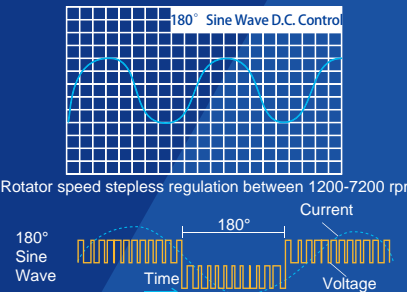
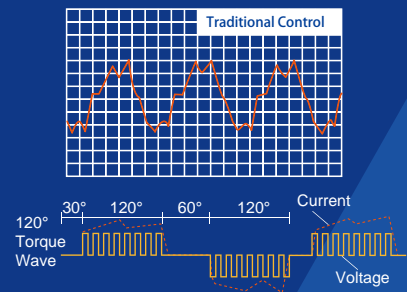


Low-frequency Torque Control

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

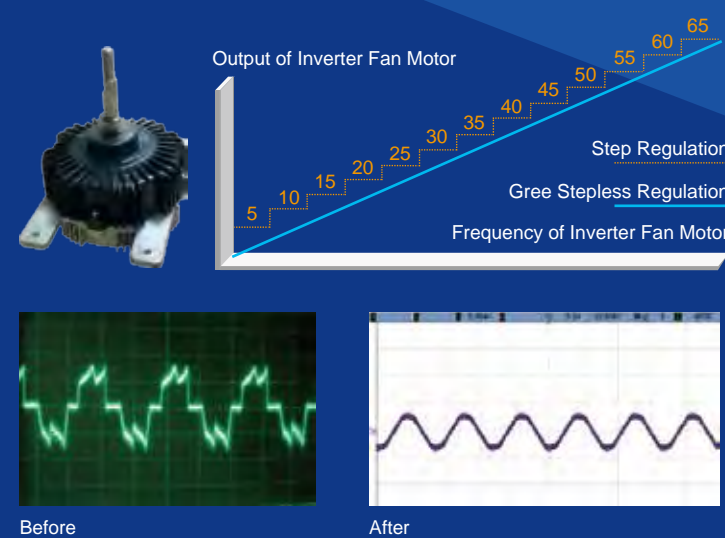


- 180° Sine Wave DC Speed Varying Technology
It can satisfy various places' demands for different temperature and is able to save a great deal of electricity and provide users with utmost comfort at the same time.



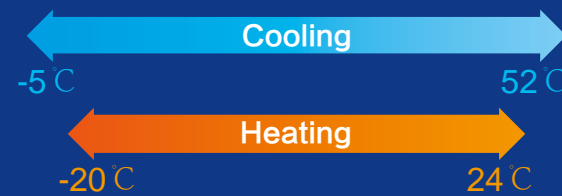
Sensorless DC Inverter Fan Motor

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



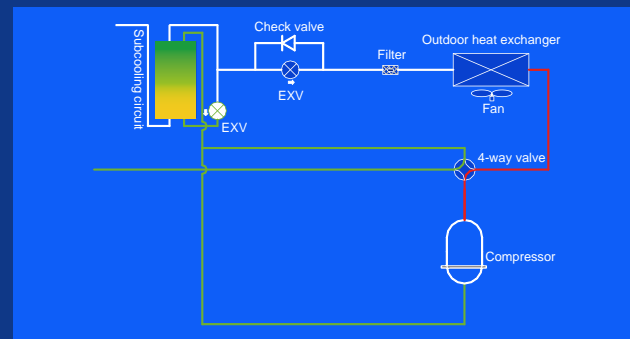
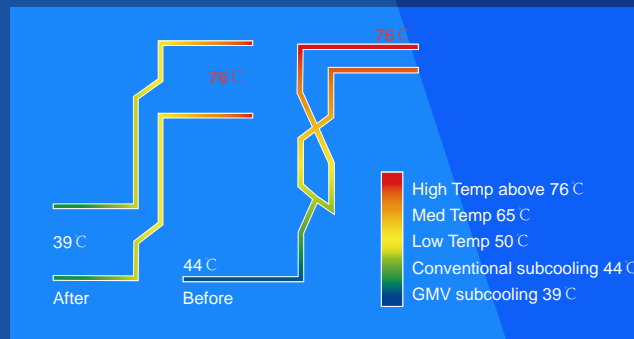
Wide Range of Operation Condition

Outdoor operation temperature range is expanded 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

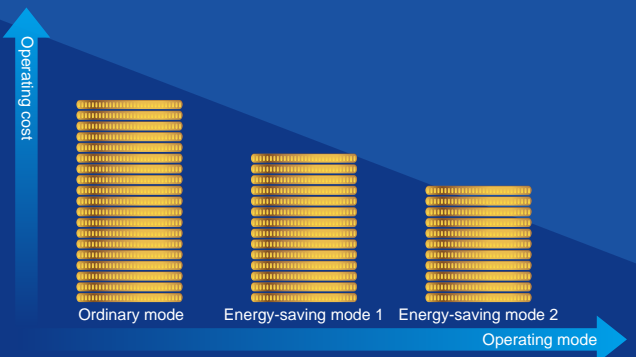
Thanks to the advanced DC inverter compressor and DC fan, optimized system design and accurate intelligent control technology, EER of GMV5 Max is up to 3.25 while COP is up to 3.82.



Energy-saving Operation Control Technology

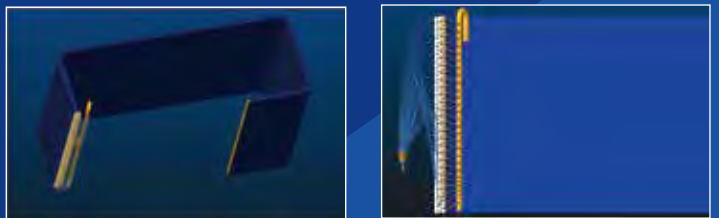
The GMV5 MAX system has 2 modes for energy saving, which can be chosen to meet different electricity demands.

- 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.



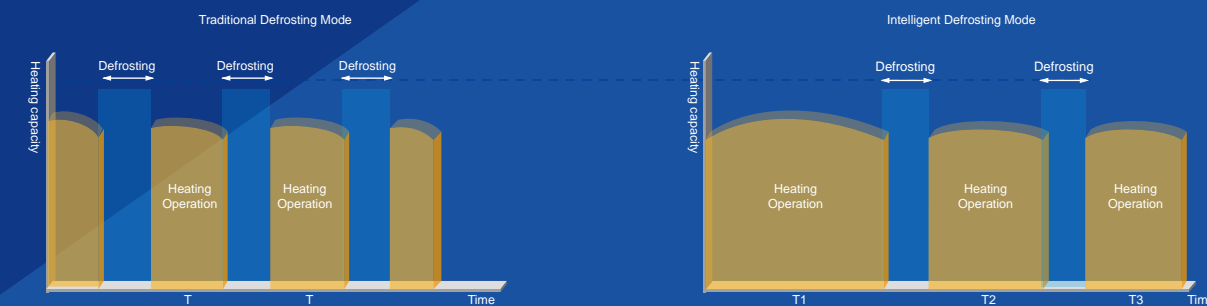
G-type Heat Exchanger

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

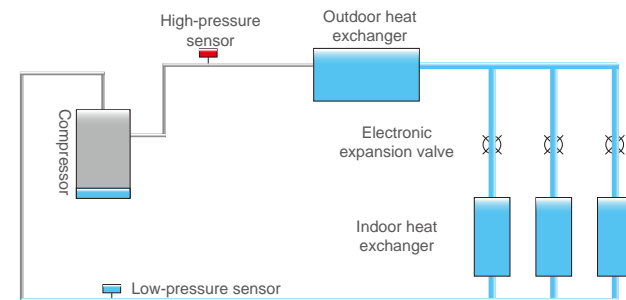
During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness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



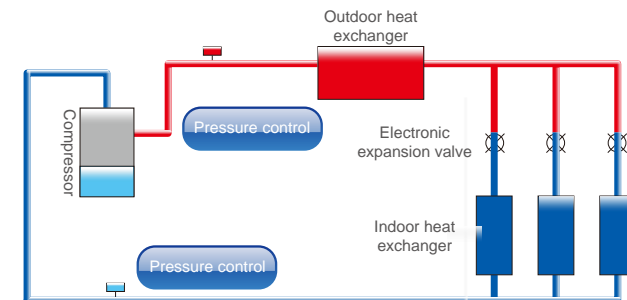
Oil Return Control Technology

● New Oil Return Control

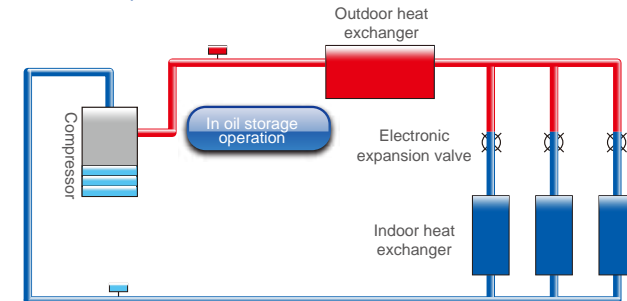
Gree new oil return control technology effectively controls system oil return and oil storage status of each compressor, which greatly improves the operation lifespan of compressor.



Oil storage status before oil return



Oil return operation



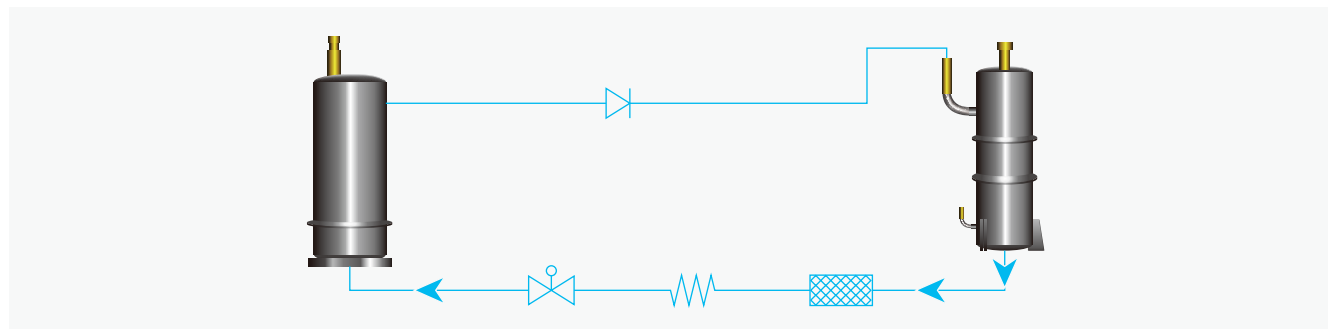
Oil storage operation

● Specialized Compressor Oil Storage Control

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

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

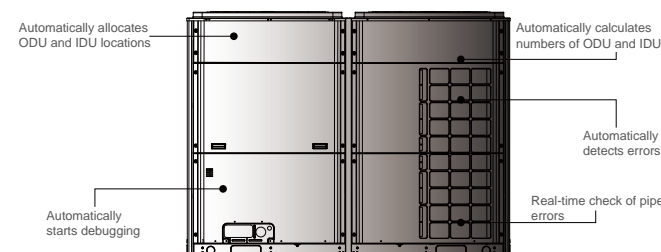
For GMV5 MAX, detection sensor is designed for the oil supply circuit of each compressor. This is to realize real-time judgment and detection for the oil supply circuit. When the compressor oil supply circuit is malfunctioning, shutdown protection will be enabled immediately to avoid further damage to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



Engineering Debugging for Convenient Construction

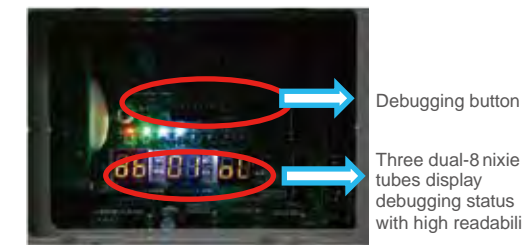
1) GMV5 MAX has five auto debugging features:

- 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:

- ① Button debugging of outdoor unit
- ② Special GMV debugging system
- ③ CE41-24/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

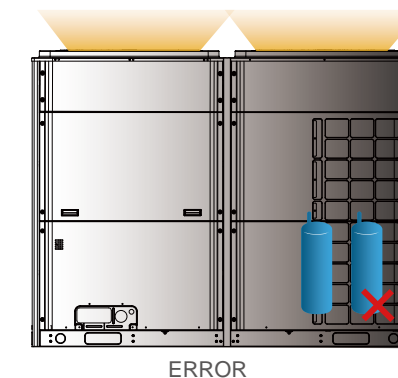


③

Excellent Emergency Operation Function to Ensure Reliable Operation

● Emergency Operation of Compressor

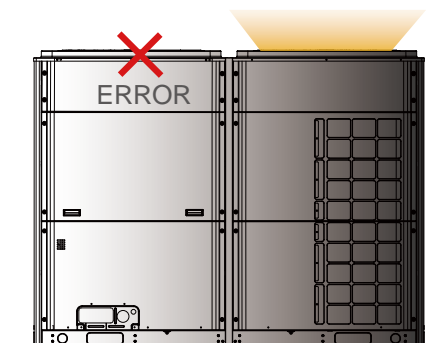
All the compressors in each single module are DC Inverter based, when one compressor has error, others will perform the emergency operation.



ERROR

● Emergency Operation of Fan

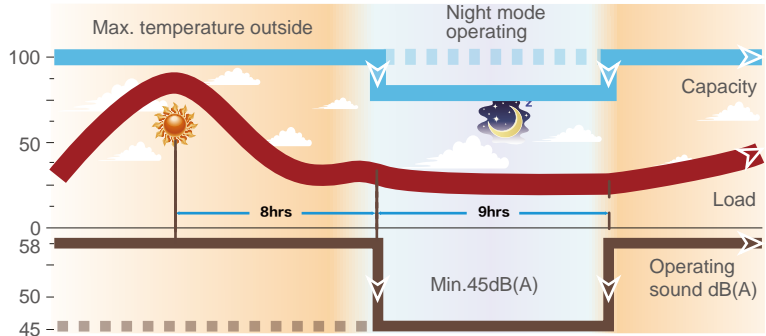
Double-fan design ensures that one fan can still work even if the other one has error.



Outdoor Unit Quiet Mode and Quiet Control

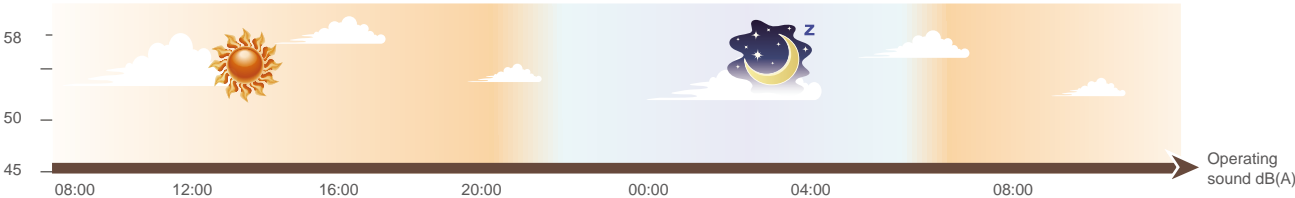
Quiet at Night

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).

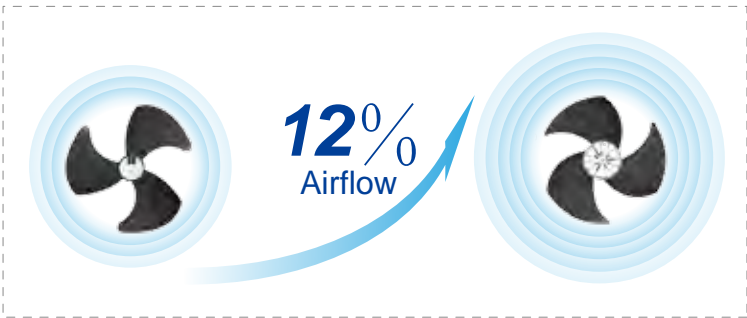


Quiet Control

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	90.0
	Heating	kW	87.5	100.0
EER	W/W		3.22	3.25
COP	W/W		3.74	3.82
Power supply	V/Ph/Hz		380V-415V 3N~ 50/60Hz	
Max. circuit/Fuse current	A		57.2/63.0	71.5/80.0
Power consumption	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	24.0
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	2200×880×1675	
	Package	mm	2267×952×1867	
Net weight/Gross weight	kg		557/592	600/635
Loading quantity	40'GP	set	12	12
	40'HQ	set	12	12

GMV5 Heat Recovery

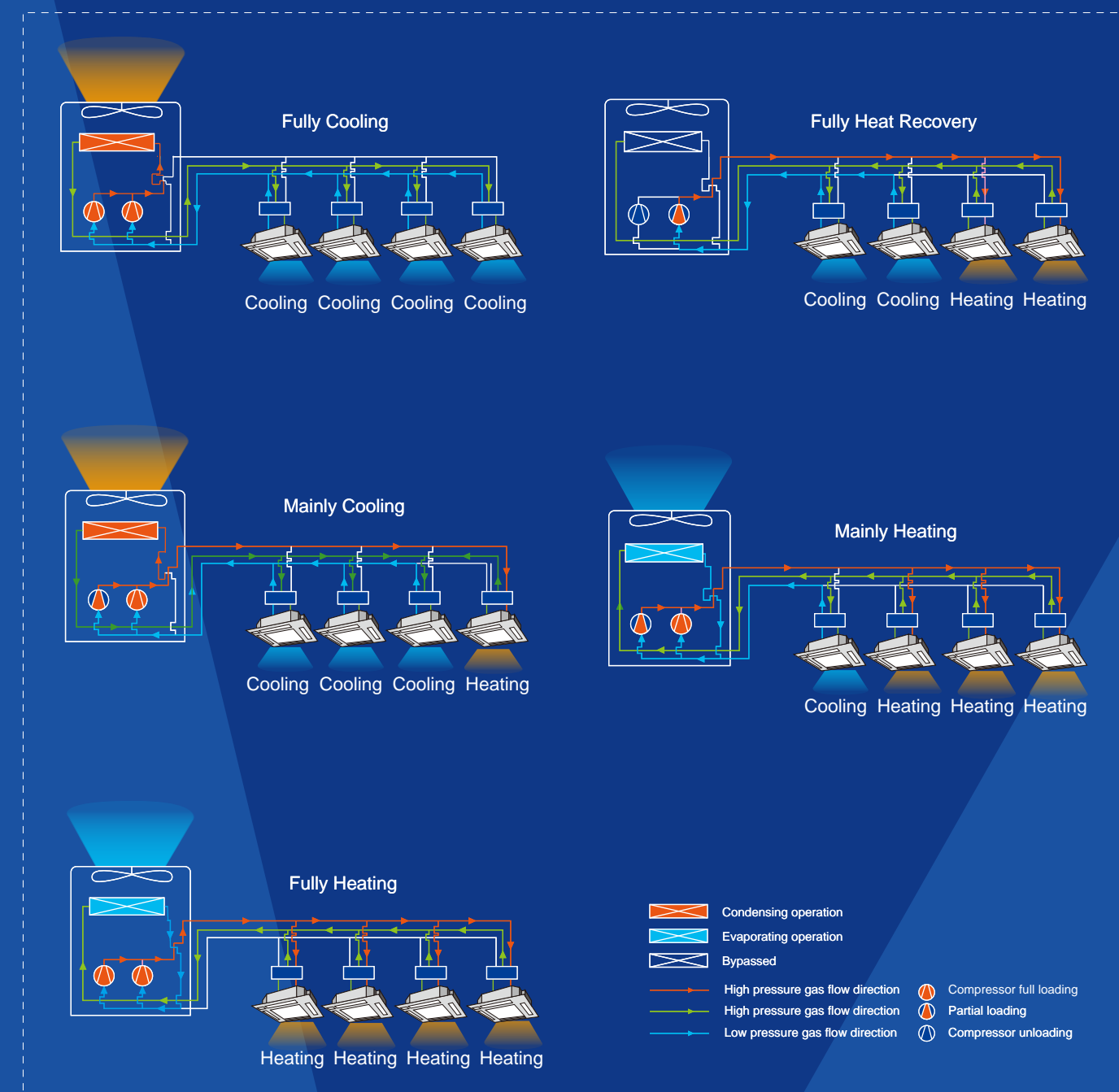


Key Features

High Efficiency

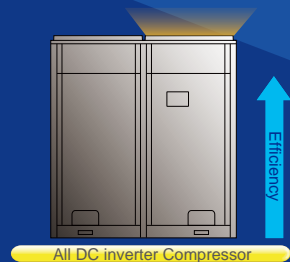
GMV5 Heat Recovery System embodies the excellent features of GMV5 (DC inverter technology, DC fan linkage control, precise control of capacity output, balancing control of refrigerant, original oil balancing technology with high pressure chamber, high-efficiency output control, low-temperature operation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

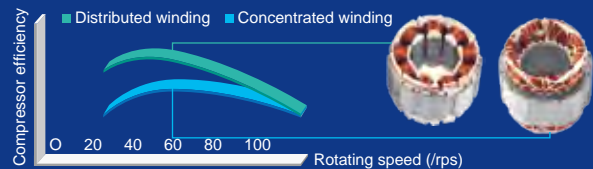


All DC Inverter Technology to Improve Compression Efficiency

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



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



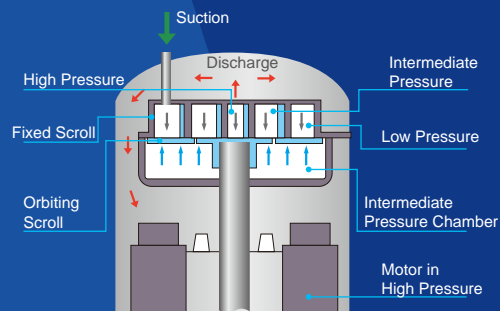
High Pressure Chamber Design

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.



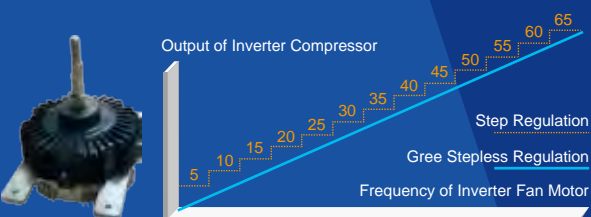
HP chamber structure can raise the high and middle frequency performance

New DC motor (concentrated winding) raises the low frequency performance

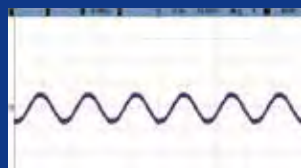
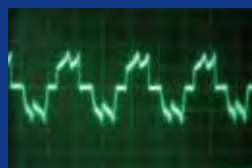


Sensorless DC Inverter Fan Motor

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.



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 buildings or hotels.



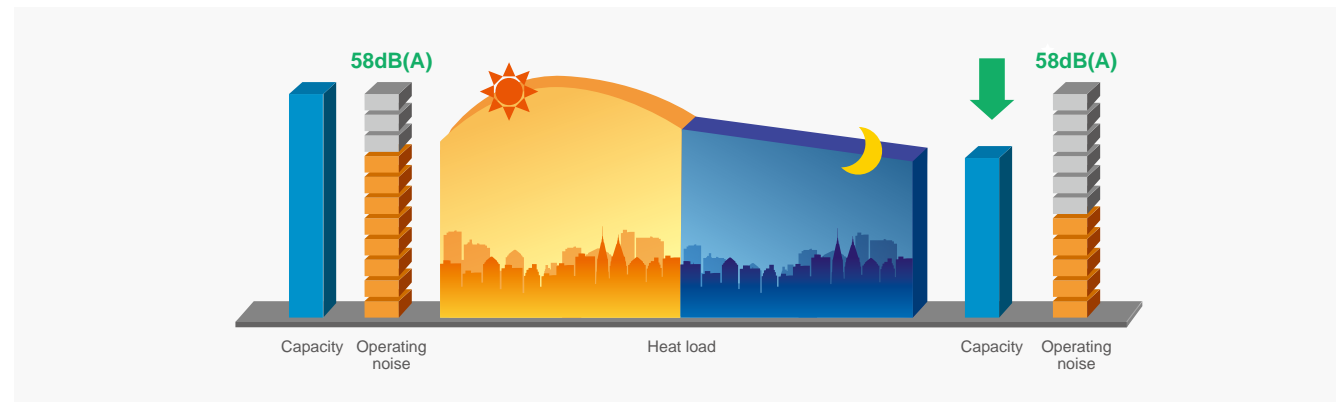
Max. IDU Connection: **80** sets

Comfortable Design for A Better Life

Intelligent Quiet Function at Night

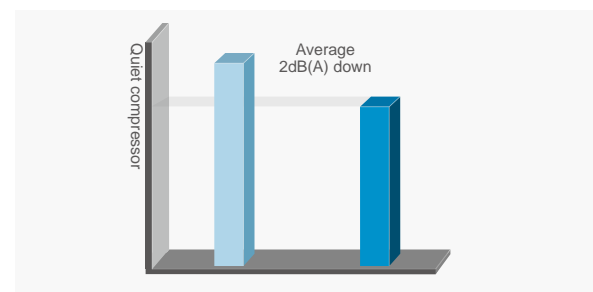
Quiet at Night

Intelligent 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).

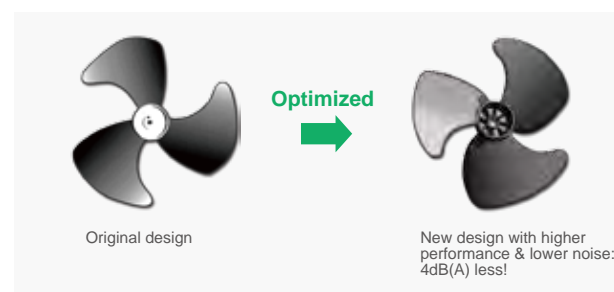


Low Noise Design

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

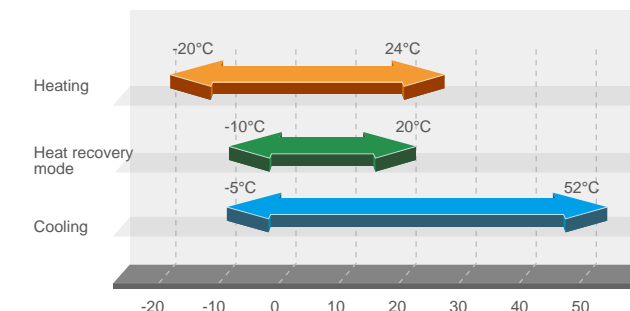
The set temperature of each room may vary by the individual thermostat control of each indoor unit. The cooling and heating operation can be performed at the same time.



Wide Operation Range

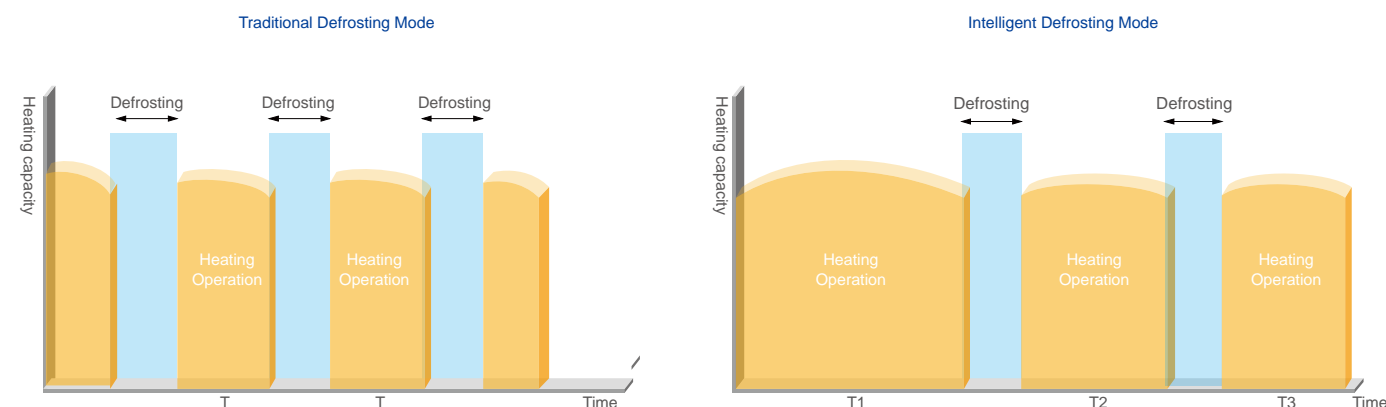
The unit can operate in wide range, greatly reducing the ambient temperature limitation.

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



Excellent Performance Ensured by Advanced Technology

Modules Rotation Operating to Maximize Lifespan

• Modules 8h Rotation Operating

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



Excellent Emergency Operation Function to Ensure Reliable Operation

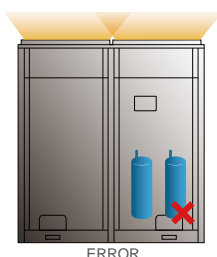
• Emergency Function

The GMV5 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.



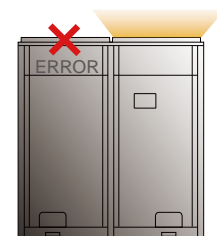
• Emergency Operation of Compressor

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



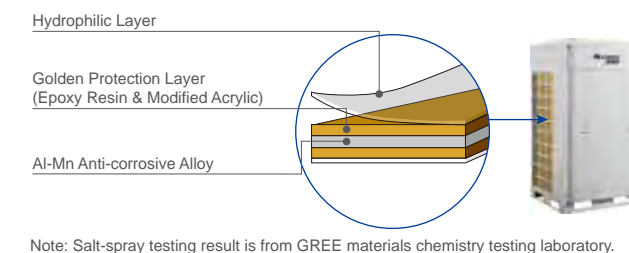
• Emergency Operation of Fan

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



Highly Anticorrosive Golden Fins

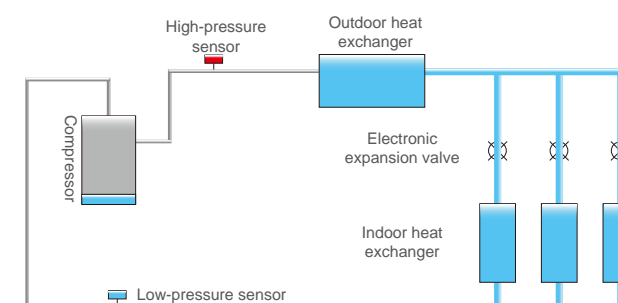
The primary material of golden fin is Al-Mn (Aluminum-Manganese) anti-rust alloy, which is coated with the golden protection layer(components: epoxy resin&modified acrylic, silicon free), the anti-corrosive performance in salt-spray testing is 200%~300% higher than normal blue fin*.



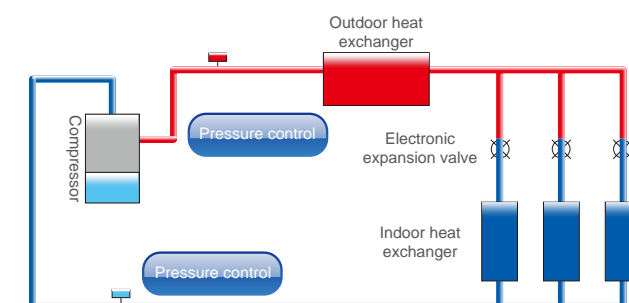
Oil Return Control Technology

• 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.



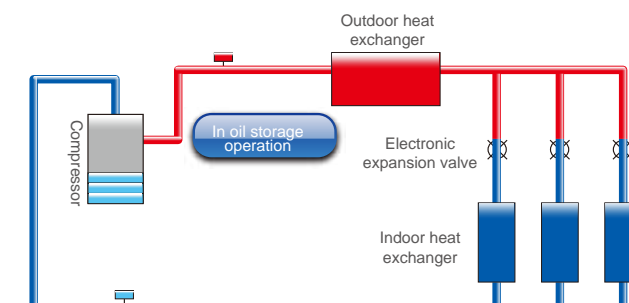
Oil storage status before oil return



Oil return operation

• Specialized Compressor Oil Storage Control

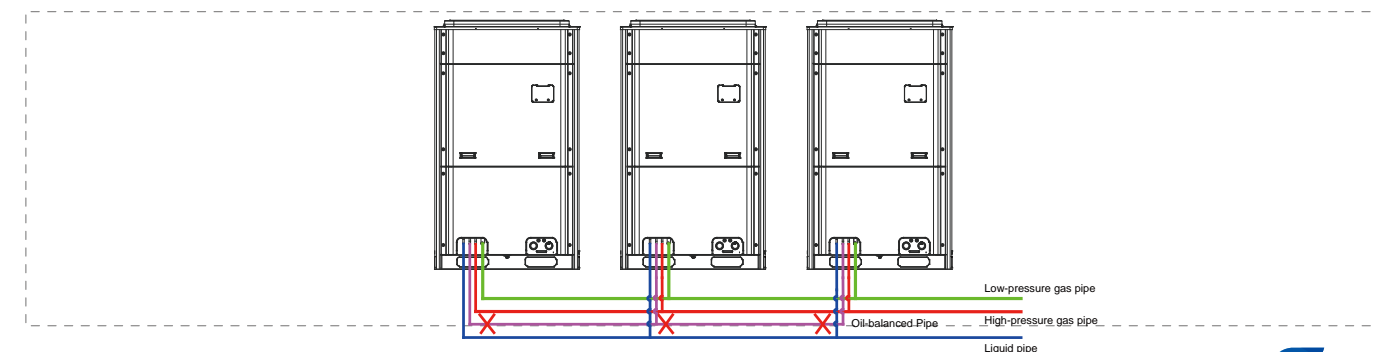
The system applies specialized compressor oil storage technology, which can control the lowest oil level for compressor operation.



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.



Easy Transportation

Optimized Base Frame

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



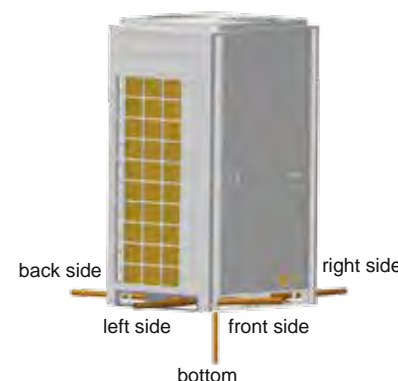
Transportable by Forklift



Five-way Piping Connection

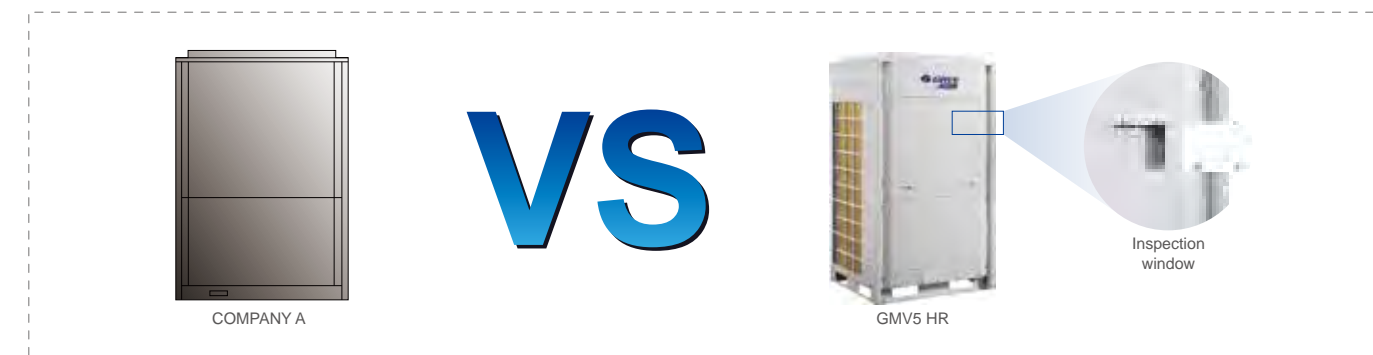
Piping and wiring are available to the front and back, left and right, and bottom.

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



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



50/60Hz














































































Model			GMV-Q224WM/E-X	GMV-Q280WM/E-X	GMV-Q335WM/E-X	GMV-Q400WM/E-X	GMV-Q450WM/E-X
Capacity range		HP	8	10	12	14	16
Cooling capacity	Nom.	kW	22.4	28.0	33.5	40.0	45.0
	Nom.	kW	22.4	28.0	33.5	40.0	45.0
Heating capacity	Max.	kW	25.0	31.5	37.5	45.0	50.0
EER	Nom.	Ducted	kW/kW	4.09	3.44	4.04	3.36
		Cassette	kW/kW	3.10	2.53	2.47	2.52
COP	Nom.	Ducted	kW/kW	4.75	4.32	4.87	4.50
		Cassette	kW/kW	3.37	3.48	3.46	3.07
	Max.		kW/kW	4.75	4.32	4.87	4.50
Power consumption of cooling	Nom.	Ducted	kW	5.48	8.14	8.29	11.90
		Cassette	kW	7.23	11.07	13.56	15.87
Power consumption of heating	Nom.	Ducted	kW	4.72	6.48	6.88	8.89
		Cassette	kW	6.65	9.05	9.68	13.03
	Max.		kW	5.26	7.29	7.70	10.00
Power supply		V/Ph/Hz	380V-415V 3N~ 50/60Hz				
Max. circuit/Fuse current		A	16.3/20.0	20.9/25.0	24.7/32.0	28.8/40.0	33.2/40.0
Maximum drive IDU NO.		unit	13	16	19	23	26
Refrigerant charge volume		kg	6.2	7.1	9.6	11.1	11.6
Sound pressure level(cooling)		dB(A)	60	61	63	63	63
Sound power level(cooling)	Ducted	dB(A)	84	84	80	86	89
	Cassette	dB(A)	84	85	86	87	91
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

50/60Hz

Model			NCHS1C	NCHS2C	NCHS4C	NCHS8C
Max. IDU branches		unit	1	2	4	8
No. of connectable IDU of each branch		unit	8	8	8	8
Total connectable IDU		unit	8	16	32	64
Max. capacity of each branch		kW	14.2	14.2	14.2	14.2
Max. capacity of connectable IDU		kW	14.2	28.0	45.0	68.0
Power supply		V/Ph/Hz	220V-240V ~ 50/60Hz			
Power consumption		W	8	28	44	80
Max. branch quantity of connecting IDU		unit	1	2	4	8
Outdoor unit piping connection	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ15.9
	Gas(Low pressure)	mm	Φ22.2		Φ28.6	
Indoor unit piping connection	Gas(High pressure)	mm	Φ15.9	Φ19.05	Φ22.2	Φ22.2
	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimensions (WxDxH)	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Outline	mm	388×302×225	468×377×225	587×399×225	987×488×225
Net weight/Gross weight	Package	mm	805×403×305	946×646×365	1123×676×345	1524×861×315
		kg	9.0/12.2	15.6/23.4	18.6/24.6	37.0/46.6

Note: GMV-Q**WM/E-X and NCHS*C are fixed match, which can't 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*1

Model	Power supply	Capacity			Power input			Dimension (WxDxH)	Airflow volume	ESP	Connecting pipe			Min. circuit current	Max. fuse current	Weight
		Cooling	Heating		Cooling	Heating					Liquid	Gas	Oil balance			
		Nom.*	Nom.*	Max	Nom.*	Nom.*	Max									
	V/Ph/Hz	kW	kW	kW	kW	kW	kW	mm	m³/h	Pa	mm	mm	mm	A	A	kg
GMV-Q504WM/E-X	380V-415V 3N ~ 50/60 Hz	50.4	50.4	56.5	13.62	11.20	12.55	(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		56.0	56.0	63.0	16.58	12.96	14.58	(930×765×1605)×2	11400×2		Φ15.9	Φ25.4	Φ28.6	20.9+20.9	25+25	233+233
GMV-Q615WM/E-X		61.5	61.5	69.0	16.43	13.36	14.99	(930×765×1605) +(1340×765×1605)	11400 +14000		Φ15.9	Φ25.4	Φ28.6	20.9+24.7	25+32	233+302
GMV-Q680WM/E-X		68.0	68.0	76.5	20.04	15.37	17.29	(930×765×1605) +(1340×765×1605)	11400 +14000		Φ15.9	Φ25.4	Φ28.6	20.9+28.8	25+40	233+346
GMV-Q730WM/E-X		73.0	73.0	81.5	22.94	17.90	19.98	(930×765×1605) +(1340×765×1605)	11400 +14000		Φ19.05	Φ28.6	Φ31.8	20.9+33.2	25+40	233+346
GMV-Q785WM/E-X		78.5	78.5	87.5	23.09	18.30	20.39	(1340×765×1605)×2	14000×2		Φ19.05	Φ28.6	Φ31.8	24.7+33.2	32+40	302+346
GMV-Q850WM/E-X		85.0	85.0	95.0	26.70	20.31	22.69	(1340×765×1605)×2	14000×2		Φ19.05	Φ28.6	Φ31.8	28.8+33.2	40+40	346+346
GMV-Q900WM/E-X		90.0	90.0	100.0	29.60	22.84	25.38	(1340×765×1605)×2	14000×2		Φ19.05	Φ28.6	Φ31.8	33.2+33.2	40+40	346+346
GMV-Q960WM/E-X		96.0	96.0	108.0	28.18	21.85	24.58	(930×765×1605)×2 +(1340×765×1605)	11400×2 +14000		Φ19.05	Φ28.6	Φ31.8	20.9+20.9+28.8	25+25+40	233+233+346
GMV-Q1010WM/E-X		101.0	101.0	113.0	31.08	24.38	27.27	(930×765×1605)×2 +(1340×765×1605)	11400×2 +14000		Φ19.05	Φ31.8	Φ38.1	20.9+20.9+33.2	25+25+40	233+233+346
GMV-Q1065WM/E-X		106.5	106.5	119.0	31.23	24.78	27.68	(930×765×1605) +(1340×765×1605)×2	11400 +14000×2		Φ19.05	Φ31.8	Φ38.1	20.9+24.7+33.2	25+32+40	233+302+346
GMV-Q1130WM/E-X		113.0	113.0	126.5	34.84	26.79	29.98	(930×765×1605) +(1340×765×1605)×2	11400 +14000×2		Φ19.05	Φ31.8	Φ38.1	20.9+28.8+33.2	25+40+40	233+346+346
GMV-Q1180WM/E-X		118.0	118.0	131.5	37.74	29.32	32.67	(930×765×1605) +(1340×765×1605)×2	11400 +14000×2		Φ19.05	Φ31.8	Φ38.1	20.9+33.2+33.2	25+40+40	233+346+346
GMV-Q1235WM/E-X		123.5	123.5	137.5	37.89	29.72	33.08	(1340×765×1605)×3	14000×3		Φ19.05	Φ31.8	Φ38.1	24.7+33.2+33.2	32+40+40	302+346+346
GMV-Q1300WM/E-X		130.0	130.0	145.0	41.50	31.73	35.38	(1340×765×1605)×3	14000×3		Φ19.05	Φ31.8	Φ38.1	28.8+33.2+33.2	40+40+40	346+346+346
GMV-Q1350WM/E-X		135.0	135.0	150.0	44.40	34.26	38.07	(1340×765×1605)×3	14000×3		Φ19.05	Φ31.8	Φ38.1	33.2+33.2+33.2	40+40+40	346+346+346
GMV-Q1410WM/E-X		141.0	141.0	158.0	42.98	33.27	37.27	(930×765×1605)×2 +(1340×765×1605)×2	11400×2 +14000×2		Φ19.05	Φ38.1	Φ41.3	20.9+20.9 +28.8+33.2	25+25 +40+40	233+233 +346+346
GMV-Q1460WM/ E-X		146.0	146.0	163.0	45.88	35.80	39.96	(930×765×1605)×2 +(1340×765×1605)×2	11400×2 +14000×2		Φ19.05	Φ38.1	Φ41.3	20.9+20.9 +33.2+33.2	25+25 +40+40	233+233 +346+346
GMV-Q1515WM/ E-X		151.5	151.5	169.0	46.03	36.20	40.37	(930×765×1605) +(1340×765×1605)×3	11400 +14000×3		Φ19.05	Φ38.1	Φ41.3	20.9+24.7 +33.2+33.2	25+32 +40+40	233+302 +346+346
GMV-Q1580WM/ E-X		158.0	158.0	176.5	49.64	38.21	42.67	(930×765×1605) +(1340×765×1605)×3	11400 +14000×3		Φ19.05	Φ38.1	Φ41.3	20.9+28.8 +33.2+33.2	25+40 +40+40	233+346 +346+346
GMV-Q1630WM/E-X		163.0	163.0	181.5	52.54	40.74	45.36	(930×765×1605) +(1340×765×1605)×3	11400 +14000×3		Φ19.05	Φ38.1	Φ41.3	20.9+33.2 +33.2+33.2	25+40 +40+40	233+346 +346+346
GMV-Q1685WM/E-X		168.5	168.5	187.5	52.69	41.14	45.77	(1340×765×1605)×4	14000×4		Φ19.05	Φ38.1	Φ41.3	24.7+33.2 +33.2+33.2	32+40 +40+40	302+346 +346+346
GMV-Q1750WM/E-X		175.0	175.0	195.0	56.30	43.15	48.07	(1340×765×1605)×4	14000×4		Φ19.05	Φ38.1	Φ41.3	28.8+33.2 +33.2+33.2	40+40 +40+40	346+346 +346+346
GMV-Q1800WM/E-X		180.0	180.0	200.0	59.20	45.68	50.76	(1340×765×1605)×4	14000×4		Φ19.05	Φ38.1	Φ41.3	33.2+33.2 +33.2+33.2	40+40 +40+40	346+346 +346+346

Note:
*1: The combination models of the outdoor units are not Eurovent certified.
*2: This is the power input that tested with duct type IDU.

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



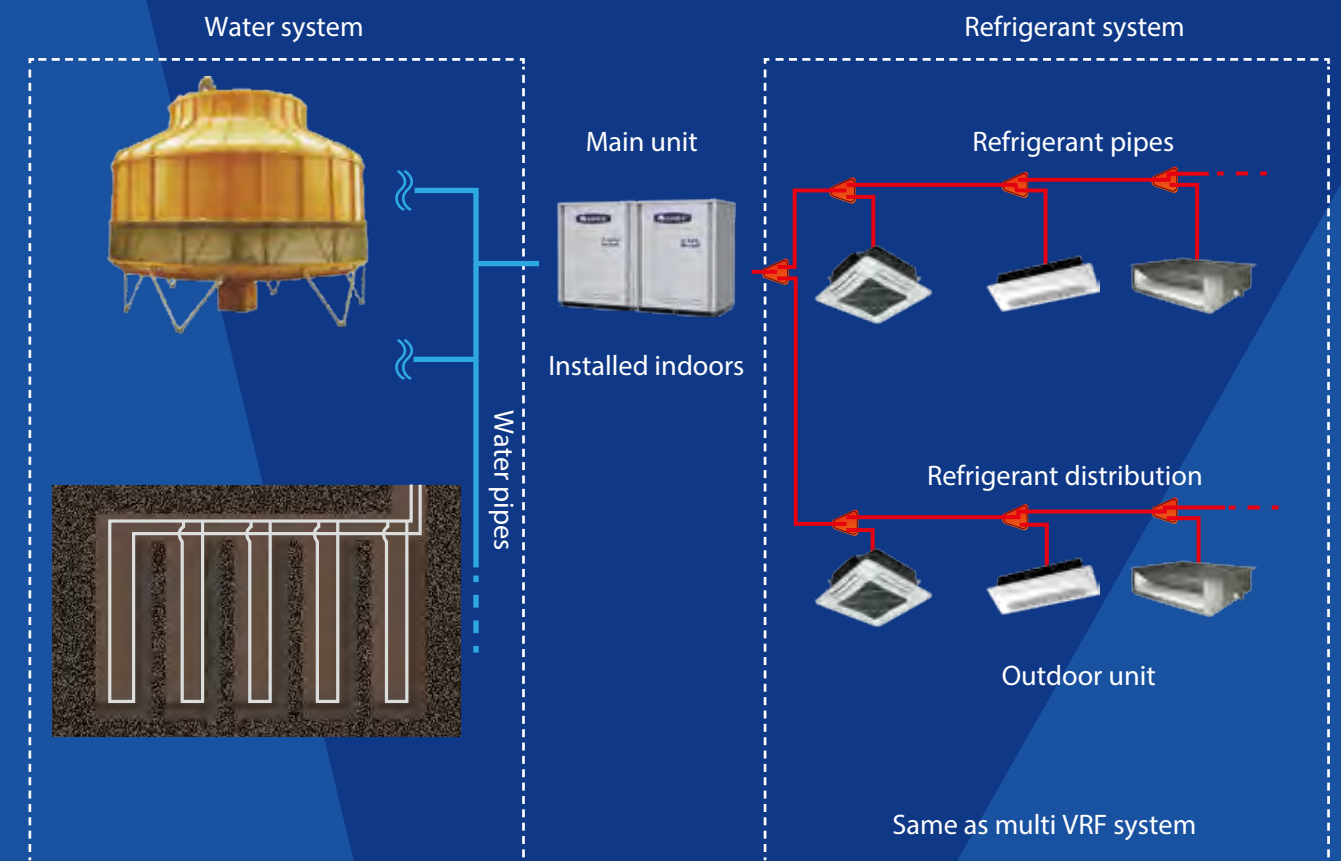
Solar Power



Industrial Waste Heat

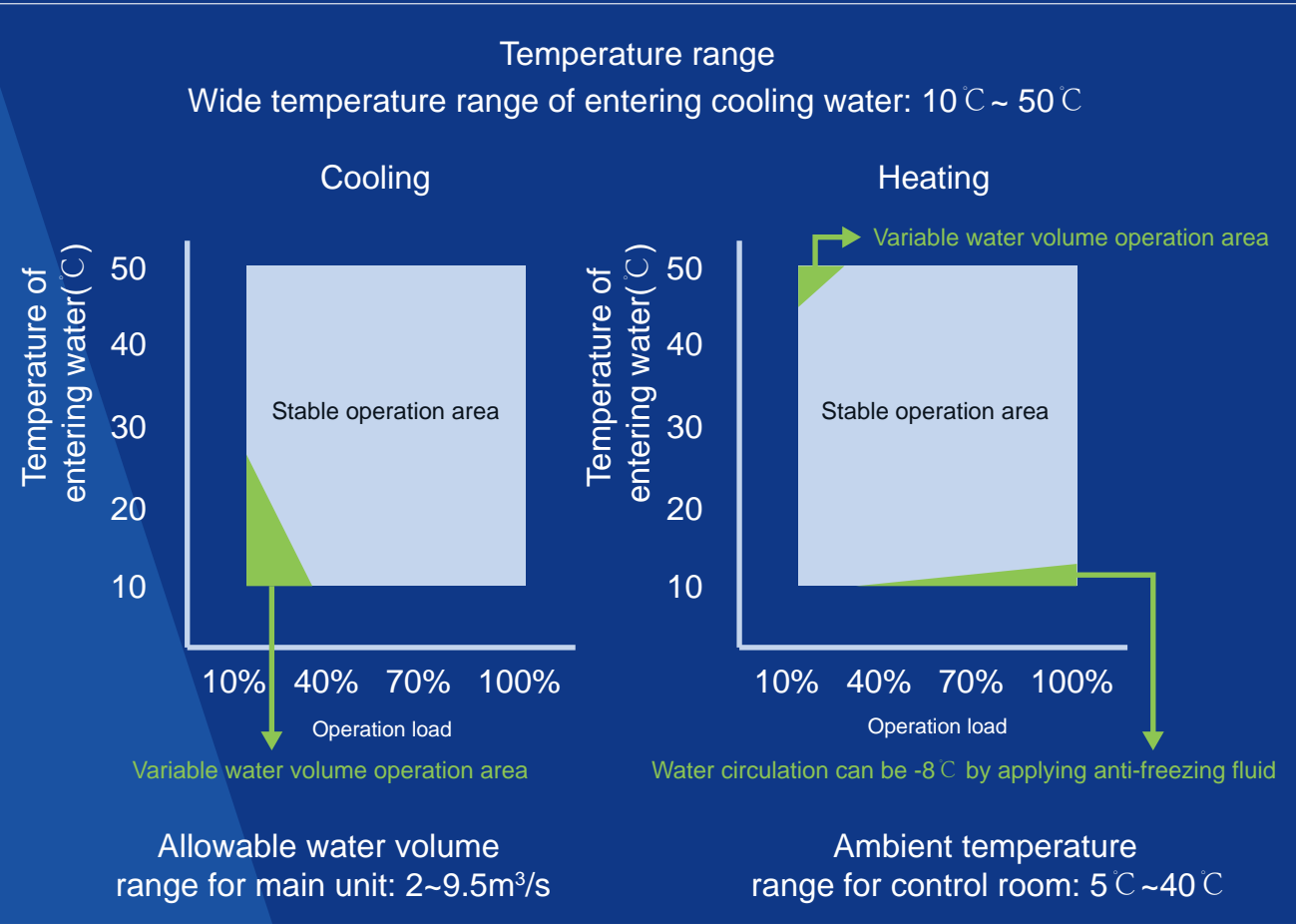


Polluted Water and Waste Water

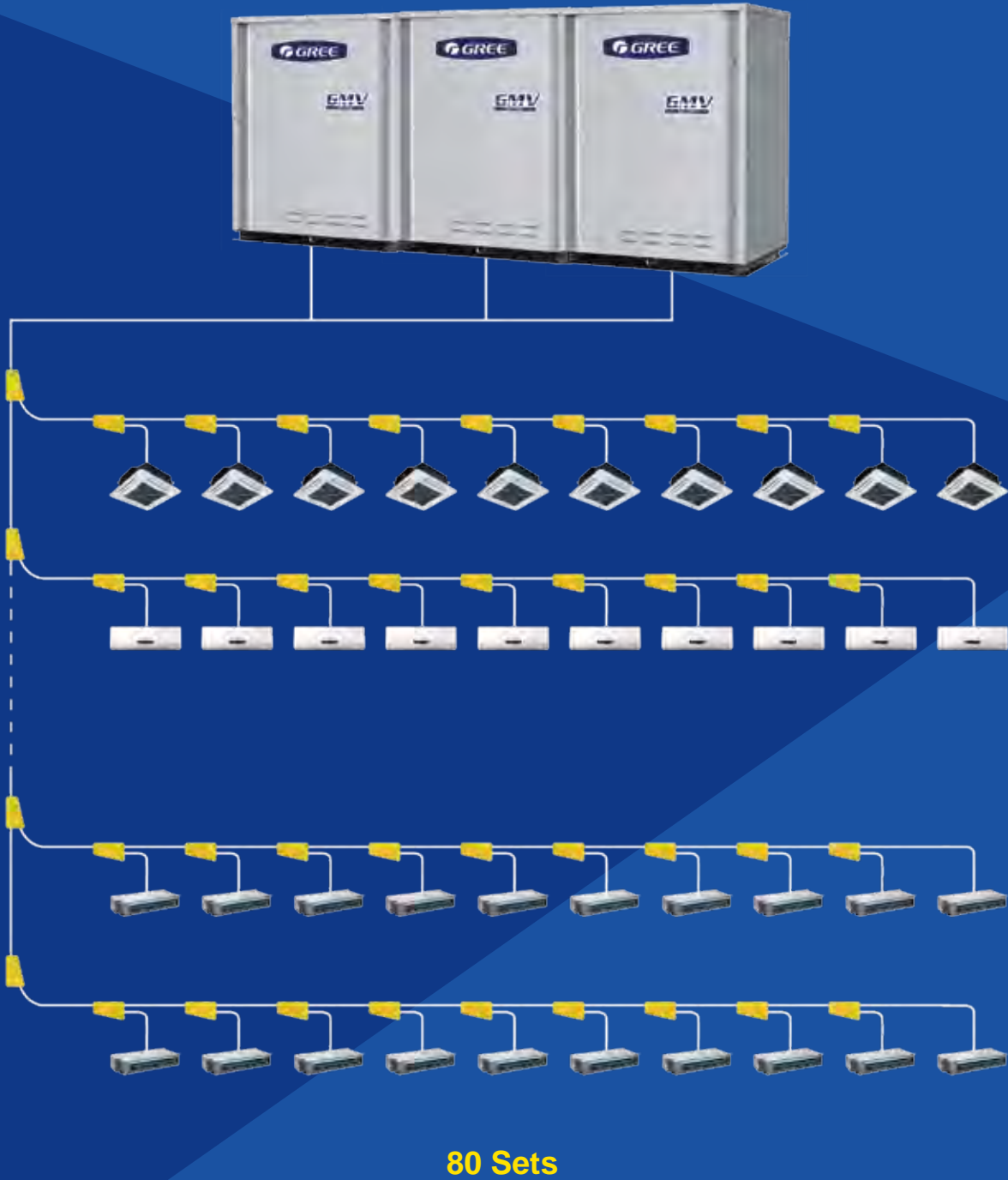


Wide Operating Range

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.



- Up to 80 indoor units can be connected.



80 Sets

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.



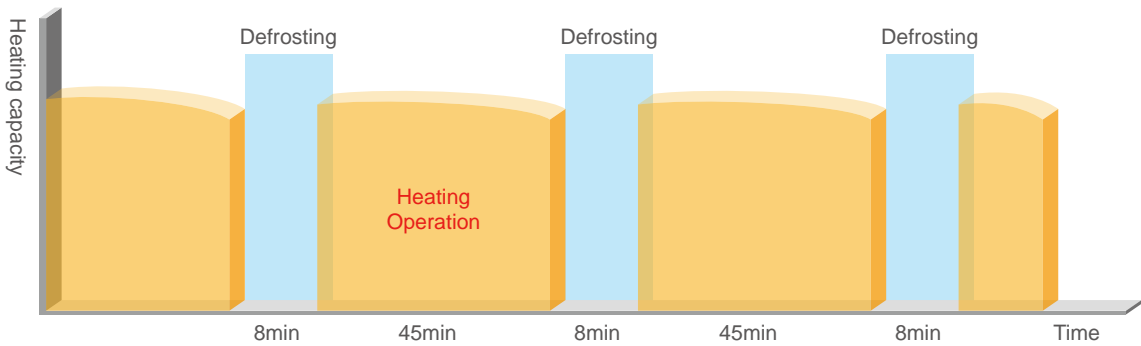
Operating in Turns, for Longer Service Life

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

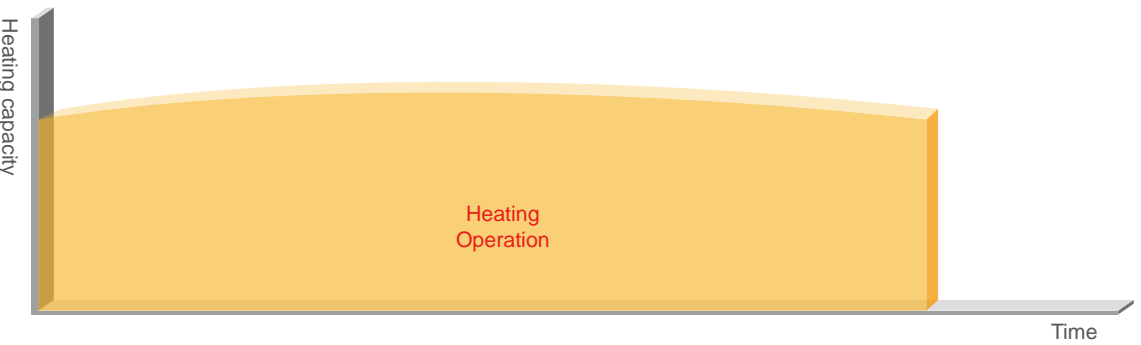


Water-cooled System, No Need of Defrosting

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.



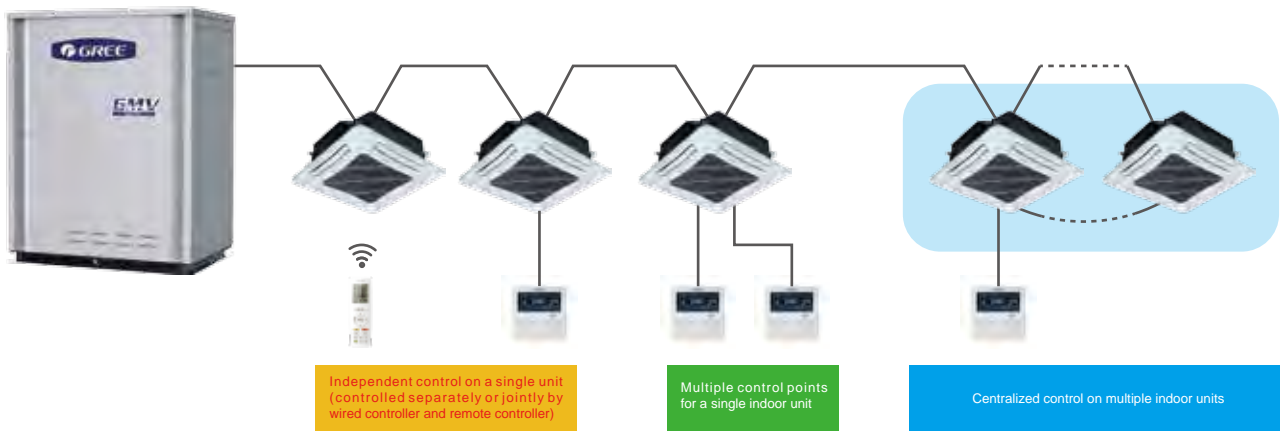
Air-cooled GMV



GMV Water

Completely New CAN Network Control

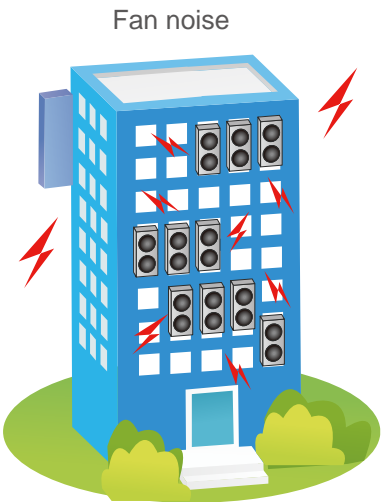
Same as GMV5, GMV Water adopts CAN communication, which has greatly improved the networking performance. It can be used in perfect combination with GMV5 indoor units.



- 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.



Air-cooled heat pump units



Water-cooled heat pump units

No Weather Influence

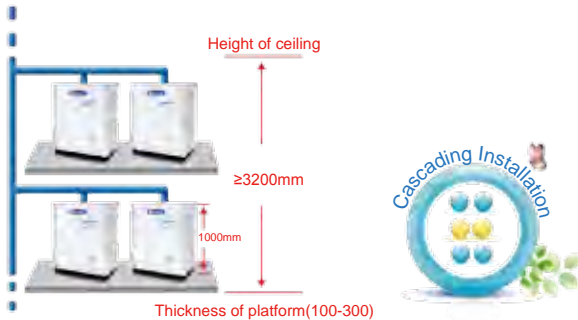
GMV Water exchange heat with water source and ground source without regard to the weather influence. Especially in winter, when it is running in heat mode, the outdoor unit will not generate frost like the air-cooled outdoor unit. There's no need to run defrosting mode, thus ensuring reliable heating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



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-W224WMA-X	GMV-W280WM/A-X	GMV-W335WMA-X
Capacity	Cooling	kW	22.4	28.0	33.5
	Heating	kW	25.0	31.5	37.5
Sound pressure level		dB(A)	50	52	52
Power supply		V/Ph/Hz	380V-415V 3N~ 50/60Hz		
Water flow volume		m³/h	4.8	6.0	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	4.00	5.40	7.35
Refrigerant connecting pipe	Gas	mm	Φ22.2	Φ22.2	Φ25.4
	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
Water connecting pipe	Inlet	mm	DN32	DN32	DN32
	Outlet	mm	DN32	DN32	DN32
Dimension(WxDxH)	Outline	mm	780x550x1000	780x550x1000	780x550x1000
	Package	mm	833x599x1160	833x599x1160	833x599x1160
Net weight/Gross weight		kg	162/175	162/175	162/175
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	28.0	33.5
	Heating	kW	25.0	31.5	37.5
Sound pressure level		dB(A)	50	52	52
Power supply		V/Ph/Hz	208V/230V 3~ 60Hz		
Water flow volume		m³/h	4.8	6.0	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	4.00	5.40	7.35
Refrigerant connecting pipe	Gas	mm	Φ22.2	Φ22.2	Φ25.4
	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
Water connecting pipe	Inlet	mm	DN32	DN32	DN32
	Outlet	mm	DN32	DN32	DN32
Dimension(WxDxH)	Outline	mm	780x550x1000	780x550x1000	780x550x1000
	Package	mm	833x599x1160	833x599x1160	833x599x1160
Net weight/Gross weight		kg	162/175	162/175	162/175
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 (WxDxH)	Water flow volume	Sound pressure level	Connecting pipe		Min. circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating				Liquid	Gas			
	V/Ph/Hz	kW	kW	kW	kW	mm	m³/h	dB(A)	mm	mm	A	A	kg
GMV-W448WMA-X	380V-415V 3N~ 50/60Hz	44.8	50.0	3.9x2	4.0x2	(780x550x1000)x2	4.8x2	53	Φ12.7	Φ28.6	16.1x2	20x2	162x2
GMV-W504WMA-X		50.4	56.5	3.9+5.7	4.0+5.4	(780x550x1000)x2	4.8+6.0	54	Φ15.9	Φ28.6	16.1+19.7	20x2	162x2
GMV-W560WMA-X		56.0	63.0	7.9x2	5.4x2	(780x550x1000)x2	6.0x2	55	Φ15.9	Φ28.6	19.7x2	20x2	162x2
GMV-W615WMA-X		61.5	69.0	5.7+7.9	5.4+7.35	(780x550x1000)x2	6.0+7.2	55	Φ15.9	Φ28.6	19.7+26.8	20+32	162x2
GMV-W670WMA-X		67.0	75.0	7.9x2	7.35x2	(780x550x1000)x2	7.2x2	55	Φ15.9	Φ28.6	26.8x2	32x2	162x2
GMV-W728WMA-X		72.8	81.5	3.9x2+5.7	4.0x2+5.4	(780x550x1000)x3	4.8x2+6.0	56	Φ19.1	Φ31.8	16.1x2+19.7	20x3	162x3
GMV-W784WMA-X		78.4	88.0	3.9+5.7x2	4.0+5.4x2	(780x550x1000)x3	4.8+6.0x2	57	Φ19.1	Φ31.8	16.1+19.7x2	20x3	162x3
GMV-W840WMA-X		84.0	94.5	5.7x3	5.4x3	(780x550x1000)x3	6.0x3	57	Φ19.1	Φ31.8	19.7x3	20x3	162x3
GMV-W895WMA-X		89.5	100.5	5.7x2+7.9	5.4x2+7.35	(780x550x1000)x3	6.0x2+7.2	57	Φ19.1	Φ31.8	19.7x2+26.8	20x2+32	162x3
GMV-W950WMA-X		95.0	106.5	5.7+7.9x2	5.4+7.35x2	(780x550x1000)x3	6.0+7.2x2	57	Φ19.1	Φ31.8	19.7+26.8x2	20+32x2	162x3
GMV-W1005WMA-X		100.5	112.5	7.9x3	7.35x3	(780x550x1000)x3	7.2x3	57	Φ19.1	Φ38.1	26.8x3	32x3	162x3
GMV-W1064WMA-X		106.4	119.5	3.9+5.7x3	4.0+5.4x3	(780x550x1000)x4	4.8+6.0x3	58	Φ19.1	Φ38.1	16.1+19.7x3	20x4	162x4
GMV-W1120WMA-X		112.0	126.0	5.7x4	5.4x4	(780x550x1000)x4	6.0x4	59	Φ19.1	Φ38.1	19.7x4	20x4	162x4
GMV-W1175WMA-X		117.5	132.0	5.7x3+7.9	5.4x3+7.35	(780x550x1000)x4	6.0x3+7.2	59	Φ19.1	Φ38.1	19.7x3+26.8	20x3+32	162x4
GMV-W1230WMA-X		123.0	138.0	5.7x2+7.9x3	5.4x2+7.35x2	(780x550x1000)x4	6.0x2+7.2x2	59	Φ19.1	Φ38.1	19.7x2+26.8x2	20x2+32x2	162x4
GMV-W1285WMA-X		128.5	144.0	5.7+7.9x3	5.4+7.35x3	(780x550x1000)x4	6.0+7.2x3	59	Φ19.1	Φ38.1	19.7+26.8x3	20+32x3	162x4
GMV-W1340WMA-X		134.0	150.0	7.9x4	7.35x4	(780x550x1000)x4	7.2x4	59	Φ19.1	Φ38.1	26.8x4	32x4	162x4

208/230V,60Hz

Model	Power supply	Capacity		Power input		Dimension (WxDxH)	Water flow volume	Sound pressure level	Connecting pipe		Min. circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating				Liquid	Gas			
	V/Ph/Hz	kW	kW	kW	kW	mm	m³/h	dB(A)	mm	mm	A	A	kg
GMV-W448WM/A-F	208V /230V 3~ 60Hz	44.8	50.0	3.9x2	4.0x2	(780x550x1000)x2	4.8x2	53	Φ12.7	Φ28.6	32.3x2	50x2	162x2
GMV-W504WM/A-F		50.4	56.5	3.9+5.7	4.0+5.4	(780x550x1000)x2	4.8+6.0	54	Φ15.9	Φ28.6	32.3+34.2	50+60	162x2
GMV-W560WM/A-F		56.0	63.0	7.9x2	5.4x2	(780x550x1000)x2	6.0x2	55	Φ15.9	Φ28.6	34.2x2	60x2	162x2
GMV-W615WM/A-F		61.5	69.0	5.7+7.9	5.4+7.35	(780x550x1000)x2	6.0+7.2	55	Φ15.9	Φ28.6	34.2+45.1	60+80	162x2
GMV-W670WM/A-F		67.0	75.0	7.9x2	7.35x2	(780x550x1000)x2	7.2x2	55	Φ15.9	Φ28.6	45.1x2	80x2	162x2
GMV-W728WM/A-F		72.8	81.5	3.9x2+5.7	4.0x2+5.4	(780x550x1000)x3	4.8x2+6.0	56	Φ19.1	Φ31.8	32.3x2+34.2	50x2+60	162x3
GMV-W784WM/A-F		78.4	88.0	3.9+5.7x2	4.0+5.4x2	(780x550x1000)x3	4.8+6.0x2	57	Φ19.1	Φ31.8	32.3+34.2x2	50+60x2	162x3
GMV-W840WM/A-F		84.0	94.5	5.7x3	5.4x3	(780x550x1000)x3	6.0x3	57	Φ19.1	Φ31.8	34.2x3	60x3	162x3
GMV-W895WM/A-F		89.5	100.5	5.7x2+7.9	5.4x2+7.35	(780x550x1000)x3	6.0x2+7.2	57	Φ19.1	Φ31.8	34.2x2+45.1	60x2+80	162x3
GMV-W950WM/A-F		95.0	106.5	5.7+7.9x2	5.4+7.35x2	(780x550x1000)x3	6.0+7.2x2	57	Φ19.1	Φ31.8	34.2+45.1x2	60+80x2	162x3
GMV-W1005WM/A-F		100.5	112.5	7.9x3	7.35x3	(780x550x1000)x3	7.2x3	57	Φ19.1	Φ38.1	45.1x3	80x3	162x3
GMV-W1064WM/A-F		106.4	119.5	3.9+5.7x3	4.0+5.4x3	(780x550x1000)x4	4.8+6.0x3	58	Φ19.1	Φ38.1	32.3+34.2x3	50+60x3	162x4
GMV-W1120WM/A-F		112.0	126.0	5.7x4	5.4x4	(780x550x1000)x4	6.0x4	59	Φ19.1	Φ38.1	34.2x4	60x4	162x4
GMV-W1175WM/A-F		117.5	132.0	5.7x3+7.9	5.4x3+7.35	(780x550x1000)x4	6.0x3+7.2	59	Φ19.1	Φ38.1	34.2x3+45.1	60x3+80	162x4
GMV-W1230WM/A-F		123.0	138.0	5.7x2+7.9x2	5.4x2+7.35x2	(780x550x1000)x4	6.0x2+7.2x2	59	Φ19.1	Φ38.1	34.2x2+45.1x2	60x2+80x2	162x4
GMV-W1285WM/A-F		128.5	144.0	5.7+7.9x3	5.4+7.35x3	(780x550x1000)x4	6.0+7.2x3	59	Φ19.1	Φ38.1	34.2+45.1x3	60+80x3	162x4
GMV-W1340WM/A-F		134.0	150.0	7.9x4	7.35x4	(780x550x1000)x4	7.2x4	59	Φ19.1	Φ38.1	45.1x4	80x4	162x4

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



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

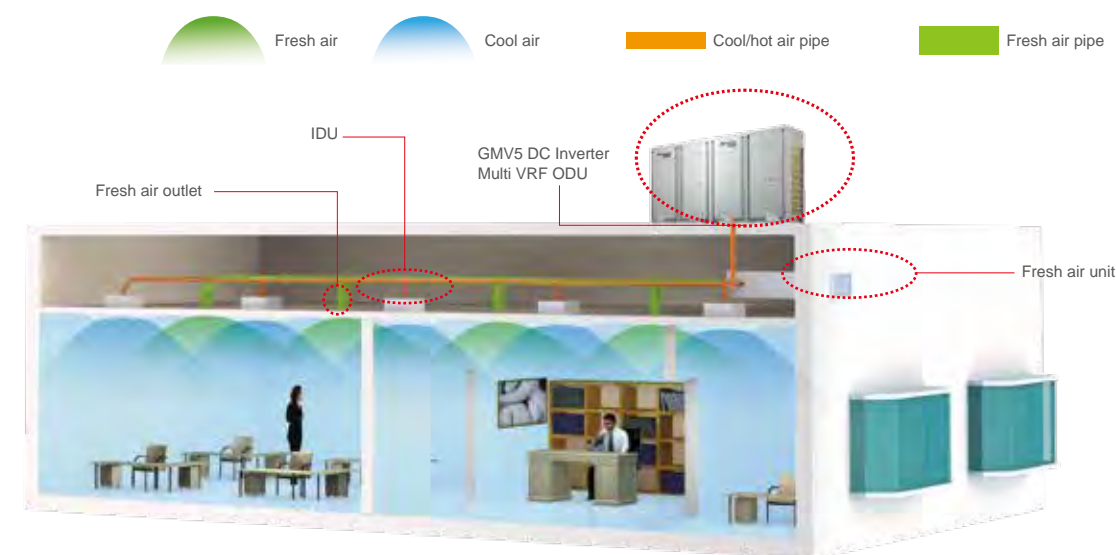
Airflow volume: 1200~4000m³/h

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.



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	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				●		●		●	●	●	●	●	●	●	●	●	●	●	●					
360° Air Discharge Cassette Indoor Unit				●		●		●	●	●	●	●	●	●	●	●	●	●						
Compact 4-way Cassette Indoor Unit		●		●		●		●	●	●														
360° Air Discharge Compact 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		●		●		●		●		●	●	●												

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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz					
Power consumption		W	55	55	55	65	65	85
Airflow volume(H/M/L)		m³/h	550/480/400	550/480/400	550/480/400	600/500/420	600/500/420	850/700/600
Rated current	Cooling	A	0.5	0.5	0.5	0.5	0.5	0.5
	Heating	A	0.5	0.5	0.5	0.5	0.5	0.5
	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	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	700x700x300	700x700x300	700x700x300	700x700x300	700x700x300	700x700x300
	Package	mm	897x808x360	897x808x360	897x808x360	897x808x360	897x808x360	897x808x360
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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz					
Power consumption		W	85	85	90	100	100	100
Airflow volume(H/M/L)		m³/h	850/700/600	850/700/600	1000/800/700	1000/800/700	1250/1050/950	1250/1050/950
Rated current	Cooling	A	0.5	0.5	0.8	0.8	0.8	0.8
	Heating	A	0.5	0.5	0.8	0.8	0.8	0.8
	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	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	700x700x300	700x700x300	1000x700x300	1000x700x300	1000x700x300	1000x700x300
	Package	mm	897x808x360	897x808x360	1205x813x360	1205x813x360	1205x813x360	1205x813x360
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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz							
Power consumption		W	140	140	160	160	220	230	800	900
Airflow volume(H/M/L)		m³/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
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	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	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.0	2.0
Dimension (WxDxH)	Outline	mm	1400x700x300	1400x700x300	1400x700x300	1400x700x300	1400x700x300	1400x700x300	1483x791x385	1686x870x450
	Package	mm	1601x813x365	1601x813x365	1601x813x365	1601x813x365	1678x808x365	1678x808x365	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	4.0
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz				
Power consumption		W	65	65	65	65	65
Airflow volume(H/M/L)		m³/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	/	/	/	/	/
ESP		Pa	30/0-50				
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	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	Φ25	Φ25	Φ25	Φ25	Φ25
	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	19.0/23.0	19.0/23.0	19.0/23.0	20.0/23.5	20.0/23.5
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	4.0	4.5	5.0	5.6	6.3
	Heating	kW	4.5	5.0	5.6	6.3	7.0
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz				
Power consumption		W	65	65	65	65	65
Airflow volume(H/M/L)		m³/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	/	/	/	/	/
ESP		Pa	30/0-50				
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	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	1010x450x200				
	Package	mm	1303x551x285				
Net weight/Gross weight		kg	24.0/29.0	24.0/29.0	25.0/30.5	25.0/30.5	25.0/30.5
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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz						
Power consumption		W	70	140	209	209	209	230	230
Airflow volume(H/M/L)		m³/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	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	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	1310x450x200	1200x655x260	1340x655x260				
	Package	mm	1603x551x285	1448x858x315	1588x858x315				
Net weight/Gross weight		kg	30.5/37.0	40.0/47.0	46.0/55.0	46.0/55.0	46.0/55.0	47.0/56.0	47.0/56.0
Loading quantity	40' GP	set	224	147	98	98	98	98	98
	40' HQ	set	224	168	112	112	112	112	112

Slim Ducted Type Indoor Unit

50/60 Hz

Model			GMV-ND22PLS/C-T	GMV-ND25PLS/C-T	GMV-ND28PLS/C-T	GMV-ND32PLS/C-T	GMV-ND36PLS/C-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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz				
Power consumption		W	28	28	28	37	37
Airflow volume (H/M/L)		m³/h	450/350/200	450/350/200	450/350/200	550/400/300	550/400/300
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
ESP		Pa	15/0~30	15/0~30	15/0~30	15/0~30	15/0~30
Sound pressure level(H/M/L)		dB(A)	30/25/22	30/25/22	30/25/22	31/27/25	31/27/25
Connecting pipe	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	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	710×462×200	710×462×200	710×462×200	710×462×200	710×462×200
	Package	mm	1008×568×275	1008×568×275	1008×568×275	1008×568×275	1008×568×275
Net weight/Gross weight		kg	18.5/23.5	18.5/23.5	18.5/23.5	19.0/24.0	19.0/24.0
Loading quantity	40'GP	set	386	386	386	386	386
	40'HQ	set	430	430	430	430	430

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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz						
Power consumption		W	48	48	48	50	59	59	68
Airflow volume(H/M/L)		m³/h	750/650/550	750/650/550	750/650/550	830/650/550	1000/900/750	1000/900/750	1180/950/850
Rated current	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	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	840×840×190	840×840×190	840×840×190	840×840×190	840×840×240	840×840×240
		Package	mm	963×963×272	963×963×272	963×963×272	963×963×272	963×963×325	963×963×325
	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
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	1033×1038×133	1033×1038×133	1033×1038×133	1033×1038×133	1033×1038×133	1033×1038×133
	Net weight/Gross weight		kg	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-ND40PLS/C-T	GMV-ND45PLS/C-T	GMV-ND50PLS/C-T	GMV-ND56PLS/C-T	GMV-ND63PLS/C-T	GMV-ND71PLS/C-T
Capacity	Cooling	kW	4.0	4.5	5.0	5.6	6.3	7.1
	Heating	kW	4.5	5.0	5.6	6.3	7.1	8.0
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz					
Power consumption		W	40	40	55	55	55	55
Airflow volume (H/M/L)		m³/h	750/550/400	750/550/440	850/700/550	850/700/550	850/700/550	1100/850/650
Rated current	Cooling	A	0.3	0.3	0.4	0.4	0.4	0.5
	Heating	A	0.3	0.3	0.4	0.4	0.4	0.5
ESP		Pa	15/0~30	15/0~30	15/0~30	15/0~30	15/0~30	15/0~50
Sound pressure level(H/M/L)		dB(A)	33/29/27	33/29/27	35/31/29	35/31/29	35/31/29	37/32/30
Connecting pipe	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	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	1010×462×200	1010×462×200	1010×462×200	1010×462×200	1010×462×200	1310×462×200
	Package	mm	1308×568×275	1308×568×275	1308×568×275	1308×568×275	1308×568×275	1608×568×275
Net weight/Gross weight		kg	25.0/31.0	25.0/31.0	25.0/31.0	25.0/31.0	25.0/31.0	31.0/37.5
Loading quantity	40'GP	set	288	288	288	288	288	229
	40'HQ	set	340	340	340	340	340	257

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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz						
Power consumption		W	68	98	98	110	110	110	120
Airflow volume(H/M/L)		m³/h	1180/950/850	1500/1350/1100	1500/1350/1100	1700/1400/1100	1860/1500/1150	1860/1500/1150	2100/1700/1400
Rated current	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	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	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	840×840×320	840×840×320	840×840×320	840×840×320	910×910×293
		Package	mm	963×963×325	963×963×409	963×963×409	963×963×409	963×963×409	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	46.5/56.5
Panel	Dimension (WxDxH)	Outline	mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65	1040×1040×65
		Package	mm	1033×1038×133	1033×1038×133	1033×1038×133	1033×1038×133	1033×1038×133	1137×1137×140
	Net weight/Gross weight		kg	7/11	7/11	7/11	7/11	7/11	8/12
Loading quantity	40'GP	set	140	104	104	104	104	104	144
	40'HQ	set	156	119	119	119	119	119	144

360° Air Discharge Cassette Indoor Unit
50/60 Hz

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
Capacity	Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3
	Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz					
Power consumption		W	25	25	26	28	35	35
Airflow volume(H/M/L)		m³/h	800/700/600	800/700/600	800/700/600	900/800/700	950/850/750	950/850/750
		CFM	471/412/353	471/412/353	471/412/353	530/471/412	559/500/441	559/500/441
Input current	Cooling	A	0.2	0.2	0.2	0.2	0.2	0.2
	Heating	A	0.2	0.2	0.2	0.2	0.2	0.2
Sound pressure level(H/M/L)		dB(A)	33/30/28	33/30/28	33/30/28	35/32/29	36/33/30	36/33/30
Connecting pipe	Liquid	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9
	Gas	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
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	840×840×240	840×840×240
		Package	mm	963×963×325	963×963×325	963×963×325	963×963×325	963×963×325
	Net weight/Gross weight	kg	28/36	28/36	28/36	29/37	29/37	29/37
		mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65
Panel	Dimension (WxDxH)	Outline	mm	1033×1038×112	1033×1038×112	1033×1038×112	1033×1038×112	1033×1038×112
		Package	mm	1033×1038×112	1033×1038×112	1033×1038×112	1033×1038×112	1033×1038×112
Loading quantity	Net weight/Gross weight	kg	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5
	40'GP	set	168	168	168	168	168	168
	40'HQ	set	192	192	192	192	192	192

Model			GMV-ND71T/C-T ¹	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	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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz						
Power consumption		W	60	68	68	80	80	95	115
Airflow volume(H/M/L)		m³/h	1150/950/850	1150/950/850	1250/1000/900	1250/1000/900	1500/1200/1000	1650/1300/1100	1650/1300/1100
Input current	Cooling	A	0.4	0.4	0.4	0.4	0.4	0.5	0.6
	Heating	A	0.4	0.4	0.4	0.4	0.4	0.5	0.6
Sound pressure level(H/M/L)		dB(A)	37/34/31	38/36/33	39/37/34	39/37/34	41/39/37	43/41/39	43/41/39
Connecting pipe	Liquid	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
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	840×840×290	840×840×290	840×840×290
		Package	mm	963×963×325	963×963×325	963×963×325	960×960×379	960×960×379	960×960×379
	Net weight/Gross weight	kg	29/37	31/38	31/38	31/38	35/44	35/44	35/44
		mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65
Panel	Dimension (WxDxH)	Outline	mm	1033×1038×112	1033×1038×112	1033×1038×112	1033×1038×112	1033×1038×112	1033×1038×112
		Package	mm	1033×1038×112	1033×1038×112	1033×1038×112	1033×1038×112	1033×1038×112	1033×1038×112
Loading quantity	Net weight/Gross weight	kg	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5
	40'GP	set	168	168	168	168	168	168	168
	40'HQ	set	192	192	192	192	144	144	144

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

Fresh Air Ventilation Kit

Model			XF150A1-T ¹	XF150A-T ²
Fresh air intake volume		%	10	10
Dimension (WxDxH)	Outline	mm	846×857×60	834×834×60
	Package	mm	878×878×180	878×878×180
Dimension of the connection		mm	150	150
		Pcs	2	2
Net weight/Gross weight		kg	3.0/7.1	2.7/7.7

Note:
*1:This model can be matched with 4-way cassette indoor units of GMV-ND**T/A-T (except 16kW) series only.
*2: This model can be matched with 4-way cassette indoor units of GMV-ND**T/C-T series only.

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	5.0	5.6
	Heating	kW	2.5	3.2	4.0	5.0	5.6	6.3
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz					
Power consumption		W	35	35	35	45	45	45
Airflow volume(H/M/L)		m³/h	600/500/400	600/500/400	600/500/400	700/600/500	700/600/500	700/600/500
Input 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	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	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	596×596×240	596×596×240	596×596×240	596×596×240	596×596×240
		Package	mm	778×738×300	778×738×300	778×738×300	778×738×300	778×738×300
	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
		mm	670×670×50	670×670×50	670×670×50	670×670×50	670×670×50	670×670×50
Panel	Dimension (WxDxH)	Outline	mm	670×670×50	670×670×50	670×670×50	670×670×50	670×670×50
		Package	mm	763×763×105	763×763×105	763×763×105	763×763×105	763×763×105
Loading quantity	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
	40'GP	set	245	245	245	245	245	245
	40'HQ	set	279	279	279	279	279	279

360° Air Discharge Compact Cassette Indoor Unit

50/60Hz

Model			GMV-ND22T/E-T	GMV-ND28T/E-T	GMV-ND36T/E-T	GMV-ND45T/E-T	GMV-ND50T/E-T	GMV-ND56T/E-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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz					
Power consumption		W	30	30	30	45	45	45
Airflow volume(H/M/L)		m³/h	500/460/370	570/480/420	620/550/480	730/650/560	730/650/560	730/650/560
Input current	Cooling	A	0.15	0.15	0.15	0.23	0.23	0.23
	Heating	A	0.15	0.15	0.15	0.23	0.23	0.23
Sound pressure level(H/M/L)		dB(A)	36/31/25	36/33/28	39/37/35	43/41/39	43/41/39	43/41/39
Connecting pipe	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	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	570×570×265	570×570×265	570×570×265	570×570×265	570×570×265
		Package	mm	653×698×295	653×698×295	653×698×295	653×698×295	653×698×295
	Net weight/Gross weight	kg	17.5/49.6	17.5/49.6	17.5/49.6	17.5/49.6	17.5/49.6	17.5/49.6
		mm	620×620×47.5	620×620×47.5	620×620×47.5	620×620×47.5	620×620×47.5	620×620×47.5
Panel	Dimension (WxDxH)	Outline	mm	620×620×47.5	620×620×47.5	620×620×47.5	620×620×47.5	620×620×47.5
		Package	mm	701×701×125	701×701×125	701×701×125	701×701×125	701×701×125
Loading quantity	Net weight/Gross weight	kg	3.0/4.5	3.0/4.5	3.0/4.5	3.0/4.5	3.0/4.5	3.0/4.5
	40'GP	set	378	378	378	378	378	378
	40'HQ	set	432	432	432	432	432	432

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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz						
Power consumption		W	55	55	55	55	103	103	103
Airflow volume(H/M/L)		m³/h	830/660/580	830/660/580	830/660/580	830/660/580	1100/900/750	1100/900/750	1100/900/750
Rated current	Cooling	A	0.4	0.4	0.4	0.4	0.7	0.7	0.7
	Heating	A	0.4	0.4	0.4	0.4	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	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	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315
		Package	mm	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	1416x630x33	1416x630x33	1416x630x33	1416x630x33	1416x630x33	1416x630x33
		Package	mm	1578x768x120	1578x768x120	1578x768x120	1578x768x120	1578x768x120	1578x768x120
	Net weight/Gross weight	kg	7/11	7/11	7/11	7/11	7/11	7/11	7/11
Loading quantity	40'GP	set	90	90	90	90	90	90	90
	40'HQ	set	105	105	105	105	105	105	105

Wall-mounted Type Indoor Unit

50/60 Hz

Model			GMV-ND22G/B4B-T	GMV-ND28G/B4B-T	GMV-ND36G/B4B-T	GMV-ND45G/B4B-T	GMV-ND50G/B4B-T
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0
	Heating	kW	2.5	3.2	4.0	5.0	5.6
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz				
Power consumption		W	20	20	25	35	35
Airflow volume(H/M/L)		m³/h	500/440/300	500/440/300	630/460/320	850/580/500	850/580/500
Rated current	Cooling	A	0.10	0.10	0.12	0.17	0.17
	Heating	A	0.10	0.10	0.12	0.17	0.17
Sound pressure level(H/M/L)		dB(A)	35/33/30	35/33/30	38/35/31	43/40/37	43/40/37
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	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 (WxDxH)	Outline	mm	845x209x289			970x300x224	
	Package	mm	976x281x379			1096x383x320	
Net weight/Gross weight		kg	10.5/12.5			12.5/15.5	
Loading quantity	40'GP	set	576			448	
	40'HQ	set	576			512	

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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz					
Power consumption		W	30	30	30	45	45	45
Airflow volume(H/M/L)		m³/h	600/500/450	600/500/450	600/500/450	830/600/500	830/600/500	890/667/564
Rated current	Cooling	A	0.2	0.2	0.2	0.3	0.3	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	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	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	987x385x178	987x385x178	987x385x178	987x385x178	987x385x178
		Package	mm	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	21.0/28.5
Panel	Dimension (WxDxH)	Outline	mm	1200x460x55	1200x460x55	1200x460x55	1200x460x55	1200x460x55
		Package	mm	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

50/60 Hz

Model			GMV-ND56G/B4B-T	GMV-ND63G/B4B-T	GMV-ND71G/B4B-T	GMV-ND80G/B4B-T	GMV-ND90G/B4B-T	GMV-ND100G/B4B-T
Capacity	Cooling	kW	5.6	6.3	7.1	8.0	9.0	9.5
	Heating	kW	6.3	7.1	7.5	9.0	10.0	10.5
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz					
Power consumption		W	50	50	65	80	80	100
Airflow volume(H/M/L)		m³/h	1100/850/650	1100/850/650	1200/850/650	1550/1050/800	1550/1050/800	1650/1100/900
Rated current	Cooling	A	0.24	0.24	0.31	0.41	0.41	0.41
	Heating	A	0.24	0.24	0.31	0.41	0.41	0.41
Sound pressure level(H/M/L)		dB(A)	43/41/37	43/41/37	44/41/37	49/46/40	49/46/40	52/48/40
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ20
	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5
Dimension (WxDxH)	Outline	mm	1078x325x246			1350x258x326		
	Package	mm	1203x413x350			1496x421x369		
Net weight/Gross weight		kg	16.0/19.0			18.5/23.5		
Loading quantity	40'GP	set	282			228		
	40'HQ	set	329			266		

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	45.0	
	Heating	kW	8.5/10.0	10.0/12.0	16.0/20.0	18.0/20.0	20.0/22.0	32.0	
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz						380~415/3/50
Power consumption		W	200/350	200/350	400/760	520/860	520/860	1240	
Airflow volume(defaulted/range)		m³/h	1200/1000~2000	1200/1000~2000	2000/1500~3000	2500/2000~3500	2500/2000~3500	4000	
Input current	Cooling	A	1.5/2.0	1.5/2.0	2.5/4.3	3.1/4.9	3.1/4.9	3.4	
	Heating	A	1.5/2.0	1.5/2.0	2.5/4.3	3.1/4.9	3.1/4.9	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(defaulted/range)		dB(A)	42/40~50	42/40~50	45/45~54	47/47~54	47/47~54	58	
Connecting pipe	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	Φ25	Φ25	Φ25	Φ33	
	Thickness	mm	2.5	2.5	2.0	2.0	2.0	3.0	
Dimension (WxDxH)	Outline	mm	1400×700×300	1400×700×300	1483×791×385	1483×791×385	1483×791×385	1700×1100×650	
	Package	mm	1601×813×365	1601×813×365	1578×883×472	1578×883×472	1578×883×472	1893×1463×838	
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*: 1.This series can be matched with GMV5, GMV5E, GMV5 CP, GMV5MAX and GMV5 HR (top discharge outdoor unit);
2. GMV-NDX***'s external static pressure and air volume are adjustable. The marked power and current are ex-factory rated value and the maximum value;
the marked air volume and noise are the ex-factory rated value and the range.

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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz				
Power consumption		W	15	15	20	40	40
Airflow volume(H/M/L)		m³/h	400/320/270	400/320/270	480/400/310	680/600/500	680/600/500
Rated current	Cooling	A	0.17	0.17	0.25	0.40	0.40
	Heating	A	0.17	0.17	0.25	0.40	0.40
	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	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	Φ28	Φ28	Φ28	Φ28	Φ28
	Thickness	mm	1	1	1	1	1
Dimension (WxDxH)	Outline	mm	700x215x600	700x215x600	700x215x600	700x215x600	700x215x600
	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

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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz				
Power consumption		W	40	40	50	50	75
Airflow volume(H/M/L)		m³/h	650/580/500	650/580/500	950/850/700	950/850/700	1400/1150/1000
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	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	220V-240V ~ 50Hz & 208V/230V ~ 60Hz					
Power consumption		W	75	140	160	160	160	200
Airflow volume(H/M/L)		m³/h	1400/1150/1000	1600/1400/1200	2000/1800/1450	2000/1800/1450	2000/1800/1450	2300/2100/1900
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	51/47/42	52/49/45	52/49/45	52/49/45
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75
Dimension (WxDxH)	Outline	mm	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

Model			GMV-ND28ZD/B-T ^{*1}	GMV-ND36ZD/B-T ^{*1}	GMV-ND50ZD/B-T ^{*1}	GMV-ND56ZD/B-T ^{*1}	GMV-ND63ZD/B-T ^{*1}	GMV-ND71ZD/B-T ^{*1}
Capacity	Cooling	kW	2.8	3.6	5.0	5.6	6.3	7.1
	Heating	kW	3.2	4.0	5.6	6.3	7.1	8.0
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz					
Power consumption		W	40	40	50	75	75	75
Airflow volume(SL/H/M/L)		m³/h	650/610/530/460	650/610/530/460	850/800/700/600	850/800/700/600	1300/1220/1090/940	1300/1220/1090/940
Rated current	Cooling	A	0.3	0.3	0.4	0.6	0.6	0.6
	Heating	A	0.3	0.3	0.4	0.6	0.6	0.6
Sound pressure level(H/M/L)		dB(A)	36/32/28	36/32/28	42/39/36	44/41/38	44/41/38	44/41/38
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
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	870×665×235	870×665×235	870×665×235	870×665×235	1200×665×235	1200×665×235
	Package	mm	1033×770×300	1033×770×300	1033×770×300	1033×770×300	1363×770×300	1363×770×300
Net weight/Gross weight		kg	25/30	25/30	26/31	31/37	31/37	31/37
Loading quantity	40'GP	set	144	144	144	144	98	98
	40'HQ	set	166	166	166	166	113	113

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

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	4.0	5.0	6.3	7.1	8.0
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz						
Power consumption		W	35	35	43	45	80	80	90
Airflow volume(H/M/L)		m³/h	450/350/250	450/350/250	550/450/350	650/500/400	900/750/600	900/750/600	1100/900/700
Rated current	Cooling	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
	Heating	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
ESP		Pa	10/0 ~ 40	10/0 ~ 40	10/0 ~ 40	15/0 ~ 60	15/0 ~ 60	15/0 ~ 60	15/0 ~ 60
Sound pressure level(H/M/L)		dB(A)	30/28/25	30/28/25	33/31/28	33/31/28	35/33/30	35/33/30	37/35/33
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	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-ND90ZD/B-T ^{*1}	GMV-ND112ZD/B-T ^{*1}	GMV-ND125ZD/B-T ^{*1}	GMV-ND140ZD/B-T ^{*1}	GMV-ND160ZD/B-T ^{*1}
Capacity	Cooling	kW	9.0	11.2	12.5	14.0	16.0
	Heating	kW	10.0	12.5	14.0	16.0	17.0
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz				
Power consumption		W	140	160	160	160	200
Airflow volume(SL/H/M/L)		m³/h	1500/1380/1200/1020	1800/1700/1540/1400	1800/1700/1540/1400	2100/2000/1800/1480	2300/2200/1870/1590
Rated current	Cooling	A	1.1	1.4	1.4	1.4	1.9
	Heating	A	1.1	1.4	1.4	1.4	1.9
Sound pressure level(H/M/L)		dB(A)	47/43/39	47/44/42	47/44/42	50/48/44	53/49/45
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75	1.75
Dimension (WxDxH)	Outline	mm	1200×665×235	1570×665×235	1570×665×235	1570×665×235	1570×665×235
	Package	mm	1363×770×300	1729×770×300	1729×770×300	1729×770×300	1729×770×300
Net weight/Gross weight		kg	31/37	40/47	40/47	42/49	42/49
Loading quantity	40'GP	set	98	53	53	53	53
	40'HQ	set	113	64	64	64	64

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

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			14.0			28.0					56.0				
	Heating	kW	4.0		8.0			16.0			31.5					63.0				
Adjustable capacity	Capacity		28	36	45	56	71	90	112	140	224	280	335	400	450	504	560	840		
	Cooling	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	22.4	28.0	33.5	40.0	45.0	50.4	56.0	84.0		
	Heating	kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	25.0	31.5	37.5	45.0	50.0	56.5	63.0	94.5		
Power input		W	8		8			8			8					8				
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz																	
Connecting 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	Φ15.9	Φ15.9	Φ15.9		
	AHU	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 (WxDxH)		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(WxDxH)		mm	539×461×247			539×461×247			539×461×247			539×461×247					759×645×180			
Net weight/Gross weight		kg	9.5/12.5			10.0/13.0			10.0/13.0			10.0/13.0					12.5/17.0			
Loading		40'GP	set	981			981			981			981					702		
Quantity		40'HQ	set	1090			1090			1090			1090					756		

Model			GMV-N36U/C-T*		GMV-N71U/C-T*		GMV-N140U/C-T*		GMV-N280U/C-T*		GMV-N560U/C-T*		
Defaulted capacity of ex-factory	Capacity		36		71		140		280		560		
	Cooling	kW	3.6		7.1		14.0		28.0		56.0		
	Heating	kW	4.0		8.0		16.0		31.5		63.0		
Adjustable capacity	Capacity		28/36		45/56/71		90/112/140		224/280/335/400/450		504/560/840		
	Cooling	kW	2.8/3.6		4.5/5.6/7.1		9.0/11.2/14.0		22.4/28.0/33.5/40.0/45.0		50.4/56.0/84.0		
	Heating	kW	3.2/4.0		5.0/6.3/8.0		10.0/12.5/16.0		25.0/31.5/37.5/45.0/50.0		56.0/63.0/94.5		
Power input		W	8		8		8		8		8		
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz										
Connecting pipe	AHU-KIT (ex-factory pipe size)	mm	Φ6.35		Φ9.52		Φ9.52		Φ9.52		Φ15.9		
	Air handling unit	Liquid pipe	mm	Φ6.35/Φ6.35		6.35/9.52/9.52		9.52/9.52/9.52		9.52/9.52/12.7/12.7/12.7		15.9/15.9/19.05	
		Gas pipe		Φ9.52/Φ12.7		12.7/15.9/15.9		15.9/15.9/15.9		19.05/22.2/25.4/25.4/28.6		28.6/28.6/31.8	
	Connection method		Brazing connection										
Outline dimension (WxDxH)		EXV box	mm	203x326x85		203x326x85		203x326x85		203x326x85		246x500x120	
		Control box		334x284x111		334x284x111		334x284x111		334x284x111		334x284x111	
Package dimension(WxDxH)			mm	539x461x247		539x461x247		539x461x247		539x461x247		759x645x180	
Net weight		kg	9.5		10.0		10.0		10.0		12.5		
Gross weight		kg	12.5		13.0		13.0		13.0		17.0		
Loading	40'GP	set	981		981		981		981		702		
	40'HP	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		126.0		157.5		189.0		
Power input			W		8+8		8+8		8+8		
Power supply			V/Ph/Hz		220V-240V ~ 50Hz & 208V/230V ~ 60Hz						
Connecting pipe	AHU	Liquid pipe	mm	Φ19.05		Φ19.05		Φ19.05		Φ19.05	
		Gas pipe	mm	Φ38.1		Φ38.1		Φ41.3		Φ41.3	
Outline dimension (WxDxH)		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+10.0		12.5+10.0		12.5+12.5			

Model			GMV-N560U/C-T+GMV-N140U/C-T*	GMV-N560U/C-T+GMV-N280U/C-T*	GMV-N560U/C-T+GMV-N560U/C-T*	
Defaulted capacity of ex-factory	Capacity		840+140	840+280	840+560	840+840
	Cooling	kW	98	112	140	168
	Heating	kW	110.5	126.0	157.5	189.0
Power input		W	8+8	8+8		
Power supply		V/Ph/Hz	220V-240V ~ 50Hz & 208V/230V ~ 60Hz			
Air handling unit	Liquid pipe	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05
	Gas pipe		Φ38.1	Φ38.1	Φ41.3	Φ41.3
Outline dimension (WxDxH)	EXV box	mm	246×500×120+203×326×85	246×500×120+203×326×85	(246×500×120) ×2	
	Control box		(334×284×111) ×2	(334×284×111) ×2	(334×284×111) ×2	
Net weight		kg	12.5+10.0	12.5+10.0	12.5+12.5	
Gross weight		kg	17+13	17+13	17+17	

Control System



VRF Selector Ultimate

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.

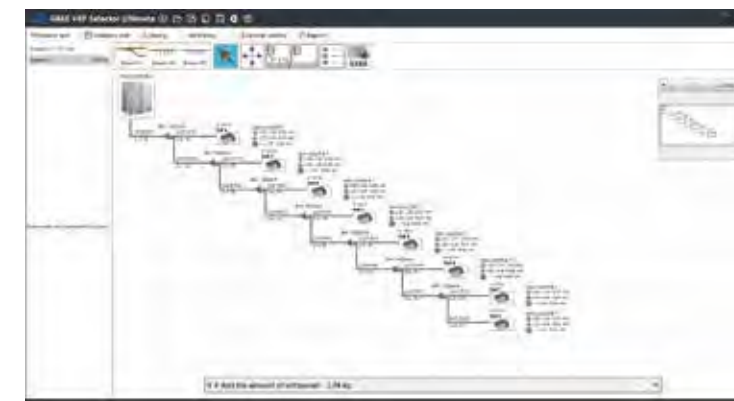
Intelligent Model Selection

- 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.

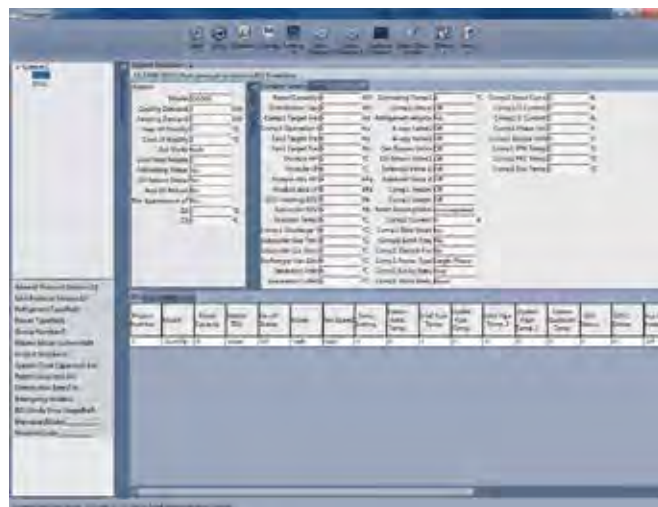


Intelligent Debugging Software

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;

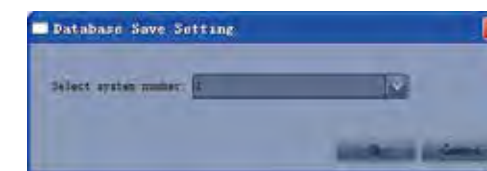


Auto Data-Saving Function

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



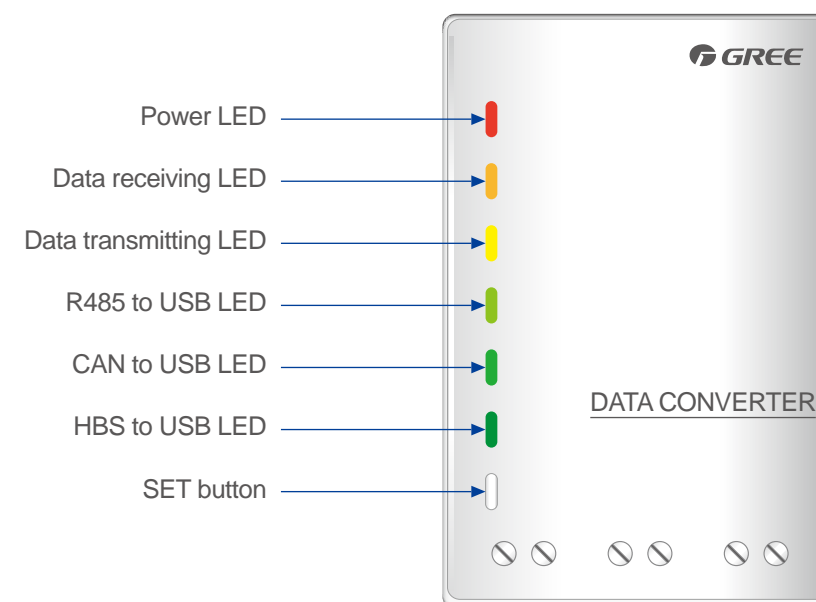
Step 1: Change Database Saving Path



Step 2: Database Save Setting

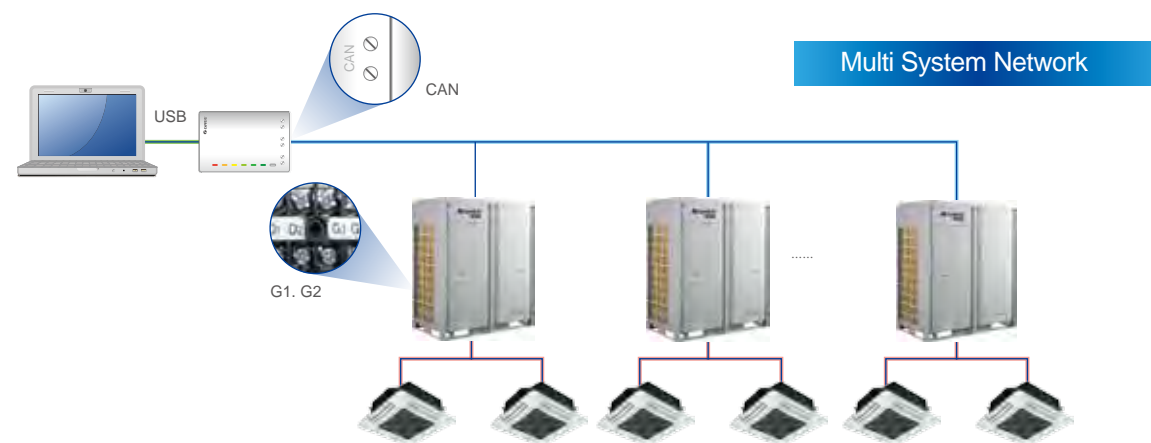
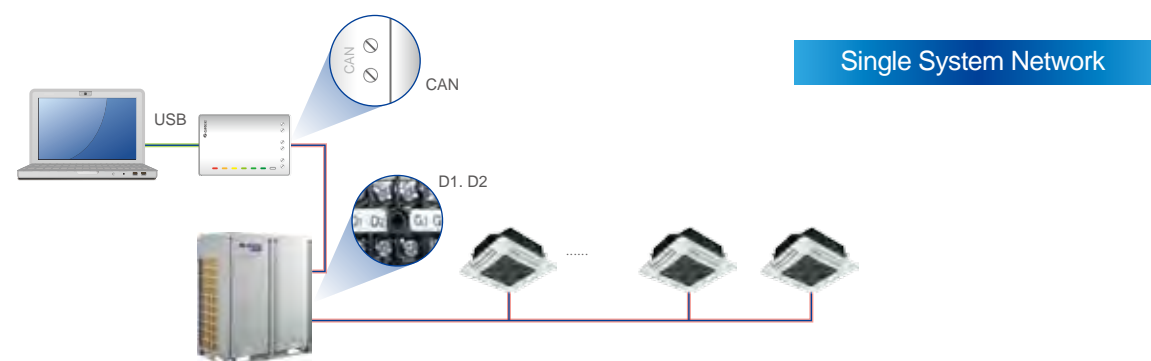
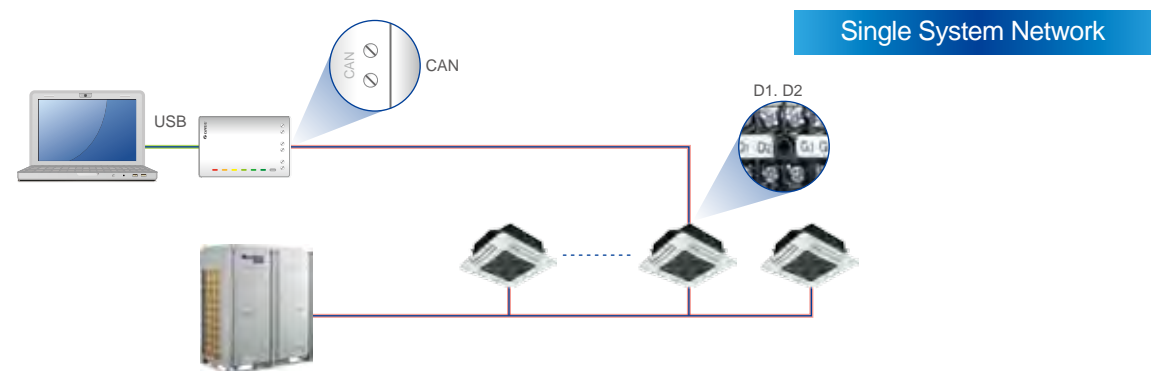
USB Data Converter

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



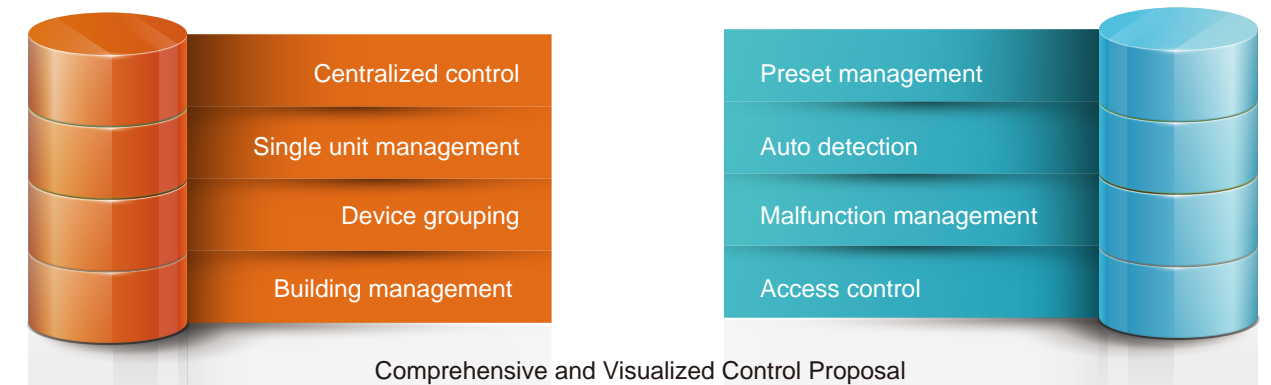
Auto Direction of Connection Way

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.

4 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 HTML5 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.

Intelligent Remote Controller

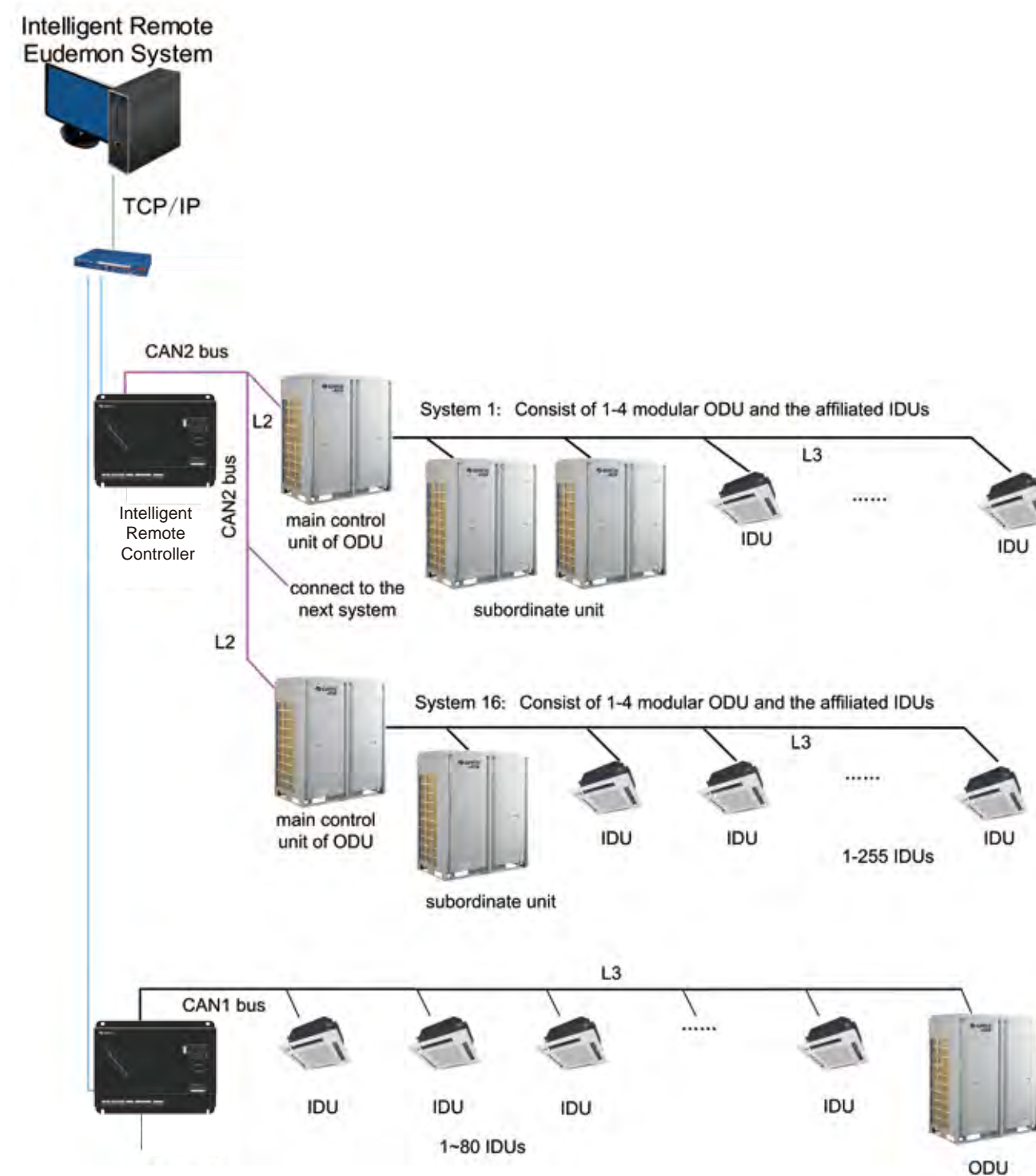


Dimension
266x208x59mm

Product Features

- Big Capacity**
 One controller can be connected with 255 indoor units (16 systems).
- Visualized and Convenient Configuration**
 The controller adopts integrated WEB technology, providing visualized configuration page to improve configuration efficiency.
- CE and ETL Certification**
 The controller complies with CE and ETL certification, which is safe and reliable.
- High Efficiency**
 800MHz processor is adopted to handle interaction data and respond control commands precisely in second level.

Distributed Structure

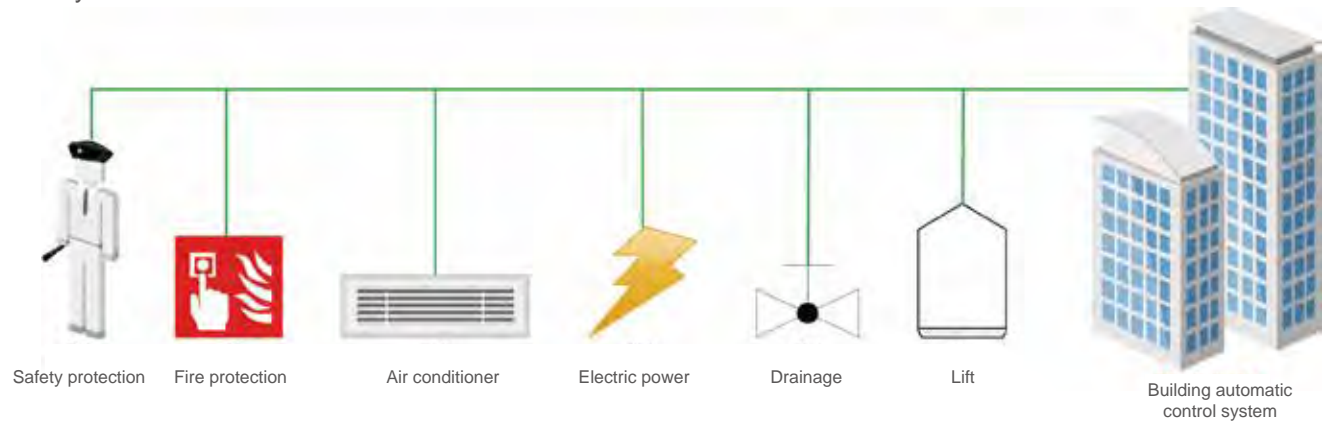


Note:

- (1) 16 systems or 255 indoor units can be connected to one Intelligent Remote Controller.
- (2) 16 Intelligent Remote Controllers can be connected to one set of Intelligent Remote Eudemon (customized order is available).

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

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.



Dimension
296×177×56mm

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
113.18x54.58x20.05mm

Functional Points

- **Network Capacity**
One Modbus Gateway (Mini) can support 16 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 113.18x54.58x20.05mm, 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.

S2S* KNX* Gateway



Dimension
91.4x72.3x61.9mm

Functional Features

- **Scene Modes Supported**
4 scene modes can be preset and user setting is supported.
- **Standard KNX Device with Convenient Configuration**
It can be directly connected to the bus of KNX/EIB* system and can be used immediately through ETS5 configuration.
- **Long-distance Monitoring**
The status and error information can be monitored through KNX bus.

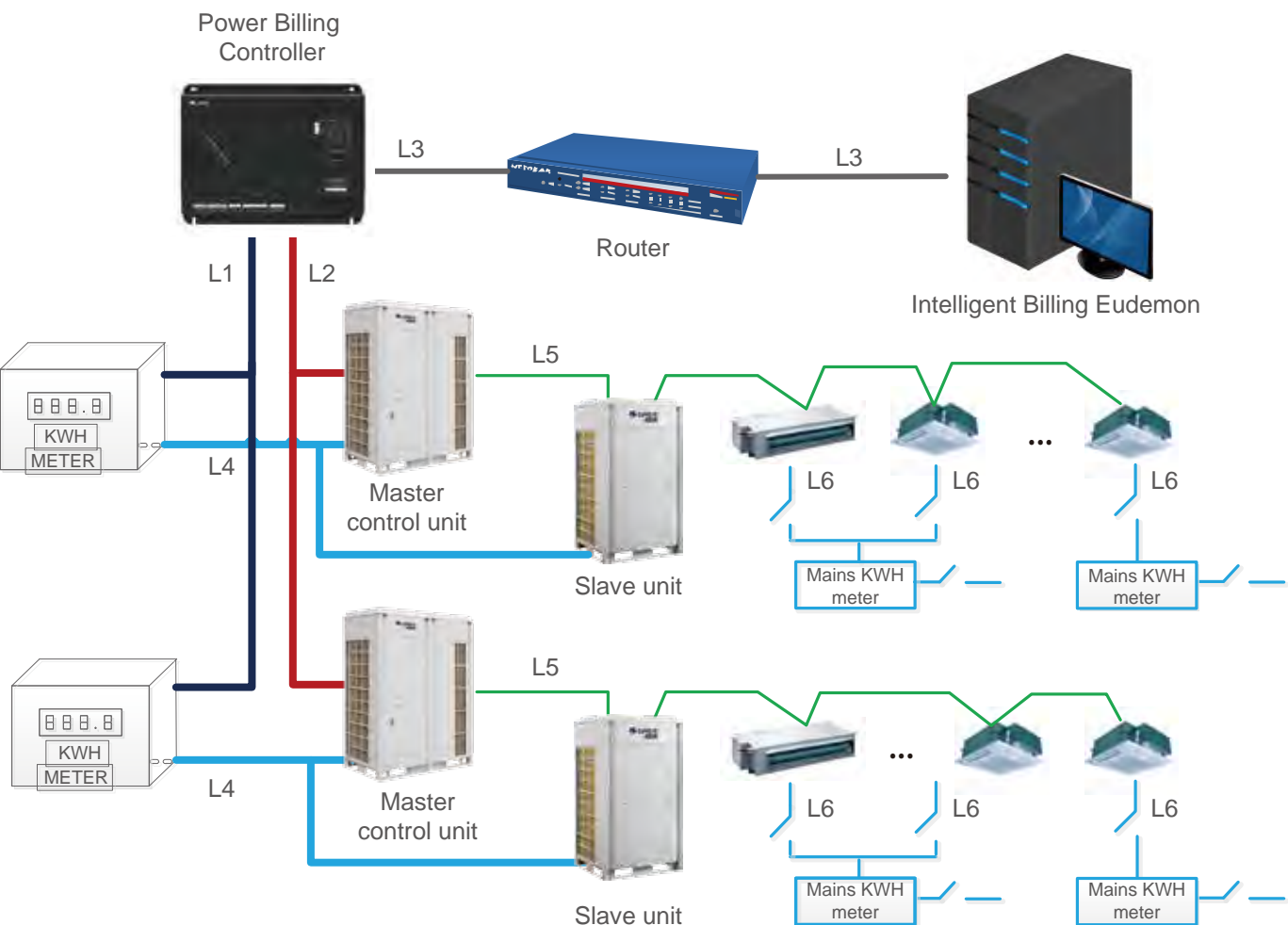
Strong Points

- **CE, ETL and KNX Certificate**
Comply with CE and ETL certification.
- **No Need of Additional Power Supply**
Power is supplied by the bus with carrier wave communication.
- **Convenient Installation**
Installation way of standard 35mm guide rail is adopted.

Note: *S2S: single to single; *KNX: konnex; *EIB: European Installation Bus.

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 Controller and KWH meter; L2: CAN2 bus for communication between Controller 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 Controller;
(2) 16 Power Billing Controllers 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 HTML5 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.

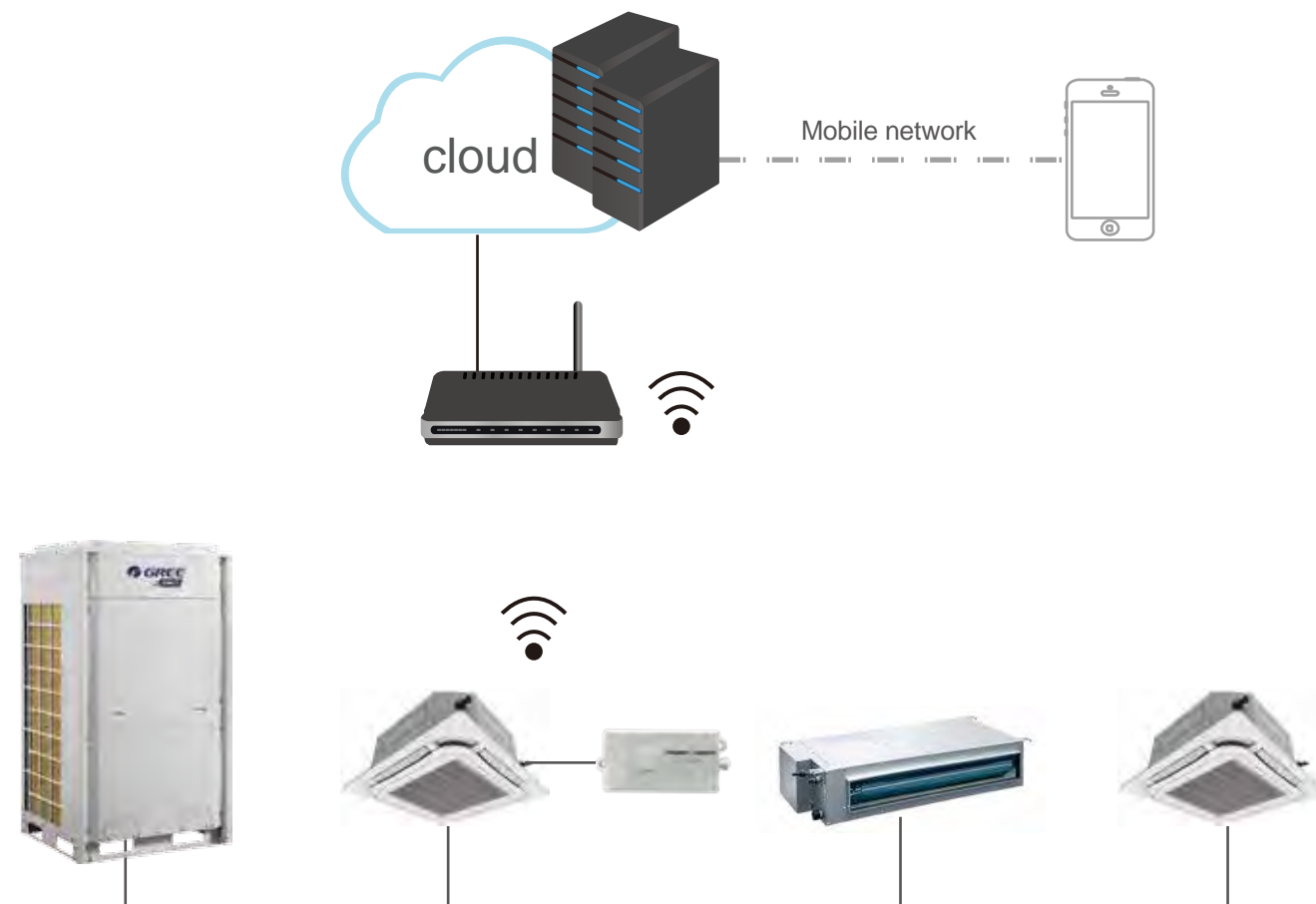
Compatible to Different Electric Meters

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.

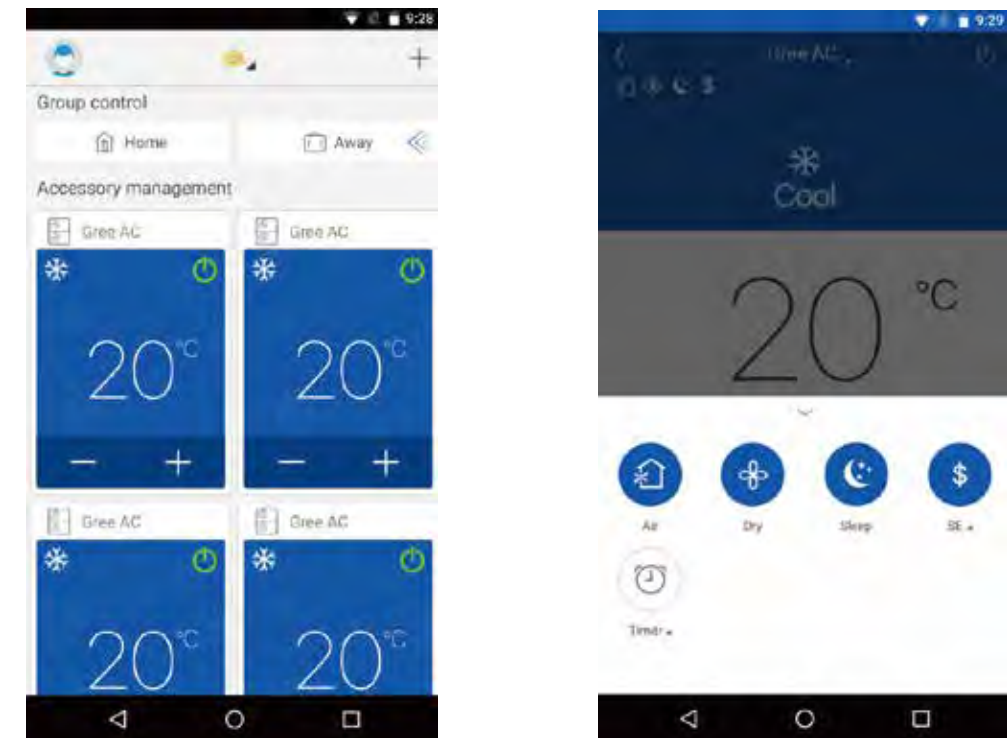
G-Cloud

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

- Light Weight**
 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)*









*: This controller is under development.

- 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;
- With functions of engineering setting, parameters check, error record, data export and authority management.

Control System Lineup

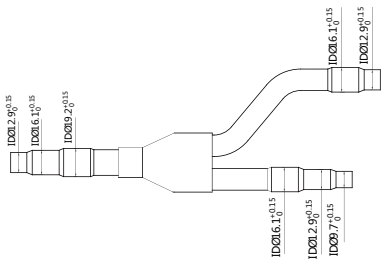
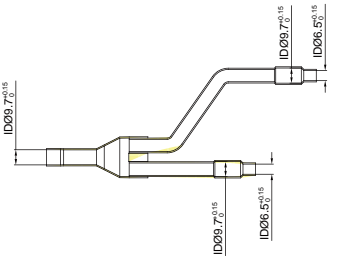
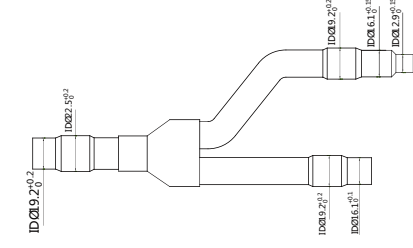
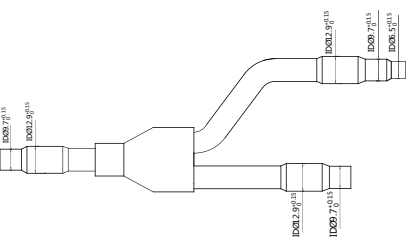
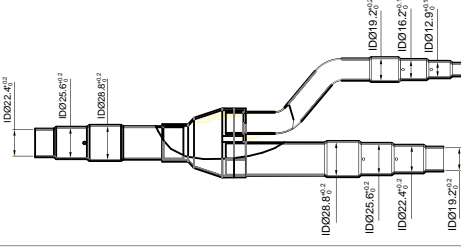
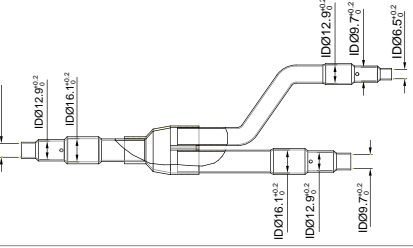
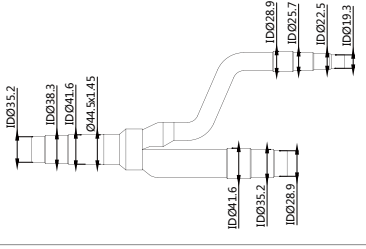
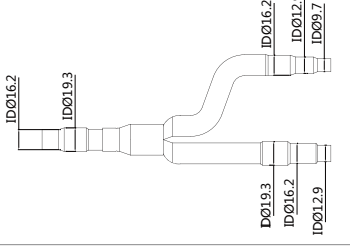
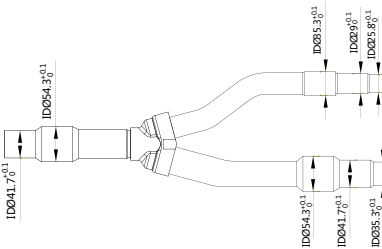
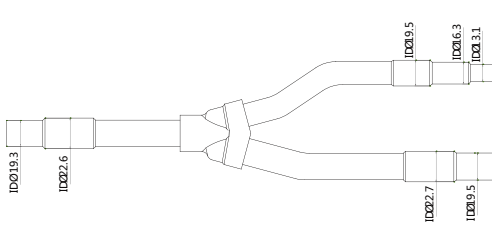
Controlling systems				GMV5	GMV5 MINI	GMV5 SLIM	GMV5 MAX	GMV5 HR
Long-distance monitor	Intelligent Remote Eudemon	FE30-24/DF(B)		○	○	○	○	○
		ME30-24/DF(B)						
	Gateway of building protocol	ME30-24/E5(M)		○	○	○	○	○
		ME30-24/E6(M)		○	○	○	○	○
		ME30-24/D4(B)		○	○	○	○	○
Intelligent Billing Eudemon		FE11-24/D4(B)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

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
Controlling system											
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)		○	○	○	○	○	○	○	○	○

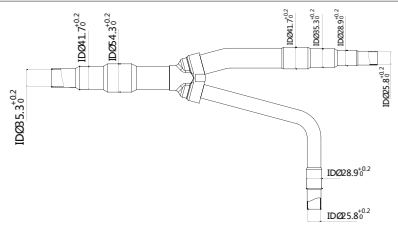
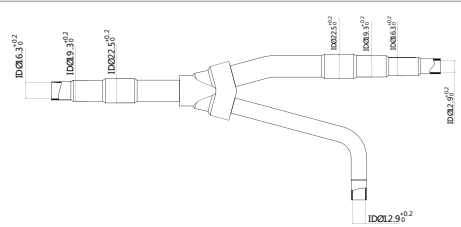
Note: ● means standard, ○ means optional.

Branching Joint (For GMV5 units)

For Indoor and Outdoor Units

Model	Total Capacity X(kW)	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
ML01/A		

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

Branching Joint (For GMV5 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<X			

For Indoor & Mode Exchanger			
Model	Total capacity of the downstream indoor units X(kW)	Appearance	
		Gas pipe	Liquid pipe
FQ01A/A	$X \leq 14.2$	<p>Gas pipe dimensions: IDØ12.9^{+0.15}₀, IDØ16.1^{+0.15}₀, IDØ19.7^{+0.15}₀, IDØ16.1^{+0.15}₀, IDØ12.9^{+0.15}₀, IDØ16.1^{+0.15}₀, IDØ12.9^{+0.15}₀.</p> <p>Liquid pipe dimensions: IDØ9.7^{+0.15}₀, IDØ6.5^{+0.15}₀.</p>	<p>Gas pipe dimensions: IDØ12.9^{+0.15}₀, IDØ16.1^{+0.15}₀, IDØ19.7^{+0.15}₀, IDØ16.1^{+0.15}₀, IDØ12.9^{+0.15}₀, IDØ16.1^{+0.15}₀, IDØ12.9^{+0.15}₀.</p> <p>Liquid pipe dimensions: IDØ9.7^{+0.15}₀, IDØ6.5^{+0.15}₀.</p>
FQ01B/A	$14.2 < X \leq 28.0$	<p>Gas pipe dimensions: IDØ12.5^{+0.2}₀, IDØ9.7^{+0.2}₀, IDØ16.1^{+0.15}₀, IDØ12.5^{+0.2}₀, IDØ9.7^{+0.2}₀, IDØ16.1^{+0.15}₀, IDØ12.5^{+0.2}₀.</p> <p>Liquid pipe dimensions: IDØ9.7^{+0.15}₀, IDØ6.5^{+0.15}₀.</p>	<p>Gas pipe dimensions: IDØ12.5^{+0.2}₀, IDØ9.7^{+0.2}₀, IDØ16.1^{+0.15}₀, IDØ12.5^{+0.2}₀, IDØ9.7^{+0.2}₀, IDØ16.1^{+0.15}₀, IDØ12.5^{+0.2}₀.</p> <p>Liquid pipe dimensions: IDØ9.7^{+0.15}₀, IDØ6.5^{+0.15}₀.</p>

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	<p>Technical drawing of the ML01R outdoor unit showing the high-pressure gas pipe, low-pressure gas pipe, and liquid pipe connections. The high-pressure gas pipe has a diameter of $\text{D}\phi 35.3 \frac{\phi}{2}$ and a length of $\text{D}\phi 41.7 \frac{\phi}{2}$. The low-pressure gas pipe has a diameter of $\text{D}\phi 41.7 \frac{\phi}{2}$ and a length of $\text{D}\phi 41.7 \frac{\phi}{2}$. The liquid pipe has a diameter of $\text{D}\phi 25.8 \frac{\phi}{2}$ and a length of $\text{D}\phi 25.8 \frac{\phi}{2}$. The drawing also shows the connection points for the high-pressure gas pipe, low-pressure gas pipe, and liquid pipe.</p>		
ML02R	96<X	<p>Technical drawing of the ML02R outdoor unit showing the high-pressure gas pipe, low-pressure gas pipe, and liquid pipe connections. The high-pressure gas pipe has a diameter of $\text{D}\phi 35.3 \frac{\phi}{2}$ and a length of $\text{D}\phi 41.7 \frac{\phi}{2}$. The low-pressure gas pipe has a diameter of $\text{D}\phi 41.7 \frac{\phi}{2}$ and a length of $\text{D}\phi 41.7 \frac{\phi}{2}$. The liquid pipe has a diameter of $\text{D}\phi 25.8 \frac{\phi}{2}$ and a length of $\text{D}\phi 25.8 \frac{\phi}{2}$. The drawing also shows the connection points for the high-pressure gas pipe, low-pressure gas pipe, and liquid pipe.</p>		

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

[illegible]

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.

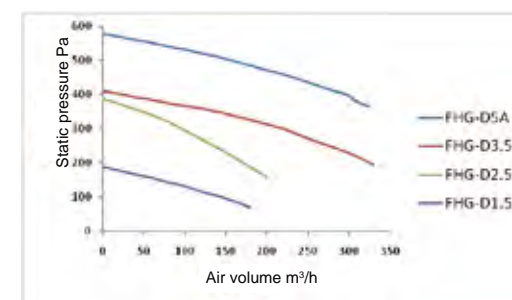


350 m³/h	High
300 m³/h	Medium high
250 m³/h	Medium
200 m³/h	Medium low
150 m³/h	Low

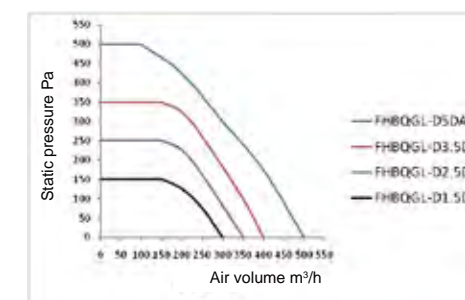
Note: The above air volume data is tested base on model FHBQGL-D3.5DA-S.

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

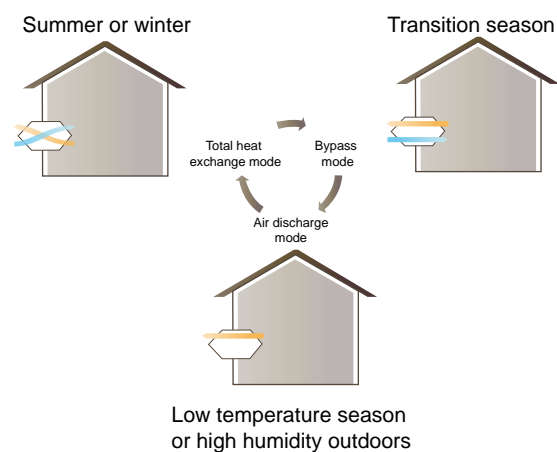


Air volume/static pressure curve of DC motor

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.

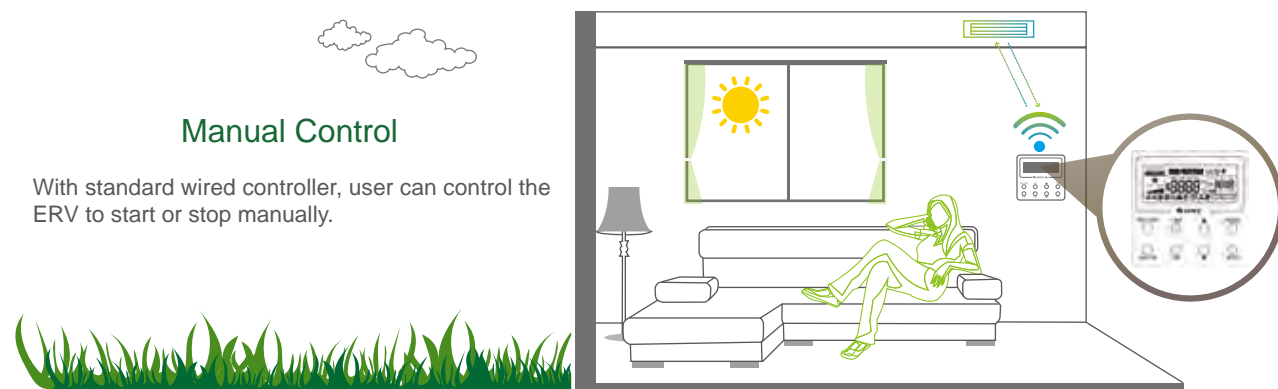


Intelligent Control

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.

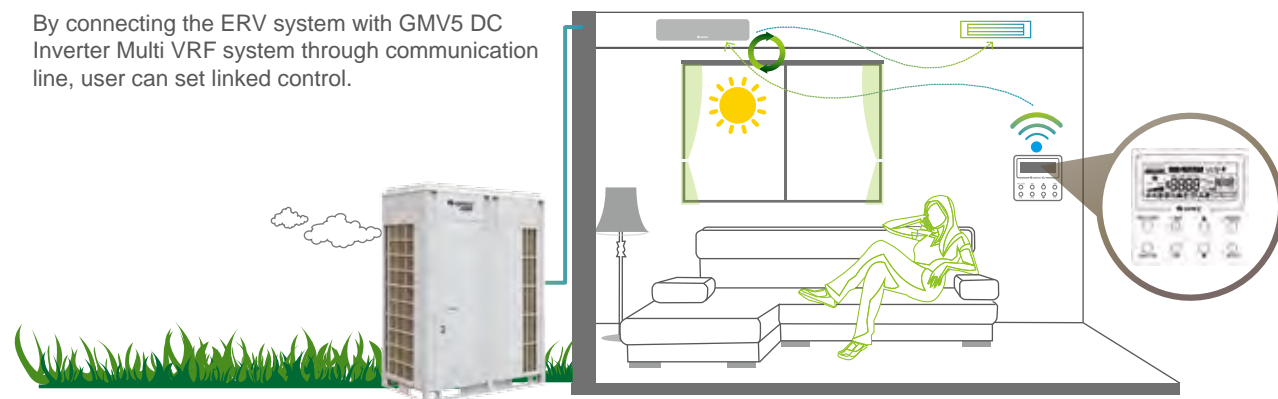
Manual Control

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.

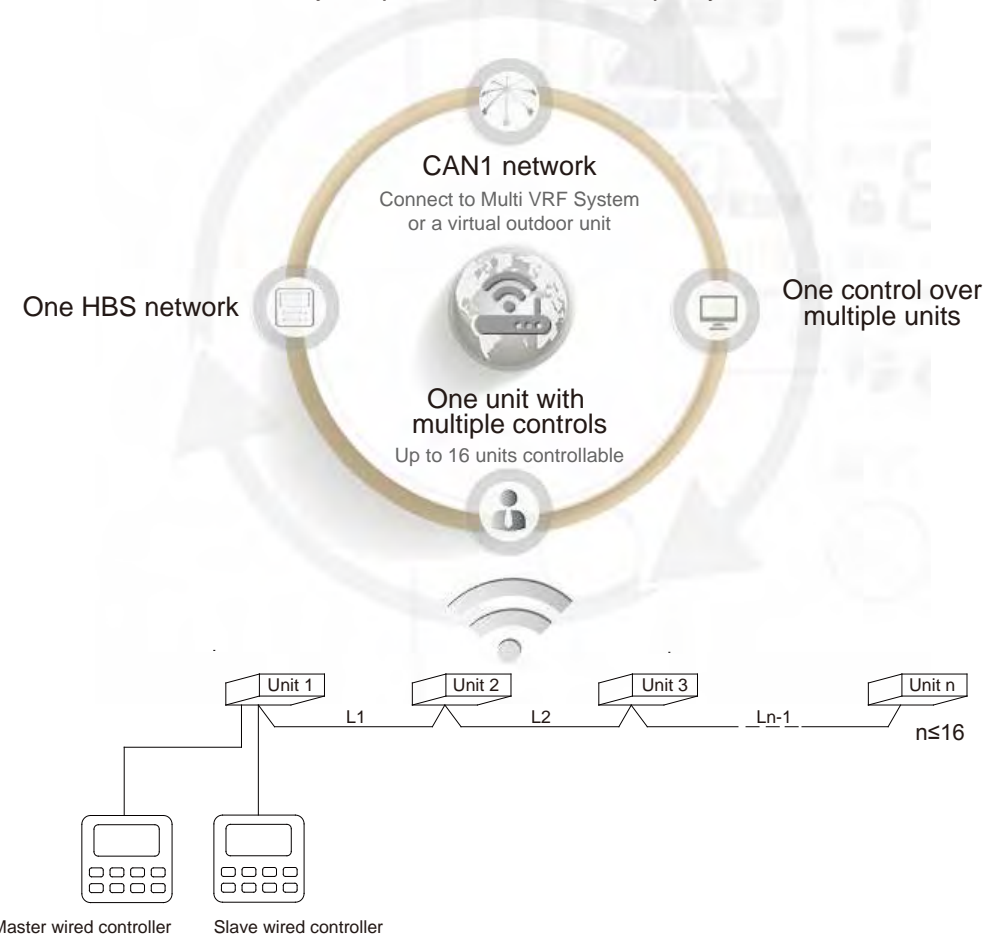


Note on auto control function: when you use the air quality box, it can display indoor air quality grade, CO2 and PM2.5 value, as well as the indoor temperature and humidity.

"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.

Adjust operation based on air quality



Smart Structural Design

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



Control System Lineup

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

Note: ● means standard, ○ means optional.

Specifications

Model			FHBQGL-D1.5DA-S ¹	FHBQGL-D2.5DA-S ¹	FHBQGL-D3.5DA-S ¹	FHBQGL-D5DA-S ¹	
Rated voltage			V	220-240	220-240	220-240	
Rated frequency			Hz	50/60	50/60	50/60	
Power input			kW	0.05	0.10	0.15	
Current input			A	0.35	0.70	1.00	
Indoor unit	Air flow volume		CFM	88	147	206	294
			m³/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 (WxDxH)	Outline	mm	1160x700x220	1160x700x220	1200x785x240	1385x785x240
		Package	mm	1465x870x270	1465x870x270	1525x970x290	1708x970x290
	Net weight/Gross weight		kg	50.0/58.5	50.0/58.5	60.0/70.5	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: *1 This ERV model is without coil.

ERV+DX Coil*

INVERTER

410A

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



- Memory function
- °C/°F switch
- Child lock
- Easier maintainability
- Weekly timer
- Centralized control

- High-efficiency HR module: They are built with heat exchange chips for efficient energy recovery on the air discharge side. When they are in use, other air conditioning equipment will consume less power.
- Constant air volume: Units adopt constant air volume control technology so that they can maintain constant air volume within a specific range of pipeline resistance.
- Efficient humidifying: Humidifying modules are built inside the units for a higher degree of comfort.
- Free cooling: When outdoor temperature is lower than the set temperature, units can automatically introduce the fresh outdoor air to make the room cooler.
- Multiple air supply modes: Positive pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor positive pressure, which will help guarantee room cleanness; Negative pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor negative pressure, which will help prevent leakage of indoor pollutants. Balanced air supply: The fresh air side and air discharge side can be set with the same air flow volume (default).
- Linked control: Units can be connected to other indoor units in the same CAN and HBS networks for linked control.
- Cooling and heating functions: With fan coils, they have cooling and heating functions like common air conditioners.
- Multiple operation modes: Total heat exchange mode: The fresh air side and air discharge side can have heat exchange for efficient energy recovery. By-pass mode: Ventilation without heat exchange. Air discharge mode: Only air discharge side is turned on for ventilation.



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

Specifications

Model				GMV-VSDR5PH/SA-S ¹	GMV-VSDR8PH/SA-S ¹	GMV-VSDR10PH/SA-S ¹	
Rated voltage			V	220-240			
Rated frequency			Hz	50/60			
Cooling capacity			kW	7.5	12.0	14.5	
Heating capacity			kW	3.8	6.0	8.0	
Power input			kW	0.30	0.50	0.66	
Current input			A	2	4	4	
Indoor unit	Airflow volume		CFM	294	471	589	
			m³/h	500	800	1000	
	ESP	Rated	Pa	150	150	150	
	Thermal exchange efficiency		%	74	74	74	
	Sound power level			dB(A)	40	46	48
	Dimension (WxDxH)	Outline	mm	1700x885x340	1800x1185x390	1800x1185x390	
		Package	mm	1900x1085x540	2000x1385x590	2000x1385x590	
Net weight/Gross weight			kg	119/165	169/219	169/219	
Ventiduct	Outer diameter		mm	200	250	250	
Loading quantity	20'GP/40'GP/40'HQ		set	24/48/60	13/26/32	13/26/32	

Note:*1 This product model is with coil and is under development.

Note

Note