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Note:
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Distributor information



Gree GMV- History of Development

Gree Modular Heat Recovery DC Inverter Multi VRF System and DC Inverter Multi VRF System were included in 2010 National Torch Program and 2010 National New Products Program respectively. In Nov., the world's first Low Ambient Temperature Heat Pump Multi VRF System was developed in Gree, gaining 16 invention patents and being appraised by authorities as "Word 2005.11 Leading". In 2006, Gree Digital Ultra-low Temperature Air Source Heat Pump Scroll VRF System was included in the National New Products Program. In order to meet consumers' growing demands on N comfortable air conditioners for large space, Gree started developing the Modular DC Inverter Multi VRF System and finally made it in 2006. The system is capable of free combination from several modules and becomes the star in Gree central air conditioners after launching. Gree succeeded in developing GMV Digital 2002 Multi VRF System and DC Inverter Multi VRF System, breaking the monopoly of Japanese brands and conquering the high-end market of multi VRF system.

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

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

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

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

SEGL

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



GMV5



Key Features

All DC Inverter Technology to Improve Compression Efficiency

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

All DC Inverter Compressor

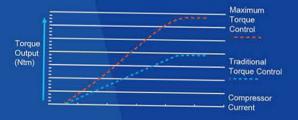
 All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.





- High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.
- Technology of maximum torque control with minimum current

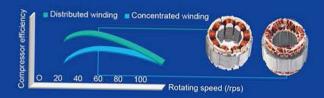
It can reduce energy loss caused by device winding so as to realize higher efficiency.



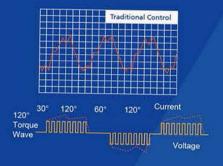
Low-frequency torque control

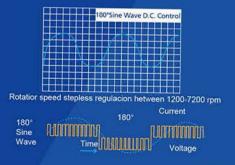
It can directly control motor torque, through which fan motor can run at a low speed. Users will feel more comfortable while requirements of the system are also met.





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

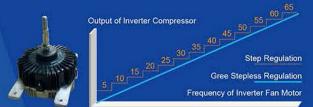






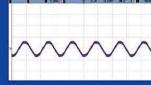
Sensorless DC Inverter Fan Motor

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



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





Afte

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
	Software check	Hardware check, more reliable
Reliability	One unit's communication error may lead to a breakdown of the whole network	If one unit has errors, it will exit from the network without any influence to other units.
Communication Efficiency	Low utilization	High utilization
Communication Efficiency	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

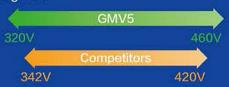
• The non-polar CAN communication technology is applied to support flexible wiring installation, greatly reducing construction difficulties.





Wide Range of Voltage and Operation Condition

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



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



Wider Applicable Location

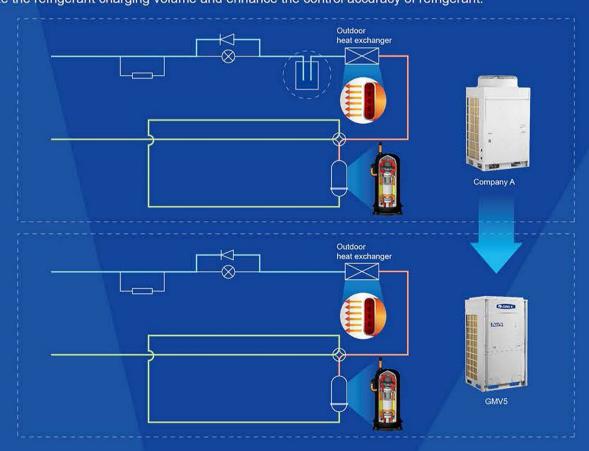
GMV5 can realize a combination of 4 outdoor unit modules connecting with as many as 80 indoor units. It's especially applicable for business building or hotels.



Max.IDU Connection: 80 sets

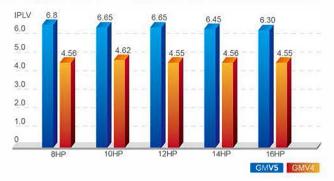
Refrigerant Storage and Distribution

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



High Efficiency and More Energy Saving

Thanks to the advanced all DC inverter technology, optimized system design and accurate intelligent control technology, IPLV of GMV5 All DC Inverter Multi VRF System is up to 6.8.



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.

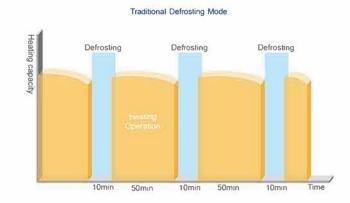
Mode 2:

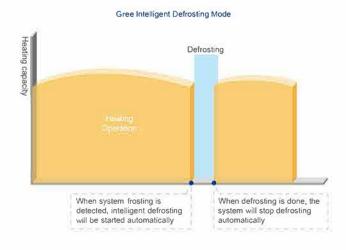
In compulsory energy-saving mode, the system will limit power output forcibly. Up to 20% of energy can be saved.



Comfortable Heating

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







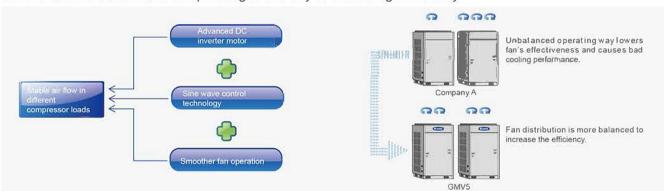
Accurate Intelligent Allocation Technology of Capacity and Output of Optimal Portion to Ensure Highest Efficiency

- 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.

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

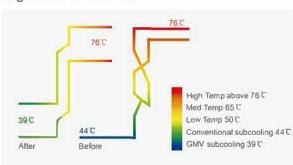
• Output of Optimal Portion to Ensure Highest Efficiency

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

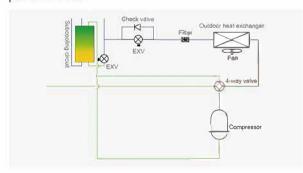


Sub-cooling Control Technology to Ensure Optimal Cooling and Heating

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



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



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

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

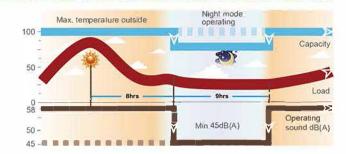
Comfortable Design for A Better Life

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

Outdoor Unit Quiet Mode and Quiet Control

Quite at night

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



• Quite 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).

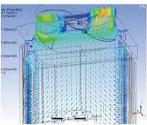


Quiet Control

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.





Indoor Unit Quiet

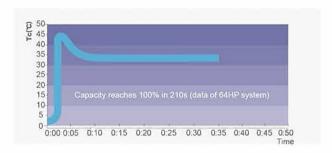
The indoor unit of the GMV5 system also adopts DC inverter motors to realize stepless regulation. According to indoor temperature or people's actual needs, users can set this mode through wired controller. Noise is as low as 25dB(A).



GMV5 (Indoor

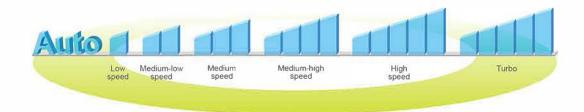
Fast Start-up in Heating

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 Levels of Indoor Fan Speed for Option

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

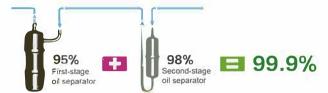


Excellent Performance Ensured by Advanced Technology

Through 10 years' of research and development, Gree GMV5 has been further upgraded to a high level from electrical components, mechanical parts, control technology to communication technology.

Two-stage Oil Separation Control Technology (Patented)

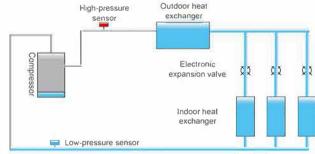
First-stage oil separator adopts a filtration expansion valve with separation efficiency of 98%; Second-stage oil separator will separate the remained 2% refrigerant oil with separation efficiency of 95%. General oil separation efficiency reaches 99.9%.



Oil Return Control Technology

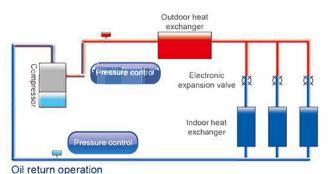
New Oil Return Control

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

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



exchanger

In oil storage operation

Electronic expansion valve

Indoor heat exchanger

Outdoor heat

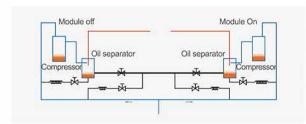
Oil storage operation



Oil Balance Control Technology

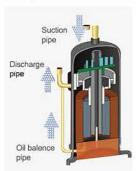
• Oil Balance between Each Module

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

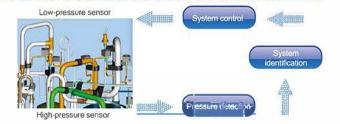
Refrigerant is taken into the compressor by the suction pipe and then runs through the cooling system. It can control the oil level and minimum oil volume required by each compressor so as to realize oil balance between each compressor.



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.

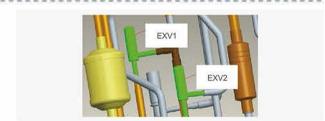


Temperature Sensor Detection Control

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

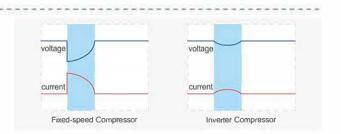
Multi Electronic Expansion Valves Control

Outdoor electronic expansion valve not only has throttling effect, but also control refrigerant flow. The system adopts multi electronic expansion valves control with 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

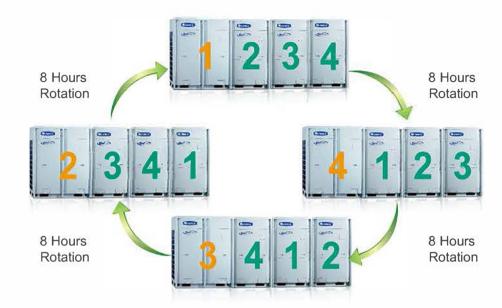
The start-up frequency of inverter compressor is gradually increased from 0 Hz to the appointed operation frequency. The start-up current of compressor rotor is decreased by reducing load torque, hence impact to power grid during start-up is reduced and electromagnetic impact to compressor is reduced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



Modules Rotation Operating to Maximize Lifespan

Modules 8h rotation operating

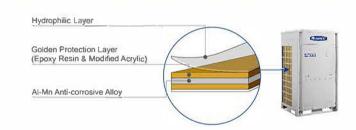
The operating priority sequence of the outdoor unit modules will be changed without restart when the system accumulatively operates for 8 hours, which can maximize the service life of the system.



Highly Anticorrosive Golden Fins

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

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



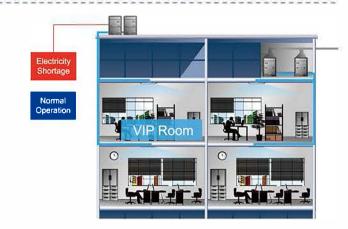
Emergency Auto-Off Control

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



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

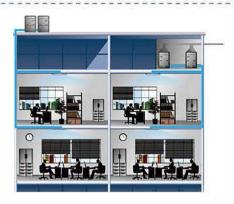
Double-fan design fan ensures that one fan can still work even if the other one has error.



Easy Installation for Various Kinds of Construction

V 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 indoors.

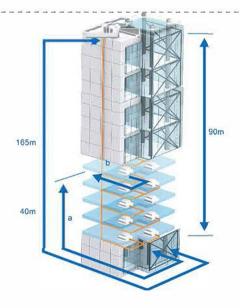


▼ 1000m Pipe Design for Flexible Installation

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

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

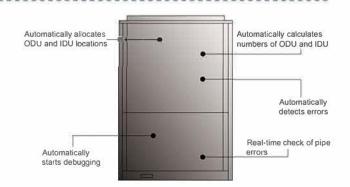
a: Distance between the first branch and the farthest indoor unit, b: Distance between the frist branch and the nearest indoor unit.



Intelligent Debugging for Convenient Construction

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

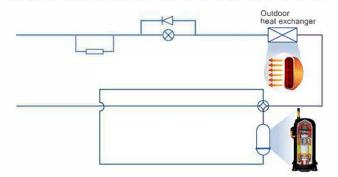






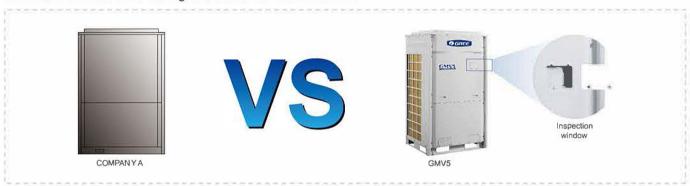
Auto Refrigerant Recovery for Convenient Operation

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.

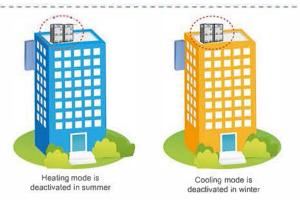


Professional Hotel Functions

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 & PARAMETER OF OUTDOOR UNITS

Outdoor Units Lineup

MOD	EL.	GMV-224WM/B-X (8HP)	GMV-280WM/B-X (10HP)	GMV-335WM/B-X (12HP)	GMV-400WM/B-X (14HP)	GMV-450WM/B-X (16HP)
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	GMV-280WMB-X (10HP)		•			
	GMV-335WM/B-X (12HP)					000000000000000000000000000000000000000
	GMV-400WM/B-X (14HP)				•	
	GMV-450WM/B-X (16HP)					
	GMV-504WM/B-X (18HP)	•	•			
	GMV-560WM/B-X (20HP)	122000000000	••	. 200 00 500 200		
C. C. C.	GMV-615WM/B-X (22HP)		•	•		
100 M	GMV-680WM/B-X (24HP)		•		•	
	GMV-730WM/B-X (26HP)		•			•
	GMV-785WM/B-X (28HP)			•		•
see: Sec.	GMV-850WM/B-X (30HP)				•	•
	GMV-900WM/B-X (32HP)					••
	GMV-960WM/B-X (34HP)		••		•	
	GMV-1010WMB-X (36HP)		••			•
	GMV-1065WIWB-X (38HP)		•	•		•
Mari Land	GMV-1130WM/B-X (40HP)		•		•	•
	GMV-1180WM/B-X (42HP)		•			••
	GMV-1235WWB-X (44HP)			•		••
100	GMV-1300WW/B-X (46HP)				•	••
	GMV-1350WM/B-X (48HP)					
	GMV-1410WM/B-X (50HP)		••		•	•
	GMV-1460WM/B-X (52HP)		••			••
	GMV-1515WWB-X (54HP)		•	**************************************	. RIOTERIE	••
100 100 100 100 100 100 100 100 100 100	GMV-1580WWB-X (56HP)		•		•	••
	GMV-1630WM/B-X (58HP)		•			
	GMV-1685W/WB-X (60HP)			•		8
	GMV-1750WWB-X (62HP)				•	& & &
	GMV-1800WWB-X (64HP)					***

▼ Specifications of Outdoor Units

380~415V,50/60Hz

Mode	l.		GMV- 224WM/B-X	GMV- 280WM/B-X	GMV- 335WM/B-X	GMV- 400WM/B-X	GMV- 450WM/B-X	GMV- 504WM/B-X*1	GMV- 560WM/B-X*1	GMV- 615WM/B-X*
Capacity range		HP	8	10	12	14	16	18	20	22
Capacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
Оараску	Heating	kW	25	31.5	37.5	45	50	56	63	69
EER		kW/kW	4.31	4	3.98	3.76	3.56	3.38	2.97	2.75
COP		kW/kW	4.55	4.32	4.17	4.05	3.85	3.84	3.6	3.16
Power supply		V/Ph/Hz				380~415V-3	Ph-50/60Hz			
Max. Circuit/Fu	se Current	A	15.7/20	20.9/25	24.7/32	28.8/40	33.2/40	36.8/40	43.8/50	48.9/50
Power	Cooling	kW	5.2	7	8.41	10.65	12.65	14.9	18.9	22.3
comsumption	Heating	kW ,	5.5	7.3	9	11.1	13	14.6	17.5	21.8
Maximum drive	IDU NO.	unit	13	16	19	23	26	31	34	38
Refrigerant Cha	arge volume	kg	5.9	6.7	8.2	9.8	10.3	12.7	13	13.5
Sound pressure	elevel	dB(A)	60	61	63	63	63	65	66	66
Connecting	Liquid	mm	Φ9	.52		Ф12.7			Φ15.9	
pipe	Gas	mm	Ф19.05	Ф22.2	Φ2	5.4	Ф28.6		Ф28.6	
	Oil balance	mm			Ф9.52		.0.47 1000		Φ9.52	
Dimension	Outline	mm	930°76	5°1605		1340°765°1605			1340°765°1740	
(M°D°H)	Package	mm.	1010*84	10*1775		1420°840°1775			1420*840*1910	
Net weight/Gro	ss weight	kg	225/235	225/235	285/300	360/375	360/375	400/415	400/415	400/415
Loading	40' GP	set	24	24	16	16	16	16	16	16
quantity	40' HQ	set	24	24	16	16	16	16	16	16

208~230V,60Hz

Model			GMV-224 WM/B-F	GMV-280 WM/B-F	GMV-335 WM/B-F	GMV-400 WM/B-F	GMV-450 WWB-F	GMV-504 WM/B-F ¹¹	GMV-560 WM/B-F''	GMV-615 WM/B-F
Capacity range		HP	8	10	12	14	16	18	20	22
Capacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
Оараску	Heating	kW	25	31.5	37.5	45	50	56	63	69
EER		kW/kW	4.31	4	3.98	3.76	3.56	3.38	2.97	2.75
COP		kW/kW	4.55	4.32	4.17	4.05	3.85	3.84	3.6	3.16
Power supply	Cooling	V/Ph/Hz				208~230V	-3Ph-60Hz			
MCA		A	36	38	43	60	65	68	74	80
MOP		A	60	60	60	80	90	93	103	112
Power	Cooling	kW	5.2	7	8.41	10.65	12.65	14.9	18.9	22.3
comsumption	Heating	kW	5.5	7.3	9.0	11.1	13	14.6	17.5	21.8
Maximum drive	IDU NO.	unit	13	16	19	23	26	31	34	38
Refrigerant Cha	rge volume	kg	5.9	6.7	8.2	9.8	10.3	12.7	13	13.5
Sound pressure	level	dB(A)	60	61	63	63	63	65	66	66
Connecting	Liquid	mm	Φ9	.52		Ф12.7			Ф15.9	
pipe	Gas	mm	Ф19.05	Ф22.2	Ф2	5.4		Ф2	8.6	
	Oil balance	mm				Ф9	.52			
Dimension	Outline	mm	930*76	5*1605		1340*765*1605			1340*765*1740	
(M*D*H)	Package	mm	1010*8	10°1775		1420*840*1775			1420*840*1910	
Net weight/Gros	ss weight	kg	225/235	225/235	285/300	360/375	360/375	400/415	400/415	400/415
Loading	40' GP	set	24	24	16	16	16	16	16	16
quantity	40' HQ	set	24	24	16	16	16	16	16	16

440~460V,60Hz

Model			GMV-224 WM/B-U ⁻¹	GMV-280 WM/B-U*1	GMV-335 WM/B-U ¹¹	GMV-400 WM/B-U"	GMV-450 WM/B-U"	GMV-504 WM/B-U"	GMV-560 WM/B-U"	GMV-615 WM/B-F
Capacity range		HP	8	10	12	14	16	18	20	22
Capacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
Сараску	Heatin_	kW	25	31.5	37.5	45	50	56	63	69
EER		kW/kW	4.15	3.84	3.85	3.69	3.49	3.38	2.97	2.75
COP		kW/kW	4.31	4.12	4.01	3.93	3.76	3.84	3.6	3.16
Power supply	Cooling	V/Ph/Hz				440-460V-	3Ph-60Hz			
MCA		A	19	20	24	32	35	37	40	43
MOP		A	30	30	35	40	40	45	50	55
Power	Cooling	kW	5.4	7.3	8.7	10.85	12.9	14.9	18.9	22.3
comsumption	Heating	30.0			9.35	11.45	18352	14.6	17.5	21.8
Maximum drive	IDU NO.	unit	13	16	19	23	26	31	34	38
Refrigerant Cha	rge volume	kg	6.5	6.7	8.2	9.8	10.3	12.7	13	13.5
Sound pressure	level	dB(A)	60	61	63	63	63	65	66	66
Connecting	Liquid	mm	Ф9	.52		Ф12.7			Ф15.9	
pipe	Gas	mm	Ф19.05	Ф22.2	Ф2	5.4		Ф2	8.6	
	Oil balance	mm				Ф9	52			
Dimension	Outline	mm	930*76	5*1605		1340*765*1605			1340 * 765 * 1740	
(M°D°H)	Package	mm	1010*8-	40*1775	1	1420*840*1775			1420°840°1910	
Net weight/Gros	ss weight	kg	225/235	225/235	285/300	360/375	360/375	400/415	400/415	400/415
Loading	40' GP	set	24	24	16	16	16	16	16	16
quantity	40' HQ	set	24	24	16	16	16	16	16	16



Note:

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

Specifications of ODU Combination

380~415V,50/60Hz

		Cool Capa		Pow Inpu		Dimension(W*D*H)	Airflow	ESP	Noise	Noise at Night	Connec		Oli Balanca	Min	Mgg.	Weight
Model	Power Supply	Cooling	Heating	Cooling	Heating		Volume			Operation Noise	Liquid	Gas	Pipe	current	current	worght
		kW	kW	kW	kW	mm	m³/h	Pa	dB(A	dB(A)	mm	mm	mm	A	A	kg
GMV-504WM/B-X		50.4	56.5	12.2	12.8	2×(930×765×1605)	2×11400	0-82	64	45	Ф15.9	Ф28.6	Ф9.52	39.6	40	225×2
GMV-560WM/BX		56	62.5	14	14.6	2×(930×765×1605)	2×11400	0~82	64	45	Ф15.9	Ф28.6	Ф9.52	41.8	50	225×2
GMV-615WM/B-X		61.5	69	15.41	16.3	(930×765×1605)+(1340×765×1605)	11400+14000	0~82	65	45	Ф15.9	Ф28.6	Ф9.52	45.6	50	285+225
GMV-680WM/B-X		68	76.5	17.65	18.4	(930×765×1605)+(1340×765×1605)	11400+14000	0~82	65	45	Ф15.9	Ф28.6	Ф9.52	54	63	225+360
GMV-730WM/B-X		73	81.5	19.65	20.3	(930×765×1605)+(1340×765×1605)	11400+14000	0~82	65	45	Ф19.05	Ф31.8	Ф9.52	55.8	63	225+360
GMV-785WM/B-X		78.5	87.5	21.06	22	2×(1340×765×1605)	2×14000	0~82	66	45	Ф19.05	Ф31.8	Ф9.52	66.1	80	285+360
GMV-850WM/B-X		85	95	23.3	24.1	2×(1340×765×1605)	2×14000	0-82	66	45	Ф19.05	Ф31.8	Ф9.52	62	80	360×2
GMV-900WM/B-X		90	100	25.3	26	2×(1340×765×1605)	2×14000	0-82	66	45	Ф19.05	Ф31,8	Ф9.52	66.5	80	360×2
GMV-960WM/B-X		96	108	24.65	25.7	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0~82	67	45	Ф19.05	Ф31.8	Ф9.52	70.6	80	225×2+360
GMV-1010WM/B-X	380~ 415V- 3Ph-	101	113	26.65	27.6	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0~82	67	45	Ф19.05	Ф38.1	Ф9.52	75	80	225×2+360
GMV-1065WWB-X	50/60Hz	106.5	119	28.06	29.3	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Ф19.05	Ф38.1	Ф9.52	78.8	100	225+285+360
GMV-1130WM/B-X		113	126.5	30.3	31.4	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Ф19.05	Ф38.1	Ф9.52	82.9	100	225+360×2
GMV-1180WM/B-X		118	131.5	32.3	33	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Ф19.05	Ф38.1	Ф9.52	87.4	100	225+360×2
GMV-1235WM/B-X		123.5	137.5	33.71	35	3×(1340×765×1605)	3×14000	0~82	68	45	Ф19.05	Ф38.1	Ф9.52	91.2	125	285+360×2
GMV-1300WM/B-X		130	145	35.95	37.1	3×(1340×765×1605)	3×14000	0~82	68	45	Ф19.05	Ф38.1	Ф9.52	95.3	125	360×3
GMV-1350WM/B-X		135	150	37.95	39	3×(1340×765×1605)	3×14000	0~82	68	45	Ф19.05	Ф38.1	Ф9.52	99.7	125	360×3
GMV-1410WM/B-X		141	158	37.3	38.7	2×(930×765×1605)+2×(1340×765×1605)	2×11400+2×14000	0-82	69	47	Ф22.2	Ф44.5	Ф9.52	103.8	125	225×2+360×2
GMV-1460WM/B-X		146	163	39.3	40.6	2×(930×765×1605)+2×(1340×765×1605)	2×11400+2×14000	0~82	69	47	Ф22.2	Ф44.5	Ф9.52	108.3	125	225×2+360×2
GMV-1515WM/B-X		151.5	169	40.71	42.3	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	47	Ф22.2	Ф44.5	Ф9.52	112.1	125	225+285+360×2
GMV-1580WM/B-X		158	176.5	42.95	44.4	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0-82	69	47	Ф22.2	Ф44.5	Ф9.52	116.2	125	225+360×3
GMV-1630WM/B-X		163	181.5	44.95	46.3	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	49	Ф22.2	Ф44.5	Ф9.52	120.6	160	225+360×3
GMV-1685WM/B-X		168.5	187.5	46.36	48	4×(1340×765×1605)	4×14000	0~82	70	49	Ф22.2	Ф44.5	Φ9.52	124.4	160	285+360×3
GMV-1750WM/B-X		175	195	48.6	50.1	4×(1340×765×1605)	4×14000	0~82	70	49	Ф22.2	Ф44.5	Ф9.52	128.5	160	360×4
GMV-1800WM/B-X		180	200	50.6	52	4×(1340×765×1605)	4×14000	0-82	70	49	Ф22.2	Ф44.5	Ф9.52	133	160	360×4

208~230V,60 Hz

		Cool Capa	_	Pow		Dimension(W*D*H)	Airflow	ren	Noise	Noise at Night	Connec			Min.	Max	Walahi
Model	Power Supply	Capiling	Heating	Cooling	Heating	Dimension(W D N)	Volume	ESP	NOISE	Operation Noise	Liquid	Gas	Pipe	current		Weight
		kW	kW	kW	kW	mm	m³/h	Pa	dB(A)	dB(A)	mm	mm	mm	A	A	kg
GMV-504WM/B-F		50.4	56.5	12.2	12.8	2×(930×765×1605)	2×11400	0-82	64	45	Ф15.9	Ф28.6	Ф9.52	39.6	40	225×2
GMV-560WM/B-F		56	62.5	14	14.6	2×(930×765×1605)	2×11400	0~82	64	45	Ф15.9	Ф28.6	Φ9.52	41.8	50	225×2
GMV-615WM/B-F		61.5	69	15.41	16.3	(930×765×1605)+(1340×765×1605)	11400+14000	0-82	65	45	Ф15.9	Ф28.6	Ф9.52	45.6	50	285+225
GMV-680WM/B-F		68	76.5	17.65	18.4	(930×765×1605)+(1340×765×1605)	11400+14000	0~82	65	45	Ф15.9	Ф28.6	Ф9.52	54	63	225+360
GMV-730WM/B-F		73	81.5	19.65	20.3	(930×765×1605)+(1340×765×1605)	11400+14000	0~82	65	45	Ф19.05	Ф31.8	Ф9.52	55.8	63	225+360
GMV-785WM/B-F		78.5	87.5	21.06	22	2×(1340×765×1605)	2×14000	0~82	66	45	Ф19.05	Ф31.8	Ф9.52	66.1	80	285+360
GMV-850WM/B-F		85	95	23.3	24.1	2×(1340×765×1605)	2×14000	0~82	66	45	Ф19.05	Ф31.8	Φ9.52	62	80	360×2
GMV-900WM/B-F		90	100	25.3	26	2×(1340×765×1605)	2×14000	0~82	66	45	Ф19.05	Ф31.8	Ф9.52	66.5	80	360×2
GMV-960WM/B-F		96	108	24.65	25.7	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0-82	67	45	Ф19.05	Ф31.8	Φ9.52	70.6	80	225×2+360
GMV-1010WM/B-F		101	113	26.65	27.6	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0~82	67	45	Ф19.05	Ф38.1	Φ9.52	75	80	225×2+360
GMV-1065WM/B-F	208~ 230V-	106.5	119	28.06	29.3	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Ф19.05	Ф38.1	Φ9.52	78.8	100	225+285+360
GMV-1130WM/B-F	3Ph- 60Hz	113	126.5	30.3	31.4	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Ф19.05	Ф38.1	Φ9.52	82.9	100	225+360×2
GMV-1180WM/B-F	OUNZ	118	131.5	32.3	33	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Ф19.05	Ф38.1	Ф9.52	87.4	100	225+360×2
GMV-1235WM/B-F		123.5	137.5	33.71	35	3×(1340×765×1605)	3×14000	0~82	68	45	Ф19.05	Ф38.1	Φ9.52	91.2	125	285+360×2
GMV-1300WWB-F		130	145	35.95	37.1	3×(1340×765×1605)	3×14000	0~82	68	45	Ф19.05	Ф38.1	Ф9.52	95.3	125	360×3
GMV-1350WM/B-F		135	150	37.95	39	3×(1340×765×1605)	3×14000	0~82	68	45	Ф19.05	Ф38.1	Ф9.52	99.7	125	360×3
GMV-1410WM/B-F		141	158	31	38.7	2×(930×765×1605)+2×(1340×765×1605)	2×11400+2×14000	0-82	69	47	Ф22.2	Φ44.5	Φ9.52	103.8	125	225×2+360×2
GMV-1460WM/B-F		146	163	39.3	40.6	2×(930×765×1605)+2×(1340×765×1605)	2×11400+2×14000	0-82	69	47	Ф22.2	Φ44.5	Ф9.52	108.3	125	225×2+360×2
GMV-1515WM/B-F		151.5	169	40.71	42.3	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	47	Ф22.2	Ф44.5	Φ9.52	112.1	125	225+285+360×2
GMV-1580WM/B-F		158	176.5	42.95	44.4	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	47	Ф22.2	Ф44.5	Ф9.52	116.2	125	225+360×3
GMV-1630WM/B-F		163	181.5	44.95	46.3	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	49	Ф22.2	Φ44.5	Φ9.52	120.6	160	225+360×3
GMV-1685WM/B-F		168.5	187.5	46.36	48	4×(1340×765×1605)	4×14000	0~82	70	49	Ф22.2	Φ44.5	Ф9.52	124.4	160	285+360×3
GMV-1750WM/B-F		175	195	48.6	50.1	4×(1340×765×1805)	4×14000	0~82	70	49	Ф22.2	Ф44.5	Ф9.52	128.5	160	360×4
GMV-1800WM/B-F		180	200	50.6	52	4×(1340×765×1605)	4×14000	0~82	70	49	Ф22.2	Ф44.5	Ф9.52	133	160	360×4

440~460V,60 Hz

		Cool		Pow		Dimension(W*D*H)	Airflow	Eep	Noise	Noise at Night	Connec plpe dia		Oil Balance		Max.	Weight
Model	Power Supply	Cooling	Heating	Cooking	Heating	Dillionsion(W & Fly	Volume	Lor	MUISE	Operation Noise	Llquid	Gas	Pipe	current		
		kW	kW	kW	kW	mm	m³/h	Pa	dB(A)	dB(A)	mm	mm	mm	Α	А	kg
GMV-504WM/B-U		50.4	56.5	12.7	13.45	2×(930×765×1605)	2×11400	0~82	64	43	Ф15.9	Ф28.6	Ф9.52	36	40	225×2
GMV-560WM/B-U		56	62.5	14.6	15.3	2×(930×765×1605)	2×11400	0~82	64	43	Ф15.9	Ф28.6	Ф9.52	37	40	225×2
GMV-615WM/B-U		61.5	69	16	17	(930×765×1605)+(1340×765×1605)	11400+14000	0~82	65	43	Ф15.9	Ф28.6	Φ9.52	37	50	285+225
GMV-680WM/B-U		68	76.5	18.15	19.1	(930×765×1605)+(1340×765×1606)	11400+14000	0~82	65	43	Ф15.9	Ф28.6	Ф9.52	49	50	225+360
SMV-730WM/B-U		73	81.5	20.2	20.95	(930×765×1605)+(1340×765×1607)	11400+14000	0~82	65	43	Ф19.05	Ф31.8	Ф9.52	52	60	225+360
GMV-785WM/B-U		78.5	87.5	21.6	22.65	2×(1340×765×1605)	2×14000	0-82	66	43	Ф19.05	Ф31.8	Ф9.52	55	60	285+360
SMV-850WM/B-U		85	95	23.75	24.75	2×(1340×765×1605)	2×14000	0~82	66	43	Ф19.05	Ф31.8	Φ9.52	64	70	360×2
GMV-900WM/B-U		90	100	25.8	26.6	2×(1340×765×1605)	2×14000	0~82	66	43	Ф19.05	Ф31.8	Ф9.52	66	70	360×2
GMV-960WM/B-U		96	108	25.45	26.75	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0-82	67	45	Ф19.05	Ф31.8	Ф9.52	65	70	225×2+360
3MV-1010WM/B-U		101	113	27.5	28.6	2×(930×765×1605)+(1340×765×1605)	2×11400+14000	0~82	67	45	Ф19.05	Ф38.1	Ф9.52	67	80	225×2+360
GMV-1065WM/B-U	440~ 460V-	106.5	119	28.9	30.3	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Ф19.05	Ф38.1	Ф9.52	71	80	225+285+360
GMV-1130WM/B-U	3Ph- 60Hz	113	126.5	31.05	32.4	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Ф19.05	Ф38.1	Ф9.52	80	90	225+360×2
GMV-1180WM/B-U	00/12	118	131.5	33.1	34.25	(930×765×1605)+2×(1340×765×1605)	11400+2×14000	0~82	67	45	Ф19.05	Ф38.1	Ф9.52	83	90	225+360×2
3MV-1235WM/B-U		123.5	137.5	34.5	35.95	3×(1340×765×1605)	3×14000	0-82	68	45	Ф19.05	Ф38.1	Φ9.52	86	90	285+360×2
3MV-1300WM/B-U		130	145	36.65	38.05	3×(1340×765×1605)	3×14000	0~82	68	45	Ф19.05	Ф38.1	Ф9.52	95	100	360×3
GMV-1350WM/B-U		135	150	38.7	39.9	3×(1340×765×1605)	3×14000	0~82	68	45	Ф19.05	Ф38.1	Ф9.52	97	110	360×3
GMV-1410WM/B-U		141	158	38.35	40.05	2×(930×765×1605)+2×(1340×765×1605)	2×11400+2×14000	0~82	69	47	Ф22.2	Ф44.5	Ф9.52	96	110	225×2+360×2
GMV-1460WM/B-U		146	163	40.4	41.9	2×(930×765×1605)+2×(1340×765×1605)	2×11400+2×14000	0~82	69	47	Ф22.2	Ф44.5	Ф9.52	99	110	225×2+360×2
GMV-1515WM/B-U		151.5	169	41.8	43.6	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	47	Ф22.2	Ф44.5	Ф9,52	102	110	225+285+360×
GMV-1580WM/B-U		158	176.5	43.95	45.7	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	47	Ф22.2	Ф44.5	Ф9.52	111	110	225+360×3
SMV-1630WM/B-U		163	181.5	46	47.55	(930×765×1605)+3×(1340×765×1605)	11400+3×14000	0~82	69	49	Ф22.2	Ф44.5	Ф9.52	114	125	225+360×3
3MV-1685WM/B-U		168.5	187.5	47.4	49.25	4×(1340×765×1605)	4×14000	0-82	70	49	Ф22.2	Ф44.5	Φ9.52	117	125	285+360×3
3MV-1750WM/B-U		175	195	49.55	51.35	4×(1340×765×1605)	4×14000	0~82	70	49	Ф22.2	Φ44.5	Φ9.52	126	150	360×4
GMV-1800WM/B-U		180	200	51.6	53.2	4×(1340×765×1605)	4×14000	0~82	70	49	Ф22.2	Φ44.5	Ф9.52	128	150	360×4



6MV5 Mini & Slim



Key Features

All DC Inverter Technology to Improve Compression Efficiency

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

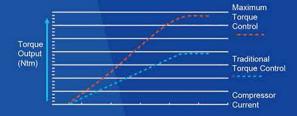
All DC Inverter Compressor

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

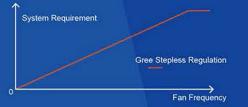


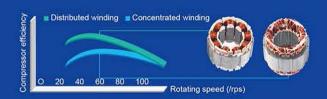
- High-efficient permasyn motor is adopted to provide better performance than traditional DC inverter compressor.
- Technology of maximum torque control with minimum current

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

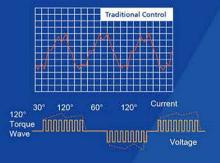


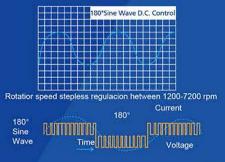
Low-frequency torque control
 It can directly control motor torque, through which
 fan motor can run at a low speed. Users will feel
 more comfortable while requirements of the
 system are also met.





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

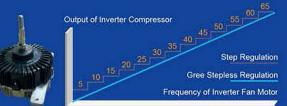






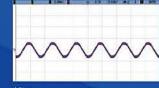
Sensorless DC Inverter Fan Motor

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



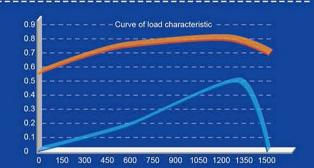
 Sensorless control technology guarantees lower noise, less vibration and steadier operation.





Sensorless DC Inverter Fan Motor

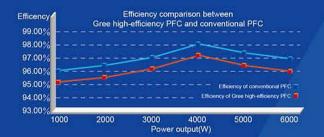
The indoor unit adopts high-efficiency brushless DC motor. Compared with conventional motor, the efficiency of brushless DC motor is improved by more than 30%. Meanwhile, the design of evaporation capacity flow is optimized through emulation software of refrigeration system and the heat exchange amount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



High-efficiency Digital PFC Control *

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

*This feature is applicable for GMV5 Mini only.



Wider Operation Condition Range

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



Comfortable and Quiet Mode

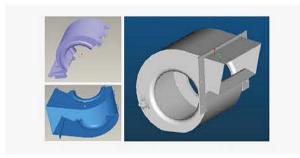
Low Noise of Outdoor Unit

- The advanced sub-cooling control technology is applied to reduce the liquid flow noise of indoor unit in cooling operation.
- Non-commutative oil return technology in heating and optimization control logic are adopted to reduce the liquid flow noise of indoor unit in oil return course of heating operation.

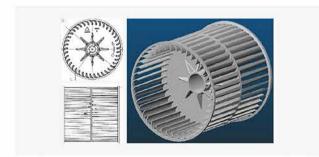


Low Noise of Indoor Unit

 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).

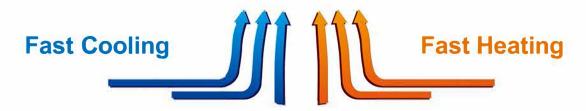


 By adopting the optimal inlet angle of centrifugal fan blade and optimal diameter ratio between internal and external circles of impeller, the air volume is increased and fan noise is decreased greatly.



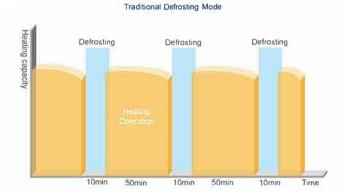
Intelligent Temperature Control Technology

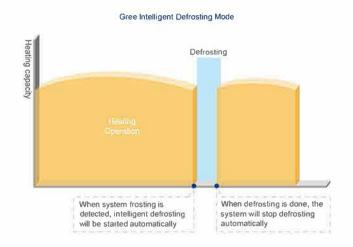
Intelligent temperature control technology is adopted for super fast cooling or heating, so that indoor temperature will reach set temperature more quickly.



Comfortable Heating

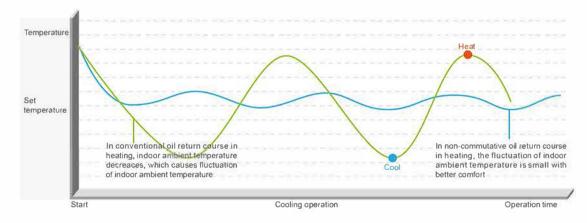
Advanced intelligent defrosting mode is adopted. Gree advanced intelligent defrosting mode will choose the best defrosting way according to outdoor temperature and operation status to realize intelligent defrosting, effectively improving heating effect and performance. While in traditional defrosting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





Non-commutative Oil Return Technology in Heating

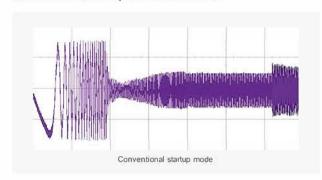
The unit can achieve non-commutative oil return in heating when outdoor ambient temperature is within 0~20°C. Thanks to this technology, indoor ambient temperature is more stable and comfort is improved in heating mode.

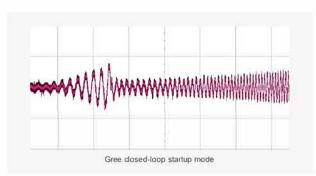


Reliable Operation

Compressor Closed-loop Startup Technology with More Reliable Startup

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





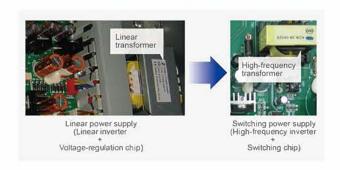
▼ High Anti-interference Ability

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



Advanced High-frequency Transformer with More Stable Voltage

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







Ultra-long Connection 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 connection pipe.



Adopting Advanced Refrigerant Cooling Technology

Drive IPM adopts refrigerant for cooling, which eliminated the limitation and instability of heat radiation of aluminum fins by fan cooling. Moreover, the controller can operate more reliable and service life is longer.

*This feature is applicable for GMV5 Slim only.



6MV5 Mini & Slim Line Up

Mini Line up

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

▼ Slim Line up

HP	Model	Product Outlook
7	GMV-H200WL/A-X	The state of the s
8	GMV-H224WL/A-X	
9	GMV-H250WL/A-X	
10	GMV-H280WL/A-X	
11	GMV-H308WL/A-X	
12	GMV-H335WL/A-X	

Mini

50/60 Hz

	Model		GMV-120WL/A-T	GMV-140WL/A-T	GMV-160WL/A-T
Capacity range		HP	4	5	6
Capacity	Cooling	kW	12.1	14	16
Capacity	Heating	kW	14	16.5	18.5
EER	kW/kW		3.97	3.52	3.3
COP	kW/kW 4.28 4.14 Cooling kW/kW /		4.28	4.14	3.96
IPLV			1	1	
Power su	upply	V/Ph/Hz		220~240V-1Ph-50Hz&208~230V-1Ph-60Hz	
Max. Circuit/Fu	se Current	A	28.1/32	31.8/32	33.6/40
Power	Cooling	kW	3.05	3.98	4.85
comsumption	Heating	kW	3.27	3.99	4.67
Maximum drive	IDU NO.	unit	7	8	9
Refrigerant Cha	arge volume	kg	5	5	5
Sound pressure	e level	dB(A)	55	56	58
Connecting	Liquid	mm		Φ9.52	
pipe	Gas	mm	Φ15	.87	Φ19.05
Dimension	Outline	mm		900°340°1345	
(M°D°H)	Package	mm		998*458*1515	
Net weight/Gros	ss weight	kg	110/120	110/120	110/120
Loading	40' GP	set	57	57	57
quantity	40' HQ	set	57	57	57

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

Slim 50/60 Hz

	Model		GMV-H200WL/A-X	GMV-H224WL/A-X	GMV-H250WL/A-X	GMV-H280WL/A-X	GMV-H308WL/A-X	GMV-H335WL/A-X			
Capacity range		HP	7	8	9	10	11	12			
Capacity	Cooling	kVV	20.0	22.4	25.0	28.0	30.8	33.5			
Capacity	Heating	kW	22.4	25.0	27.0	31.5	33.9	37.5			
EER		kW/kW	1	1	W	1	1	1			
COP		kW/kW	- Ł	i.	1	1	1	(E			
IPLV	Cooling	kW/kW	6.1	6.1	6.0	6.0	6.0	6.0			
Power supply V/Ph		V/Ph/Hz		380-415~3Ph~50/60Hz							
Max. Circuit/Fuse Current		A	25	25	25	25	25	25			
Power	Cooling	kW	6.5	7.2	7.7	9.4	10.3	11.0			
comsumption	Heating	kW	5.6	6.1	7.2	8.6	9.6	10.4			
Maximum drive	IDU NO.	unit	12	13	15	17	18	20			
Refrigerant Cha	rge volume	kg	5.0	5.5	6.0	7.5	8.0	8.8			
Sound pressure	Cooling	dB(A)	57	58	59	59	59	60			
level	Heating	dB(A)	58	59	60	60	60	61			
Connecting	Liquid	mm	Φ9.52	Φ9.52	Ф9.52	Φ12.7	Φ12.7	Ф12.7			
pipe	Gas	mm	Ф19.05	Φ19.05	Φ19 05	Φ25.4	Φ25.4	Ф25.4			
Dimension	Outline	mm	940°320°1430	940*320*1430	940°320°1430	940*460*1615	940*460*1615	940°460°1615			
(M.D.H)	Package	mm	1033*433*1580	1033*433*1580	1033°433°1580	1033°573°1765	1033*573*1765	1033*573*1765			
Net weight/Gross weight		kg	133/144	133/144	133/144	160/175	165/180	170/185			
Loading	40' GP	set	54	54	54	44	44	44			
quantity	40' HQ	set	54	54	54	44	44	44			

- 1 Testing conditions of rated cooling capacity: indoor 27°CDB/19°CWB, outdoor 35°CDB, connection pipe length of 5m, no height difference between units.

 2 Testing conditions of rated heating capacity: indoor 20°CDB, outdoor 7°CDB/6°CWB, connection pipe length of 5m, no height difference between units.

 3 The total indoor unit capacity shall be within 50% to 130% of outdoor unit capacity. Correction of other parameters can be referred to the unit capacity correction sheet. 4. The above-mentioned parameters are tested with standard connection pipe length. In actual engineering, please arrange correction according to the capacity correction with long connection pipe.
- *1 This product is under development. The parameters are estimated, please refer to the value on the nameplate.



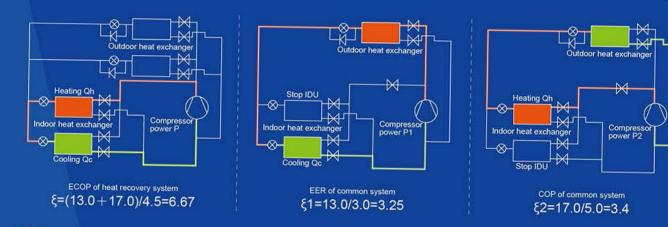
6MV5 Heat Recovery



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.

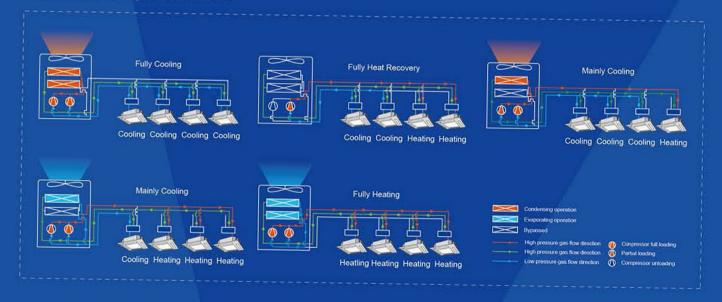


When the cooling capacity and heating capacity of common system are equivalent to the capacity of heat recovery system, its energy efficiency ratio is: $\xi 2 = (13.0 \pm 17.0)/(3.0 \pm 5.0) = 30.0/8.0 = 3.75$

The energy efficiency ratio of heat recovery system is higher than common system: (6.67-3.75)x100%/3.75=78%

Note: Working conditions of above-mentioned test: outdoor temperature 7 C/6 C, indoor temperature in cooling 27 C/19 C, indoor temperature in heating 20 C/15 C.

Five Efficient Operation Modes



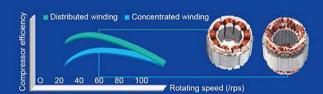


All DC Inverter Technology to Improve Compression Efficiency

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



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



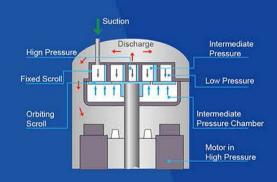
High Pressure Chamber Design

What's high pressure chamber?

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

What's the benefits of high pressure chamber?

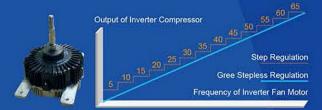
High pressure chamber compressor inhales directly to reduce overheat suction loss and improve compression efficiency.





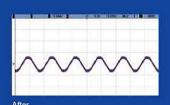
Sensorless DC Inverter Fan Motor

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



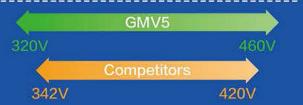
Sensorless control technology guarantees lower noise, less vibration and steadier operation.





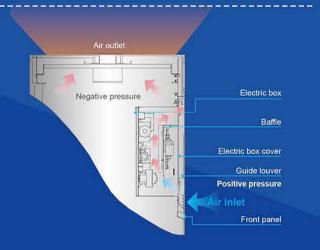
Wide Range of Voltage to Ensure a Steady System Running

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



Unique PCB Protection

With unique high efficiency radiating air-dust design, the outdoor electric box is designed as water-proof, dust-proof, damp-proof and well-ventilated, which can ensure the required conditions for the electric elements even if in tropical conditions, highly improved the system reliability and service life.



Wider Applicable Location

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



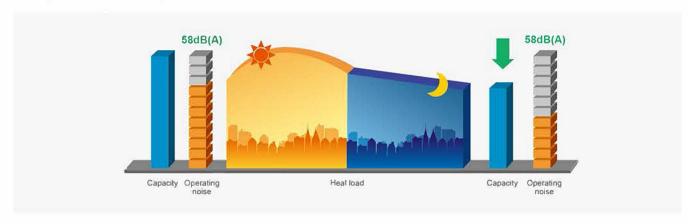
Max. IDU Connection: 80 sets

Comfortable Design for A Better Life

Intelligent Quiet Function at Night

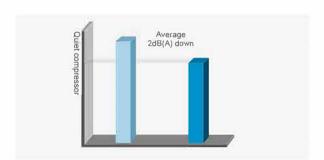
Quiet at night

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

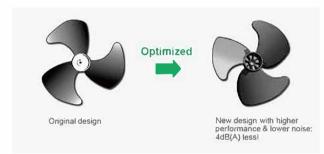


Low noise design

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

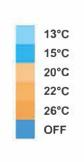


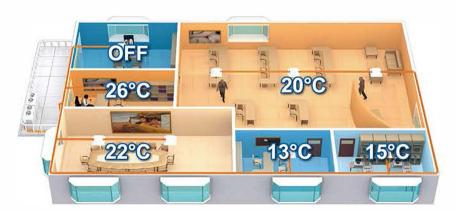
The optimized design of condensing fan blade reduces the air flow turbulence among blades, so that the noise is lower.



Individual Control for More Energy Saving

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





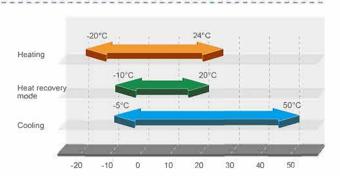
Wide Operation Range

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

Note:

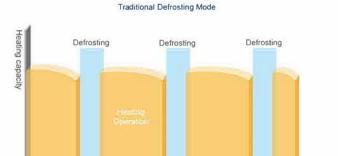
If the required capacity of indoor units is 50% higher than outdoor unit, cooling range may be lowerto -15°C.

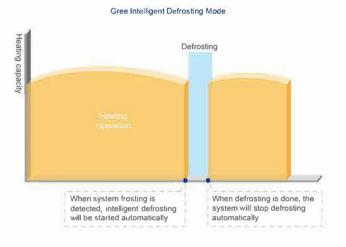
If the required capacity of indoor units is 50% higher than outdoor unit, cooling range may be up to -5°C



Comfortable Heating

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





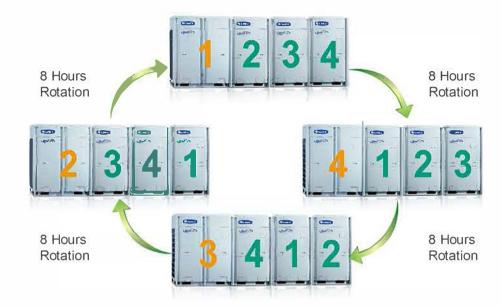


Excellent Performance Ensured by Advanced Technologyn

Modules Rotation Operating to Maximize Lifespan

Modules 8h rotation operating

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



Excellent Emergency Operation Function to Ensure Reliable Operation

Emergency Function

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

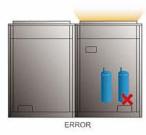


All the compressors in each single module are DC Inverter based, when one compressor has error, others will perform the emergency operation.

• Emergency Operation of Fan

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

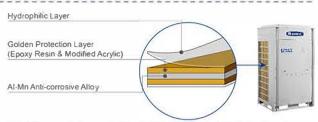






Highly Anticorrosive Golden Fins

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

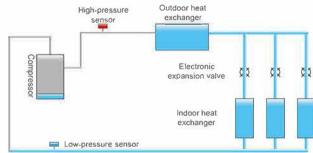


Note: Satt-spary testing result is from GREE materials chemistry testing laboratory

▼ Oil Return Control Technology

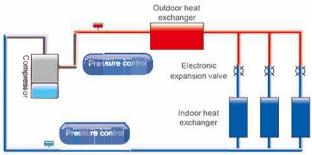
New Oil Return Control

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

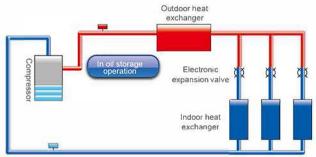


Oil storage status before oil return

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



Oil return operation



Oil storage operation



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 availiable to the front and back, left and right, and bottom.

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



Easy Maintenance

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



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





6MV5 HR Line Up

HR Line up

HP	Model	Product Outlook
8HP	GMV-Q224WM/B-X	200
10HP	GMV-Q280WM/B-X	
12HP	GMV-Q335WM/B-X	
14HP	GMV-Q400WM/B-X	(MAY)
16HP	GMV-Q450WM/BX	

Model	Product Outlook
NCHS1B	
NCHS4B	1000
NCHS8B	15000

Specifications and Parameters 50/60 Hz

	Model		GMV-Q224WM/B-X	GMV-Q280WM/B-X	GMV-Q335WM/B-X	GMV-Q400WM/B-X	GMV-Q450WM/E
Capacity range	9	HP	8	10	12	14	16
Canacity	Cooling	kW	22.4	28	33.5	40	45
Capacity	Heating	kW	25	31.5	37.5	45	50
EER		kW/kW	4.07	3.73	3.76	3.54	3.33
COP		kW/kW	4.17	3.89	3.68	3.85	3.62
IPLV	Cooling	kW/kW	1	1	1	1	X.
Power Supply		V/Ph/Hz		380	~415V-3Ph-50/60Hz		
Max. circuit/fus	se current	A	15.7/20	20.9/25	24.7/32	28.8/40	33.2/40
Power	Cooling	kW	5.5	7.5	8.9	11.3	13.5
comsumption	Heating	kW	6	8.1	10.2	11.7	13.8
Maximum drive	e IDU NO.	unit	13	16	19	23	26
Refrigerant Ch	arge volume	kg	6.2	7.1	8.6	10.2	10.5
Sound pressur	e level	dB(A)	60	61	63	63	63
Connecting	Liquid	mm	Φ9.	52		Φ12.7	
pipe	Gas	mm	Ф19.05	Ф22.2	Ф2	5.4	Ф28.6
pipe	Oil balance	mm		Ф19.05		Φ2	22.2
Dimension	Outline	mm	930°76	5*1605		1340°765°1605	
(M°D°H)	Package	mm	1010*84	0*1775		1420°840°1775	
Net weight/Gross weight		kg	225/235	225/235	285/300	360/375	360/375
Loading	40' GP	set	24	24	16	16	16
quantity	40' HQ	set	24	24	16	16	16

50 Hz

Model			NCHS1B	NCHS4B	NCHS8B
Max.IDU Branches		unit	1	4	8
No. of connectable IDU	of each branch	unit	8	8	8
fotal Connectable IDU		unit	8	32	64
Max. Capacity of each branch		kW/kW	14	14	14
Max. Capacity of connectable IDU		kW/kW	14	14 45	
Power supply		V/Ph/Hz		220-240V-1Ph-50Hz	
Power comsumption		W	20	30	30
Maximum drive IDU NO).	unit	1	4	8
Outdoor Unit	Liquid	mm	Φ9.52	Φ12.7	Ф15.9
Piping Connection	Suction	mm	Ф15.9	Φ22.2	Ф22.2
indoor Unit Piping Gas		mm	Ф19.05	Ф28.6	Ф28.6
Connection	Liquid	mm	Ф9.5	Φ9.5	Ф9.5
Comedion	Gas	mm	Ф15.9	Φ15.9	Ф15.9

Key Features of Indoor Units |

▼ High Static Pressure Duct Type Indoor Unit



• High static pressure design

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

Easy maintenance

The system has maintenance port for easy maintenance.

Convenient installation

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

Protection function

Anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection, auxiliary electric heating overheat protection.



Low Static Pressure Duct Type Indoor Unit



• Low static pressure, low noise

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

Safety design

With ceramic PTC electric heating, it features safe operation, high heat exchange efficiency, quick temperature rising, no oxygen consumption, constant temperature, etc.

Intelligent drainage device

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

Note: Please specify if you need this function,

Convenient installation

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

Protection function

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

▼ Slim Ducted Type Indoor Unit



Highly Efficient & Energy-saving

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

Slim & Small

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

• Wiring of Electric Control Box

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

Protection Functions

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

Ultra-quiet

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

Fast & Strong

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

• Flexible Installation

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

CAN Bus Communication Technology

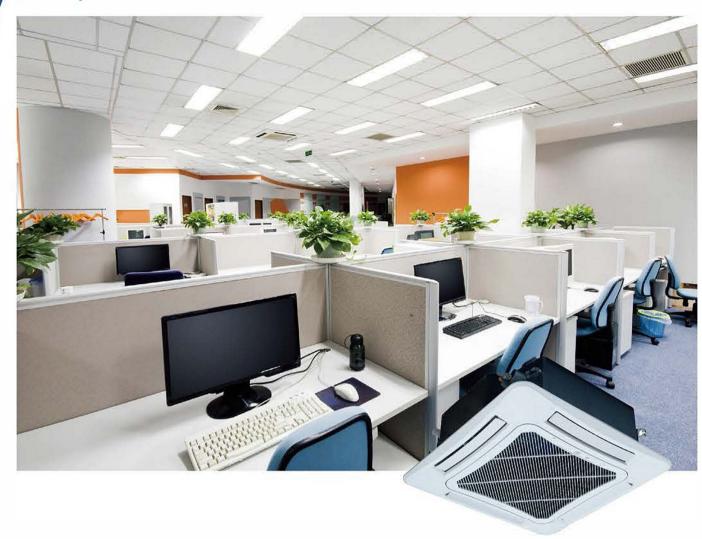
System response speed is faster and communication is more reliable. Auto addressing, non-polar communication, free wire matching

• Convenient Operation & Maintenance

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



▼ 4-way Cassette Indoor Unit



• Strong and balanced airflow

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

Ultra-low noise operation

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

Intelligent drainage device

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

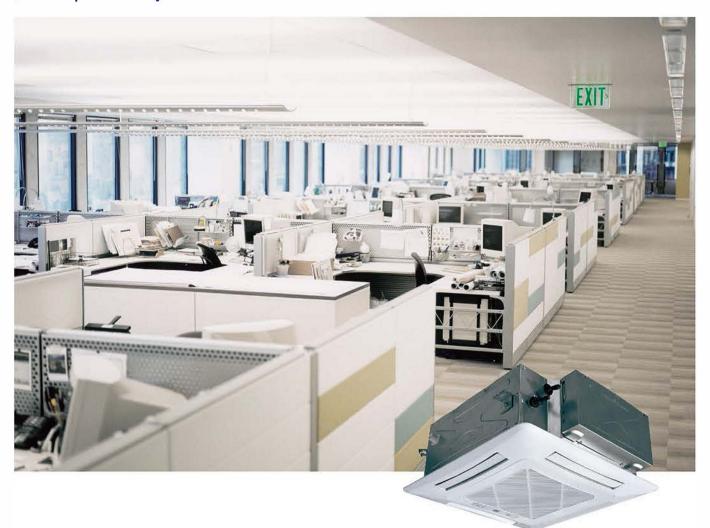
DC inverter motor

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

Protection function

Water overflow protection, anti-freezing protection, temperature sensor malfunction protection, fan motor overload protection, auxiliary electric heating overheat protection (This function is not included in pure heat pump unit).

Compact 4-way Cassette Indoor Unit



Compact Design for Easy Installation

Units maintain the uniform length and width with consistent ceiling opening and panel dimension, convenient for design and installation;

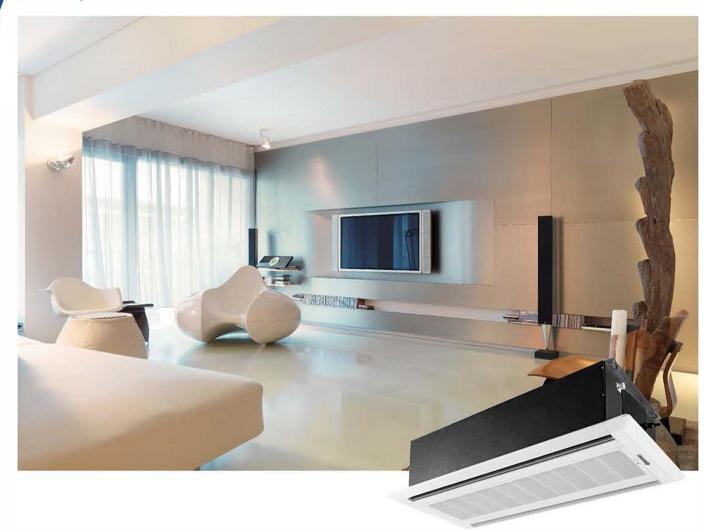
Ultra-low noise operation

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

• Intelligent drainage device

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

2-way Cassette Indoor Unit



• Beautiful Appearance

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

• Intelligent drainage device

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

• Two-way air flow design

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

Multiple protections

Anti-freezing protection, temperature malfunction protection, fan motor overload protection, auxiliary electric heating overheat protection and humidity sensor protection.

▼ 1-way Cassette Indoor Unit



• Small installation space

With 185mm ultrathin design, unit can be installed in the ceiling of 19cm deep.

Detachable grille and long life filter

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

• High drain pump lift

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

Protection function

Water overflow protection, anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection, auxiliary electric heating overheat protection(This function is not included in pure heat pump unit).

Wall-mounted Indoor Unit



Comfortable and balanced airflow, up&down air outlet

Up air outlet: In cooling, cool air blows out horizontally and then gradually drops.

Down air swing: In heating, warm air blows downward and then gradually climbs up.

• Triple defenders for better purification

Mildew-proof filter, electrostatic fibre and anti-biotic fibre adopted to remove dust, smell, bacteria and mildew.

• Cold air prevention design

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

Multiple protections

Anti-freezing protection, temperature sensor malfunction protection, fan motor overload protection, auxiliary electric heating overheat protection(This function is not included in pure heat pump unit).

Floor Ceiling Type Indoor Unit



• Hoisted or seated, flexible installation

Unit can be hoisted or seated. When seated, suspended ceiling is not needed.

Beautiful appearance

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

Protection function

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

Horizontal and vertical air swing

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



Console Indoor Unit



Multiple fan speed

The fan can operate in multiple speed 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.

• High drain pump lift

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

Protection function

Water overflow protection, anti-freezing protection, fan motor overload protection, temperature sensor malfunction protection, auxiliary electric heating overheat protection(This function is not included in pure heat pump unit).

Floor Standing Indoor Unit



Wide Application

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

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

Fresh Air Processing Indoor Unit

Airflow volume: 1200~6000m3/h

Applicable range: Residential houses, villas,





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 and precisely.
- DC inverter technology adopted, constant humidity is enabled with less power consumption.
- Integrated system control with Gree GMV Multi VRF System.



Air conditioning and fresh air, two in one

Less investment

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

Less operation cost

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

• Less installation space

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







7 1.13 Air Handler

Highly Flexible Installation

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

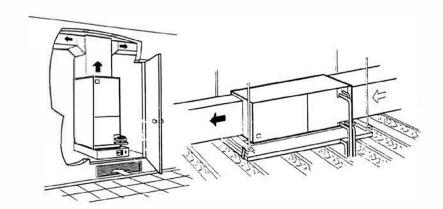
Cold Air Prevention Design

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

Long life and Washable Filter

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







Indoor Units Lineup

▼ Specifications of Indoor Units

Type of indoor unit	Specification	22	25	28	32	36	40	45	50	56	63	71	72	80	90	100	112	125	140	160	224	280	450
High Static Pressure Duct Type Unit										•	•	•		•	•	•	•	•	•	•	•	•	
Low Static Pressure Duct Type Unit		•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•				
Slim Ducted Type Indoor Unit		•	•	•	•	•	•	•	•	•	•		•										
4-way Cassette Unit				•		•		•	•	•	•	•		•	•	•	•	•	•	•			
Compact 4-way Cassette Indoor Unit		•		•		•		•	•	•													
2-way Cassette Indoor Unit				•		•		•	•	•	•	•											
1-way Cassette Unit		•		•		•		•	•														
Wall-mounted Type Unit	1 -	•		•		•		•	•	•	•	•											
Floor Ceiling Type Indoor Unit	* inex			•		•			•		•	•			•		•	•	•				
Console Indoor Unit	SHARE	•		•		•		•	•														
Floor Standing Type Indoor Unit	-															•			•				
Fresh Air Processing Indoor Unit																			•		•	•	•
Airhandler													•		•	•	•		•	•			

High Static Pressure Duct Type Indoor Unit

192

(WxDxH)

Package mm

40° GP set

	Model		GMV-ND56PHS/A-T	GMV-ND63PHS/A-T	GMV-ND71PHS/A-T	GMV-ND80PHS/A-T	GMV-ND90PHS/A-T
0 :	Cooling	kW	5.6	6.3	7.1	8.0	9.0
Capacity	Heating	kW	6.3	7.1	8.0	9.0	10.0
Power supply		V/Ph/Hz		220~240/1/50 &	208~230/1/60		
Power consum	ption	W	120	120	130	130	200
A inflammatures	ALLON ALL V	m³/h	1000/800/600	1000/800/600	1100/900/700	1100/900/700	1700/1450/1100
Airflow volume	(H/W/L)	CFM	590/471/355	590/471/355	650/530/410	650/530/410	1000/853/650
	Cooling	A	0.6	0.6	0.6	0.6	1.0
Rated Current ²	Heating	A	0.6	0.6	0.6	0.6	1.0
	Water Heating	A	- 1	1	1)	/
ESP		Pa		70/0~	100		
Sound pressur	e level(H/M/L)	dB(A)	44/40/36	44/40/36	45/41/37	45/41/37	46//44/42
Connecting pipe	e Liquid	mm	Ф9.52	Ф9.52	Ф9.52	Ф9.52	Ф9.52
diameter	Gas	mm	Ф15.9	Ф15.9	Ф15.9	Ф15.9	Ф15.9
Drain pipe	External dia.	mm	Ф25	Ф25	Ф25	Ф25	Ф25
Diairi pipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5

1271x558x268

1348x597x283

192

216

35/40 192

216

192

216

	Model		GMV-ND100PHS/A-T	GMV-ND112PHS/A-T	GMV-ND125PHS/A-T	GMV-ND140PHS/A-T	GMV-ND160PHS/A-T	GMV-ND224PHS/A-T	GMV-ND280PH/A
Companib.	Cooling	kW	10.0	11.2	12.5	14.0	16.00	22.4	28.0
Capacity	Heating	kW	11.2	12.5	14.0	16.0	18.00	25.0	31.0
Power supply		V/Ph/Hz		220~240/1/50	\$ 208~230/1/60	220~240/1/50/60	220~240/1/50 & 208~230/1/60		
ower consump	otion	W	200	200	220	220	560	800	900
Siefless selves e	LIZA AZI N	m³/h	1700/1450/1100	1700/1450/1100	2000/1550/1200	2000/1700/1200	3100	4000	4400
Airflow volume(HINVL)	CFM	1000/853/650	1000/853/650	1175/912/706	1175/912/706	1824	2355	2590
	Cooling	Α	1.0	1.0	1.0	1.0	4	4.1	4.6
Rated Current ²	Heating	Α	1.0	1.0	1.0	1.0	4	4.1	4.6
	Water Heating	Α	1	1	1	1	1	1	I:
SP		Pa		70/0	~100		50	150/50~200	150/50~200
Sound pressure	e level(H/M/L)	dB(A)	46//44/42	46//44/42	48/45/42	48/46/44	55.0	54.0	55.0
Connecting pipe	Liquid	mm	Ф9.52	Ф9.52	Ф9.52	Ф9.52	φ9,52		Φ9.52
diameter	Gas	mm	Ф15.9	Ф15.9	Ф15.9	Ф15.9	φ19		Ф22.2
Orain pipe	External dia.	mm	Ф25	Ф25	Ф25	Ф25	Ф30	Ф30	Ф30
orani pipe	Thickness	mm	2.5	2.5	2.5	2.5	1.5	1.5	1.5
Dimension	Outline	mm		1229x7	75x290		1497x799x389	1483×791×385	1686x870x450
WxDxH)	Package	mm		1338x8	77x305		1578x883x400	1758×883×470	1788x988x580
let weight/Gros	ss weight	kg	47/54	47/54	47/54	47/54	79/103	82/104	105/140
oading	40' GP	set	128	128	128	128	75	65	52
oading	40' HQ	set	128	128	128	128	75	65	52

Low Static Pressure Duct Type Indoor Unit 50/60 Hz

	Model		GMV-ND22PLS/A-T	GMV-ND25PLS/A-T	GMV-ND28PLS/A-T	GMV-ND32PLS/A-T	GMV-ND36PLS/A-T
Cit	Cooling	kW	2.2	2.5	2.8	3.2	3.6
Capacity	Heating	kW	2.5	2.8	3.6	3.6	4.0
Power supply		V/Ph/Hz			220~240/1/50 & 208~230/1/60		
Power consum	ption	W	35	35	35	43	43
A inflant, male man	(STANIA)	m³/h	450/350/250	450/350/250	450/350/250	550/450/350	550/450/350
Airflow volume(H/M/L)		CFM	265/206/147	265/206/147	265/206/147	325/265/206	325/265/206
	Cooling	A	0.2	0.2	0.2	0.2	0.2
Rated Current ²	Heating	A	0.2	0.2	0.2	0.2	0.2
	Water Heating	Α	1	1	1	7	Ĵ.
ESP Pa		Pa			15/0~30		
Sound pressur	e level(H/M/L)	dB(A)	31/28/25	31/28/25	31/28/25	32/30/27	32/30/27
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
diameter	Gas	mm	Ф9.52	Ф9.52	Ф9.52	Ф12.7	Ф12.7
Drain pipe	External dia_	mm	25	25	25	25	25
Diam pipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm			700 x 615 x 200		
(WxDxH)	Package	mm			893x743x305		
Net weight/Gro	ss weight	kg	22/27	22/27	22/27	22/28	22/28
Loading	40° GP	set	192	192	192	192	192
Loading	40° HQ	set	192	192	192	192	192



1229x775x290

1338x877x305

47/54

128

128

	Model		GMV-ND40PLS/A-T	GMV-ND45PLS/A-T	GMV-ND50PLS/A-T	GMV-ND56PLS/A-T	GMV-ND63PLS/A-7
0-11-12	Cooling	kW	4.0	4.5	5.0	5.6	6.3
Capacity	Heating	kW	4.5	5.0	5.6	6.3	7.1
Power supply		V/Ph/Hz			220~240/1/50 & 208~230/1/60		
Power consum	ption	W	52	52	52	99	99
A in flavour alves a	11/84/15	m³/h	700/600/450	700/600/450	700/600/450	1000/800/600	1000/800/600
Airflow volume	H/IVI/L)	CFM	410/355/265	410/355/265	410/355/265	590/471/353	590/471/353
	Cooling	A	0.3	0.3	0.3	0.5	0.5
Rated Current ²	Heating	Α	0.3	0.3	0.3	0.5	0.5
	WaterHeating	A	y	1	1	1	1
ESP Pa		Pa			15/0~30		
Sound pressure	e level(H/M/L)	dB(A)	33/31/28	33/31/28	33/31/28	35/33/30	35/33/30
Connecting pipe	Liquid	mm	Ф6.35	Φ6.35	Φ6.35	Ф9.52	Ф9.52
diameter	Gas	mm	Ф12.7	Ф12.7	Ф12.7	Ф15.9	Ф15.9
Drainpipe	External dia.	mm	25	25	25	25	25
Ciampipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm		900 x 615 x 200		1100 x	615 x 200
(WxDxH) Package		mm		1123x743x305		1323x	743x305
Net weight/Gro	ss weight	kg	27/33	27/33	27/33	31/38	40/47
Loading	40" GP	set	192	192	192	162	96
Loading	40° HQ	set	192	192	192	162	96

	Model		GMV-ND71PLS/A-T	GMV-ND80PLS/A-T	GMV-ND90PLS/A-T	GMV-ND100PLS/A-T	GMV-ND112PLS/A-T	GMV-ND125PLS/A-T	GMV-ND140PLS/A
	Cooling	kW	7.1	8.0	9.0	10.0	11.2	12.5	14.0
Capacity	Heating	kW	8.0	9.0	10.0	11.2	12.5	14.0	16.0
Power supply		V/Ph/Hz			220-	-240/1/50 & 208~230/	1/60		
Power consum	otion	W	105	140	209	209	209	230	230
A inflammation of	11/64/15	m³//h	1000/800/600	1100/1000/800	1500/1250/950	1500/1350/1000	1700/1500/1100	2000/1500/1150	2000/1500/1150
Airflow volume(H/M/L)	CFM	590/471/355	650/590/471	885/736/599	885/795/590	1000/885/650	1175/885/677	1175/885/677
	Cooling	Α	0.5	0.7	10	10	10	1.1	1,1
Rated Current ²	Heating	A	0.5	0.7	1.0	1.0	1.0	1.1	1.1
	Water Heating	Α	7	V.	1	1	1	1	1
ESP		Pa				30/0~50			
Sound pressure	e level(H/M/L)	dB(A)	35/33/30	36/34/31	40/36/32	40/36/32	40/36/32	42/40/37	42/40/37
Connecting pipe	Liquid	mm	Ф9.52	Ф9.52	Ф9.52	Ф9.52	Ф9.52	Ф9.52	Φ9.52
diameter	Gas	mm	Ф15.9	Ф15.9	Ф15.9	Ф15.9	Ф15.9	Ф15.9	Ф15.9
Drain pipe	External dia	mm	25	25	25	25	25	25	25
глант ріре	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm	1200 x 6	55 x 260			1340 x 6	55 x 260	
(WxDxH)	Package	mm	1448x8	58x315			1591x86	31x330	
Net weight/Gro	ss weight	kg	40/47	40/47	46/55	46/55	46/55	47/56	47/56
Loading	40' GP	set	96	96	78	78	78	78	78
Loading	40' HQ	set	96	96	78	78	78	78	78

Slim Ducted Type Indoor Unit 50/60 Hz

	Model		GMV-ND22PL/B-T*	GMV-ND25PL/B-T*	GMV-ND28PL/B-T*	GMV-ND32PL/B-T*	GMV-ND36PL/B-T
0	Cooling	kW	2.2	2.5	2.8	3.2	3.6
Capacity	Heating	kW	2.5	2.8	3.2	3.6	4.0
Power supply		V/Ph/Hz			220~240/1/50 & 208~230/1/60)	
Power consum	otion	W	25	25	25	30	30
A := 0 =	1.1/0.4/1.5	m³/h	450/400/320	450/400/320	450/400/320	550/450/340	550/450/340
Airflow volume(H/M/L)		CFM	265/235/188	265/235/188	265/235/188	324/265/200	324/265/200
	Cooling	A	0.2	0.2	0.2	0.3	0.3
Rated Current ²	Heating	Α	0.2	0.2	0.2	0.3	0.3
	Water Heating	Α	1)	y .	1
ESP		Pa			0/15		
Sound pressure	e level(H/M/L)	dB(A)	30/28/22	30/28/22	30/28/22	31/29/25	31/29/25
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Ф6.35	Φ6.35	Φ6.35
diameter	Gas	mm	Ф9.52	Ф9.52	Ф9.52	Ф9.52	Ф12.7
Drain pipe	External dia.	mm	25	25	25	25	25
Drain pipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm			710x450x200		
(WxDxH)	Package	mm			1003x551x285		
Net weight/Gro	ss weight	kg	18.5/22	18.5/22	18.5/22	19.5/23	19.5/23
Loading	40' GP	set	352	352	352	352	352
Loading	40 HQ	et	352	352	352	352	352

	Model		GMV-ND40PL/B-T*	GMV-ND45PL/B-T*	GMV-ND50PL/B-T*	GMV-ND56PL/B-T*	GMV-ND63PL/B-T*	GMV-ND72PL/B-
Casasitu	Cooling	kW	4.0	4.5	5.0	5.6	6.3	7.2
Capacity	Heating	kW	4.5	5.0	5.6	6.3	7.0	8.0
Power supply	wer supply V/				220~240/1/50 8	3 208~230/1/60		
ower consum	otion	W	35	35	35	45	50	45
Callana at a san d	11000	m³/h	750/660/540	750/660/540	750/660/540	850/700/610	850/700/610	1100/800/640
Airflow volume(H/M/L)	CFM	441/388/318	441/388/318	441/388/318	500/412/359	500/412/359	647/471/377
	Cooling	Α	0.3	0.3	0.3	0.3	0.3	0.5
Rated Current ²	Heating	Α	0.3	0.3	0.3	0.3	0.3	0.5
	Water Heating	Α	1	1	1	1	- 1	1
SP		Pa			0/	15		
Sound pressure	e level(H/M/L)	dB(A)	33/30/27	33/30/27	33/30/27	35/33/29	35/33/29	37/34/30
Connecting pipe	Liquid	mm	Ф6.35	Ф6.35	Ф6.35	Ф9.52	Ф9 52	Φ9.52
liameter	Gas	mm	Ф12.7	Ф12.7	Ф12.7	Ф15.9	Ф15.9	Φ15.9
Orain pipe	External dia	mm	25	25	25	25	25	25
oralii pipe	Thickness	mm	2,5	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm		1010x4	50x200		1010x450x200	1310x450x200
WxDxH)	Package	mm		1303x5	51x285		1303x551x285	1603x551x285
Net weight/Gro	ss weight	kg	23.5/28	23.5/28	23.5/28	24.5/29	2 4 5/29	30.5/36
oading	40' GP	set	288	288	288	288	288	224
Loaumy	40' HQ	set	288	288	288	288	288	224

4-way Cassette Indoor Unit

	Mo	odel		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
2		Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3	7.1
Capacity		Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1	8.0
ower supply		V/Ph/Hz			220~24	0/1/50 & 208~230/1/	60			
Power cons	umption		W	48	48	48	50	59	59	68
A in Elementer	/11/A4/3 V		m³/h	750/650/550	750/650/550	750/650/550	830/650/550	1000/900/750	1000/900/750	1180/950/850
Airflow volu	me(H/M/L)		CFM	440/383/325	440/383/325	440/383/325	490/383/325	590/530/440	590/530/440	695/559/550
		Cooling	Α	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Rated Curre	ent ²	Heating	Α	0.2	0.2	0.2	0.2	0.3	0.3	0.3
		Water Heating	Α	1	1	1	1	1	/	1
Sound pres	sure level(H/M	/L)	dB(A)	36/34/31	36/34/31	36/34/31	36/34/31	37/35/32	37/35/32	38/36/33
Connecting	pipe	Liquid	mm	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Φ9.52	Φ9.52	Φ9.52
liameter		Gas	mm	Ф9.52	Ф12.7	Ф12.7	Ф12.7	Ф15.9	Ф15.9	Ф15.9
Orain pipe		External dia.	mm	25	25	25	25	25	25	25
Diain pipe		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	Dimension	Outline	mm	840x840x190	840x840x190	840x840x190	840x840x190	840x840x240	840x840x240	840x840x240
Main Body	(WxDxH)	Package	mm	963x963x272	963x963x272	963x963x272	963x963x272	963x963x325	963x963x325	963x963x325
	Net weight/G	cross weight	kg	22.5/29.5	22.5/29.5	22.5/29.5	22.5/29.5	26.5/34.5	26.5/34.5	26.5/34.5
	Dimension	Outline	mm	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65
Panel	(WxDxH)	Package	mm	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133
	Net weight/G	cross weight	kg	7/11	7/11	7/11	7/11	7/11	7/11	7/11
oading qua	antity	40'GP	set	167	167	167	167	140	140	140
Loading que	arracy	40°HQ	set	171	171	171	171	156	156	156

	М	odel		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
		Cooling	kW	8.0	9.0	10.0	11.2	125	14.0	16,0
Capacity		Heating	kW	9.0	10.0	11.2	12.5	14.0	16.0	17.5
ower supp	oly		V/Ph/Hz			220~24	0/1/50 & 208-230/1/	60		
ower cons	sumption		W	68	98	98	110	110	110	130
	411040		m³/h	1180/950/850	1500/1350/1100	1500/1350/1100	1700/1400/1100	1860/1500/1150	1860/1500/1150	2100/1700/1400
liflow volu	me(H/M/L)		CFM	695/559/550	880/795/650	880/795/650	1000/824/650	1095/880/677	1095/880/677	1235/1000/824
		Cooling	Α	0.3	0.4	0.4	0.5	0.5	0.5	0.6
Rated Curre	ent ²	Heating	Α	0.3	0.4	0.4	0.5	0.5	0.5	0.6
		Water Heating	Α	1	1	1	1	1	1	1
Sound pres	sure level(H/M	/L)	dB(A)	38/36/33	40/37/35	40/37/35	41/38/36	43/41/38	43/41/38	47/44/42
Connecting	pipe	Liquid	mm	Ф9.52	Ф9.52	Ф9.52	Ф9.52	Ф9.52	Φ9.52	Φ9.52
lameter		Gas	mm	Ф15.9	Ф15.9	Ф15.9	Ф15.9	Ф15.9	Ф15.9	Ф19.05
Verin elen		External dia.	mm	25	25	25	25	25	25	25
Drain pipe		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	Dimension	Outline	mm	840x840x240	840x840x320	840x840x320	840x840x320	840x840x320	840x840x320	910×910×293
Main Body	(WxDxH)	Package	mm	963x963x325	963x963x409	963x963x409	963x963x409	963x963x409	963x963x409	1023×993×375
	Net weight/0	Gross weight	kg	26.5/34.5	32.5/40.0	32.5/40.0	32.5/40.0	32.5/40.0	32.5/40.0	46.5/56.5
	Dimension	Outline	mm	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	950x950x65	1040x1040x65
anel	(WxDxH)	Package	mm	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1033x1038x133	1137x1137x140
	Net weight/G	ross weight	kg	7/11	7/11	7/11	7/11	7/11	7/11	7.5/11.5
oading gu	antitu	40'GP	set	140	104	104	104	104	104	144
.oaumg qu	ariuty	40°HQ	set	156	119	119	119	119	119	144



Note * * This series is without water pump.

Compact 4-way Cassette Indoor Unit 50/60 Hz

	M	odel		GMV-ND22T/B-T	GMV-ND28T/B-T	GMV-ND86T/B-T	GMV-ND45T/B-T	GMV-ND50T/B-T	GMV-ND56T/B-T
		Cooling	kW	2.2	2.8	3.6	4.5	5	5.6
Capacity		Heating	kW	2.5	3.2	4	5	5.6	6.3
Power supp	oly		V/Ph/Hz		-	220~240/1/50 8	3 208~230/1/60		
Power cons	sumption		W	35	35	35	45	45	45
AT-H			m³/h	500/450/400	500/450/400	700/600/480	700/600/480	700/600/480	700/600/480
Airflow volu	me(H/M/L)		CFM	295/265/235	295/265/235	410/355/283	410/355/283	410/355/283	410/355/283
		Cooling	Α	0.4	0.4	0.4	0.5	0.5	0.5
Rated Curre	ent ²	Heating	Α	0.4	0.4	0.4	0.5	0,5	0.5
		Water Heating	Α	V V	1	I	1	1	7
Sound pres	sure leve!(H/M	(L)	dB(A)	46/-/-	46/-/-	46/-/-	47/-/-	47/-/-	47/-/-
Connecting	pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Ф9.52
diameter		Gas	mm	Φ9.52	Ф9.52	Ф12.7	Φ12.7	Φ12.7	Φ15.9
		External dia.	mm	25	25	25	25	25	25
Drain pipe		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
	Dimension	Outline	mm	596x596x240	596x596x240	596x596x240	596x596x240	596x596x240	596x596x240
Main Body	(WxDxH)	Package	mm	733x733x300	733x733x300	733x733x300	733x733x300	733x733x300	733x733x300
	Net weight/G	cross weight	kg	20,5/25.5	20.5/25.5	20.5/25,5	20.5/25.5	20.5/25.5	20.5/25.5
	Dimension	Outline	mm	650x650x50	650x650x50	650x650x50	650x650x50	650x650x50	650x650x50
Panel	(WxDxH)	Package	mm	763x763x105	763x763x105	763x763x105	763x763x105	763x763x105	763x763x105
	Net weight/C	cross weight	kg	3.5/5.0	3.5/5.0	3.5/5.0	3.5/5.0	3.5/5.0	3.5/5.0
Loading qua	antity	40'GP	set	267	267	267	267	267	267
Loading que	artity	40'HQ	set	288	288	288	288	288	288

2-way Cassette Indoor Unit 50/60 Hz

	M	odel		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
		Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3	7.1
Capacity		Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1	8.0
ower supp	ly		V/Ph/Hz			220~2	40/1/50 & 208~230/	1/60		-
Power cons	umption		W	55.0	55.0	55.0	55.0	103.0	103.0	103.0
A 1 40 - 1 1 1 1 1 1 1 1			m³/h	830/600/530	830/600/530	830/600/530	830/600/530	1100/820/760	1100/820/760	1100/820/760
Airriow Volu	me(H/M/L)		CFM	490/355/312	490/355/312	490/355/312	490/355/312	650/483/647	650/483/647	650/483/647
		Cooling	Α	0.3	0.3	0.3	0.3	0.7	0.7	0.7
Rated Curre	nt ²	Heating	Α	0.3	0.3	0.3	0.3	0.7	0.7	0.7
		Water Heating	Α	F _	1	1	1	1	1	1
Sound pres	sure level(H/M/	/L)	dB(A)	35/33/31	35/33/31	35/33/31	35/33/31	39/37/35	39/37/35	39/37/35
Connecting	pipe	Liquid	mm	Φ6.35	Φ6.35	Ф6.35	Ф6.35	Φ9.52	Φ9.52	Φ9,52
diameter		Gas	mm	Φ9 52	Ф12.7	Ф12.7	Ф12.7	Ф15.9	Ф15.9	Ф15.9
		External dia.	mm	25	25	25	25	25	25	25
Drainpipe		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	Dimension	Outline	mm	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315
Main Body	(WxDxH)	Package	mm	1520x655x415	1520x655x4 15	1520x655x415	1520x655x415	1520x655x4 15	1520x655x415	1520x655x415
	Net weight/G	Gross weight	kg	40.5/52.5	40.5/52.5	40.5/52.5	40.5/52.5	43.0/55.0	43.0/55.0	43.0/55.0
	Dimension	Outline	mm	1443x630x33	1443x630x33	1443x630x33	1443x630x33	1443x630x33	1443x630x33	1443x630x33
Panel	(WxDxH)	Package	mm	1575x765x105	1575x765x105	1575x765x105	1575x765x105	1575x765x105	1575x765x105	1575x765x105
	Net weight/0	Gross weight	kg	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7 0/11.0	7.0/11.0	7.0/11.0
oading qu	antity	40'GP	set	101	101	101	101	101	101	101
Louding qui	uiiiiy	40'HQ	set	115	115	115	115	115	115	115

1-way Cassette Indoor Unit

	M	odel		GMV-ND22TD/A-T	GMV-ND28TD/A-T	GMV-ND36TD/A-T	GMV-ND45TD/A-T	GMV-ND50TD/A-
0		Cooling	kW	2.2	2.8	3.6	4.5	5.0
Capacity		Heating	kW	2.5	3.2	4.0	5.0	5.6
Power supply			V/Ph/Hz		2	20~240/1/50 & 208~230/1/6	0	
Power cons	umption		W	30	30	30	45	45
A1-0			m³/h	600/500/450	600/500/450	600/500/450	830/600/500	830/600/500
Airflow volu	me(H/M/L)		CFM	355/295/265	355/295/265	355/295/265	490/355/295	490/355/295
		Cooling	A	0.2	0.2	0.2	0,3	0.3
Rated Curre	ent ²	Heating	A	0.2	0.2	0.2	0.3	0.3
		Water Heating	A	1	1	. 1	1	7
Sound pres	sure level(H/M/	L)	dB(A)	36/32/28	36/32/28	36/32/28	40/35/30	40/35/30
Connecting	pipe	Liquid	mm	Φ6.35	Φ6.35	Ф6.35	Ф6.35	Ф6.35
diameter		Gas	mm	Φ9.52	Ф12.7	Ф12.7	Φ12.7	Φ12.7
Orain pipe		External dia.	mm	25	25	25	25	25
Drain pipe		Thickness	mm	2.5	2.5	2.5	2.5	2.5
	Dimension	Outline	mm	987x385x178	987x385x178	987x385x178	987x385x178	987x385x178
Main Body	(WxDxH)	Package	mm	1307x501x310	1307x501x310	1307x501x310	1307x501x310	1307x501x310
	Net weight/G	Bross weight	kg	20.0/27.0	20.0/27.0	20.0/27.0	21.0/28.5	21.0/28.5
	Dimension	Outline	mm	1200x460x55	1200x460x55	1200x460x55	1200x460x55	1200x460x55
Panel	(WxDxH)	Package	mm	1265x536x118	1285x536x118	1265x536x118	1265x536x118	1265x536x118
	Net weight/G	cross weight	kg	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0
Loading qui	antity	40'GP	set	138	138	138	138	138
Louding qui	unny	40'HQ	set	138	138	138	138	138

Wall-mounted Type Indoor Unit

	Model		GMV- N22G/A3A-K *	GMV- N28G/A3A-K *	GMV- N36G/A3A-K*	GMV- N45G/A3A-K *	GMV- N50G/A3A-K *	GMV- N56G/A3A-K*	GMV- N63G/A3A-K*	GMV- N71G/A3A-K *
	Cooling	kW	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1
Capacity	Heating	kW	2.5	3.2	4.0	5.0	5.8	6.3	7.0	7.5
Power supply		V/Ph/Hz				220~2	40/1/50			
Power consump	otion	W	50	50	60	60	60	70	70	70
		m³/h	500/420/350	500/420/350	630/550/480	630/550/480	630/550/480	750/600/500	750/600/500	750/600/500
Airflow volume(H/M/L)	CFM	294/247/206	294/247/206	371/324/282	371/324/282	371/324/282	441/353/294	441/353/294	441/353/294
	Cooling	Α	0.2	0.2	0.21	0.21	0.21	0.31	0.31	0.31
Rated Current ²	Heating	A	0.2	0.2	0.21	0.21	0.21	0.31	0.31	0.31
	Water Heating	Α	T.	X.	1	1	1	Ĭ.	1	/
Sound pressure	e level(H/M/L)	dB(A)	38/334/30	38/34/30	44/41/38	44/41/38	44/41/38	44/41/38	44/41/38	44/41/38
Connecting pipe	Liquid	mm	Ф6.35	Ф6.35	Ф6.35	Φ6.35	Ф6.35	Ф9.52	Φ9.52	Ф9.52
diameter	Gas	mm	Ф9.52	Ф9.52	Φ12.7	Ф12,7	Φ12.7	Φ15.9	Ф15.9	Φ15.9
Duoin nino	External dia.	mm	Ф20	Ф20	Ф20	Ф20	Φ20	Ф30	Ф30	Ф30
Drain pipe	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dimension	Outline	mm	843x18	30x275		940x200x298			1008x221x319	
(WxDxH)	Package	mm	970x25	55x355		1065x285x380			1128x395x313	
Net weight/Gros	ss weight	kg	10/12.5	10/12.5	12.5/15.5	12.5/15.5	12.5/15.5	15/18.5	15/18.5	15/18.5
labidies.	40' GP	set	702	702	557	557	557	441	441	441
Loading	40' HQ	set	819	819	624	624	624	503	503	503

60 Hz

	Model		GMV- N22G/A3A-D*	GMV- N28G/A3A-D*	GMV- N36G/A3A-D*	GMV- N45G/A3A-D*	GMV- N50G/A3A-D*	GMV- N56G/A3A-D*	GMV- N63G/A3A-D*	GMV- N71G/A3A-D
O	Cooling	kW	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1
Capacity	Heating	kW	2.5	3.2	4.0	5.0	5.8	6.3	7.0	7.5
Power supply		V/Ph/Hz				208~2	30/1/60			
Power consump	tion	W	50	50	60	60	60	70	70	70
Airflow volume()	an An A	m³/h	500/420/350	500/420/350	630/550/480	630/550/480	630/550/480	750/600/500	750/600/500	750/600/500
Allinow worther	OIVI/L)	CFM	294/247/206	294/247/206	371/324/28 2	371/324/282	371/324/282	441/353/294	441/353/294	44 1/353/294
	Cooling	Α	0.2	0.2	0.21	0.21	0.21	0.31	0.31	0.31
Rated Current2	Heating	Α	0.2	0.2	0.21	0.21	0.21	0.31	0.31	0.31
	Water Heating	A	1	1	1	1	1	1	1	1
Sound pressure	level(H/M/L)	dB(A)	38/ 34/30	38/34/30	44/41/38	44/41/38	44/41/38	44/41/38	44/41/38	44/41/38
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Ф6.35	Φ6.35	Φ6.35	Ф9.52	Φ9.52	Φ9.52
diameter	Gas	mm	Ф9.52	Ф9.52	Ф12.7	Ф12.7	Ф12.7	Φ15.9	Ф15.9	Ф15.9
Orain pipe	External dia:	mm	Ф20	Φ20	Φ20	Ф20	Ф20	Ф30	Ф30	Ф30
Stain pipe	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dimension	Outline	mm	843x18	0x275		940x200x298			1008x221x319	
WxDxH)	Package	mm	970x25	5x355		1065x285x380			1128x395x313	
Net weight/Gross	s weight	kg	10/12.5	10/12.5	12.5/15.5	12.5/15.5	12.5/15.5	15/18.5	15/18.5	15/18.5
oading	40' GP	set	702	702	557	557	557	441	441	441
Loading	40' HQ	set	819	819	624	624	624	503	503	503

^{*} This series is without water pump.

Floor Ceiling Type Indoor Unit 50/60 Hz

	Model		GMV- ND28ZD/A-T	GMV- ND36ZD/A-T	GMV- ND50ZD/A-T	GMV- ND63ZD/A-T	GMV- ND71ZD/A-T	GMV- ND90ZD/A-T	GMV- ND112ZD/A-T	GMV- ND125ZD/A-T	GMV- ND140ZD/A-T
	Cooling	kW	2.8	3.6	5.0	6.3	7.1	9.0	11.2	12.5	14.0
Capacity	Heating	kW	3.6	4.0	5.6	7.1	8.0	11.2	12.5	12.0	15.0
Power supply		V/Ph/Hz				220~240/1/50	0 & 208~230/1/6	0			
Power consump	otion	W	40	40	50	75	75	140	160	160	160
A - A	11/24/1	m³/h	650/580/500	650/580/500	950/850/700	1400/1150/1000	1400/1150/1000	1600/1400/1200	2000/1800/1450	2000/1800/1450	2000/1800/145
Airflow volume(H/IVUL)	CFM	380/341/294	380/341/294	560/500/410	825/677/590	825/677/590	940/824/706	1175/1059/853	1175/1059/853	1175/1059/853
	Cooling	Α	0.2	0.2	0.25	0.38	0.38	0.7	0.95	0.95	0.95
Rated Current ²	Heating	Α	0.2	0.2	0.25	0.38	0.38	0.7	0.95	0.95	0.95
	Water Heating	Α	1	1	1	1	1	1	1	1	γ.
Sound pressure	level(H/M/L)	dB(A)	36/34/32	36/34/32	42/38/33	44/42/39	44/42/39	50/47/43	51/47/42	52/49/45	52/49/45
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Ф9.52	Φ9.52	Φ9.52	Ф9.52	Ф9.52	Ф9.52
diameter	Gas	mm	Ф9.52	Ф12.7	Ф12.7	Ф15.9	Ф15.9	Φ15.9	Ф15.9	Φ15.9	Ф15.9
Drain pipe	External dia.	mm	Ф17	Φ17	Ф17	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17
Drain pipe	Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Dimension	Outline	mm		1220x700x225			1420x700x245			1700x700x245	
(WxDxH)	Package	mm		1343x823x315			1548x828x315			1828x828x345	
Net weight/Gros	ss weight	kg	40/49	40/49	40/49	50/58	50/58	50/58	60/68	60/68	60/68
Loading	40' GP	set	145	145	145	90	90	90	84	84	84
Luading	40' HQ	set	158	158	158	98	98	98	98	98	98



Console Indoor Unit 50/60 Hz

Package

40' GP

40 ' HQ

GMV-ND22C/A-T GMV-ND28C/A-T GMV-ND36C/A-T GMV-ND45C/A-T GMV-ND50C/A-T 2.8 3.6 4.5 5.0 Cooling kW 2.2 Capacity 2.5 3.2 4.0 5.0 5.5 Heating kW V/Ph/Hz 220-240/1/50 & 208-230/1/60 60 60 60 Power consumption m³/h 500-430/370/280 650-620/500/410 650-620/500/410 500-430/370/280 600-520/440/360 Airflow volume(H/M/L) CFM 383-365/294/241 383-365/294/241 294-253/217/164 294-253/217/164 353-306 /259/212 0.15 0.15 0.15 Cooling 0.15 0.15 Rated Current² Heating 0.15 0.15 0.15 0.15 0.15 Water Heating ESP Sound pressure level(H/M/L) dB(A) 38/33/26 38/33/26 40/37/32 46/41/35 46/41/35 Liquid mm Connecting pipe 6.35 6.35 6.35 6.35 6.35 Gas mm 9,52 9.52 9.52 12.7 12.7 External dia. mm 17.2 17.2 17.2 17.2 17.2 Drainpipe Thickness mm Dimension Outline 700/215/600 700/215/600 700/215/600 700/215/600 700/215/600

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433

Fresh Air Processing Indoor Unit

kg

set

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433

(WxDxH)

Net weight/Gross weight

	Model		GMV-NX140P/A(X1.2)-K*	GMV-NX224P/A(X2.0)-M *	GMV-NX280P/A(X2.5)-M*	GMV-NX280P/A(X3.0)-M *	GMV-NX450P/A(X4.0)-M
Canaditu	Cooling	kW	14.0	22.4	28.0	28.0	5.0
Capacity	Heating	kW	10.0	16.0	20.0	20.0	5.5
Power supply		V/Ph/Hz	220~240/1/50		380~415	/3/50	
Power consum	ption	W	360	740	760	1060	1240
Ai-flammat.	11000	m³/h	1200	2000	2500	3000	4000
Airflow volume	HIMIL)	CFM	705	1175	1470	1765	2355
	Cooling	Α	1.82	1.32	1.36	1.89	2.22
Rated Current ²	Heating	Α	1.82	1.32	1.36	1.89	2 22
	Water Heating	Α	1	1	1	1	χ.
ESP		Pa	150		200		-
Sound pressure	e level(H/M/L)	dB(A)	42	47	48	51	52
Connecting pipe	Liquid	mm	Ф9.52	Ф9.52	Ф9.52	Ф9.52	Ф12.7
diameter	Gas	mm	Ф15.9	Φ19.05	Ф22.2	Φ22.2	Ф28.6
Drainpipe	External dia.	mm	25	25	25	25	25
Diampipe	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension	Outline	mm	1463 x 756 x 300		1500 x 1000 x 500		1700 x 1100 x 650
(WxDxH)	Package	mm	1514x785x360		1840x1200x673		1890x1460x835
Net weight/Gro	ss weight	kg	63.5/71	130/182	134/188	134/188	208/266
Loading	40' GP	set	84.0	18.0	18.0	18.0	16.0
Loading	40' HQ	set	98.0	18.0	18.0	18.0	16.0

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

Air Handler

	Model		GMV-ND71A/A-T	GMV-ND90A/A-T	GMV-ND100A/A-T	GMV-ND112A/A-T	GMV-ND140A/A-T	GMV-ND160A/A-
0 1	Cooling	7.	7.03	8.79	10.26	12.02	13.48	17
Capacity	Heating	kW	6.74	8.79	9.96	11.58	13.19	16.12
Power supply		kW			208-23	30/1/60		
Power consum	ption	V/Ph/Hz	140	170	245	245	368	368
A :- Co	(1.1/8.4/1.5	W	1400	1660	1940	2210	2380	2800
Airflow volume	(H/M/L)	m3/h	825	980	1140	1300	1400	1650
	Cooling	CFM	1.52	1.35	2,00	2.00	2,50	4.60
Rated Current	Heating	Α	1.52	1.35	2.00	2.00	2.50	4.60
	Water Heating	Α	1	1	1	1	1	1
ESP		Α	25	37	37	37	50	50
Sound pressure	e level(H/M/L)	Pa	48	50	48	50	50	55
Connecting pipe	Liquid	dB(A)	φ9.52	φ9.52	φ9.52	φ9.52	φ9.52	φ12.7
diameter	Gas	mm	Φ15.9	φ19	φ19	φ22.2	φ22.2	φ28.5
Orainage Conne Outer Diameter×V		mm	φ19	φ19	φ19	φ19	φ19	φ19
Dimension	Outline	mm	460°540°1105	460°540°1105	540°540°1224	540°540°1224	630°540°1224	630*540*1224
WxDxH)	Package	mm	514*617*1155	514°617°1155	594°617°1274	594*617*1274	684*616*1280	684°618°1280
let weight/Gro	ss weight	kg	53/57	55. 5 /59	65/70	67/72	79/84	80/86
oading	40' GP	set	164	164	85	85	85	85
Loading	40' HQ	set	172	172	114	114	114	114

Floor Standing Type 50/60 Hz

	Model		GMV-ND100L/A-T	GMV-ND140L/A-T
Constitu	Cooling	kW	10	14
Capacity	Heating	kW	11	15
Power supply		V/P h/Hz	220-240/1/50 8	& 208-230/1/60
Power consum	ption	W	180	180
A :- 6:	/1 1/0 A/1 3	m³/h	1600/1500/1300	1700/1600/1400
Airflow volume	(H/W/L)	CFM	942/883/765	1000/942/824
	Cooling	A	1.5	1.5
Rated Current ²	Heating	A	1.5	1.5
	Water Heating	Α	1	1
ESP		Pa	0	0
Sound pressur	e level(H/M/L)	dB(A)	51/50/48	52/50/48
Connecting pip	Liquid	mm	9	9
diameter	Gas	mm	16	16
Drainpipe	External dia.	mm	31	31
Diampipe	Thickness	mm	4.5	4.5
Dimension	Outline	mm	1870x580x400	1870x580x400
(WxDxH)	Package	mm	2080x735x530	2080x735x530
Net weight/Gro	ss weight	kg	53/73	57/77
Loading	40' GP	set	67	67
Loading	40' HQ	set	67	67



Control System



Smart Model Selection Software and Debugging Software

Model Selection Software

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

Flexible Setting of Project Design Conditions

When setting up a new model selection project, the information of customer, designer, unit series and working conditions, etc. can be set as relevant parameters of model selection, and then sent to data report for checking during project design.



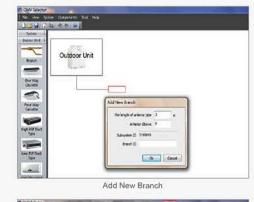


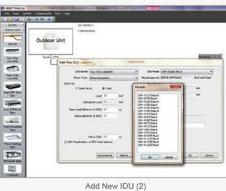


Confirmation

Accurate Recommendation of Indoor Unit and Outdoor Unit

When selecting indoor unit model with the software, you can use automatic recommendation way only by inputting the required air conditioning load and indoor unit series. Then the software will recommend the suitable indoor unit model automatically according to model selection logic. When selecting outdoor unit model, you can use automatic recommendation way directly to select the suitable outdoor unit model.





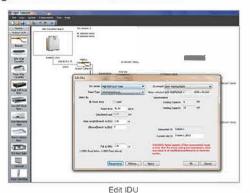


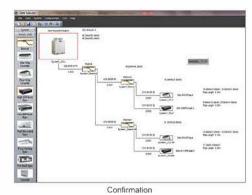




Free Modification of Selected Models

If you are not satisfied with the system recommended by the software, you can select or adjust indoor unit model through alternate selection function.

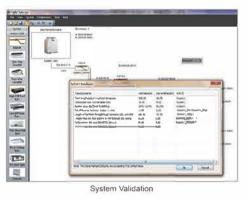




One-click Modification and System Validation

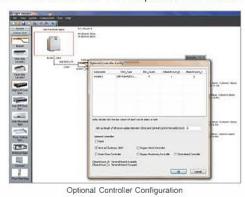
When reselection is needed due to major changes of indoor units, one-click recommendation function can be adopted to reselect all indoor units with simple operation; after finishing model selection, you can use one-click system validation function to check various parameters requirements of air conditioning system.

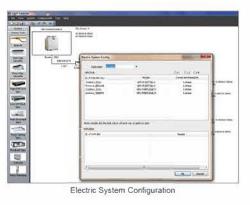




Optional Controller Configuration and Electric System Configuration

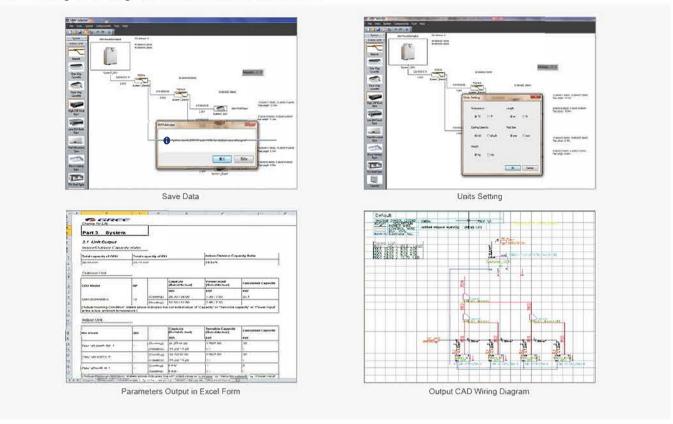
The software will offer controller model matched with the system. The user only needs to choose controller type and then the software will output the controller model into the report.





Save Model Selection Project, Output Data Report and System Wiring Diagram

After finishing system selection and various system configurations, the user can save model selection project freely for future reference. Then the user can output relevant parameters of selected project in an excel form and output system wiring CAD diagram for reference in installation.



Intelligent Debugging Software

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

Monitoring Functions

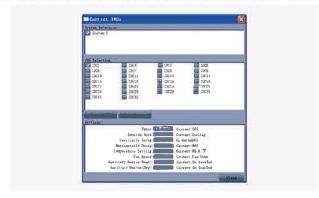
- Fully control the operation status of each device of the system;
- Hover the mouse over the parameter to display its remarks.
- The online devices will be displayed in a tree structure;
- Display the information of air conditioner in divided regions;
- Each display region can be moved or concealed;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



Control System

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.







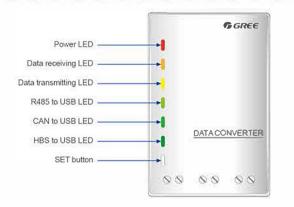
Step 1: Change Database Saving Path

USB Data Converter

Step 2: Database Save Setting

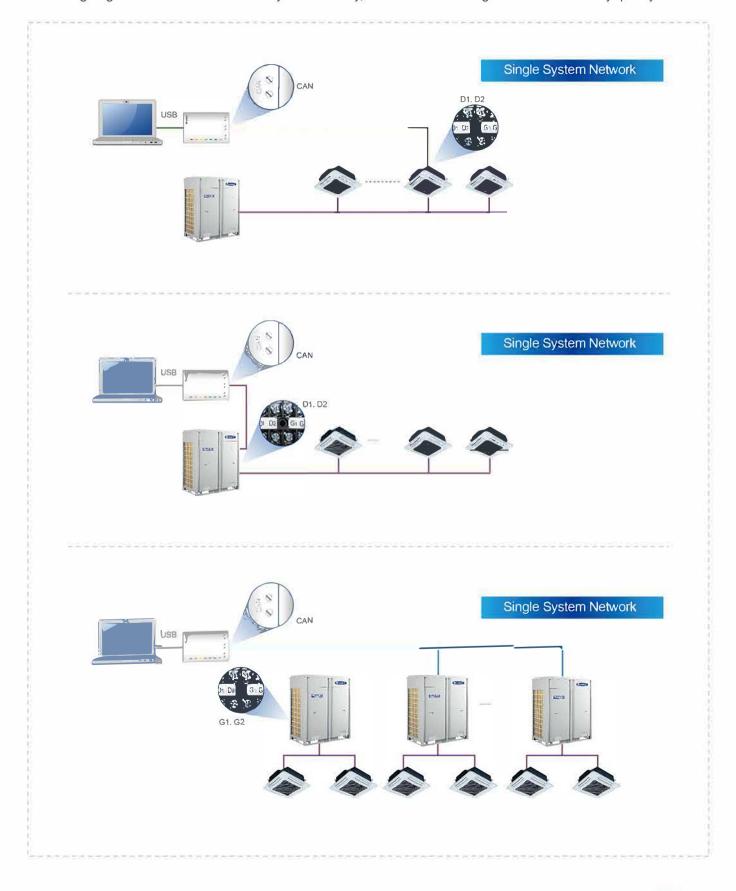
De Ble Stable Ble S.

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

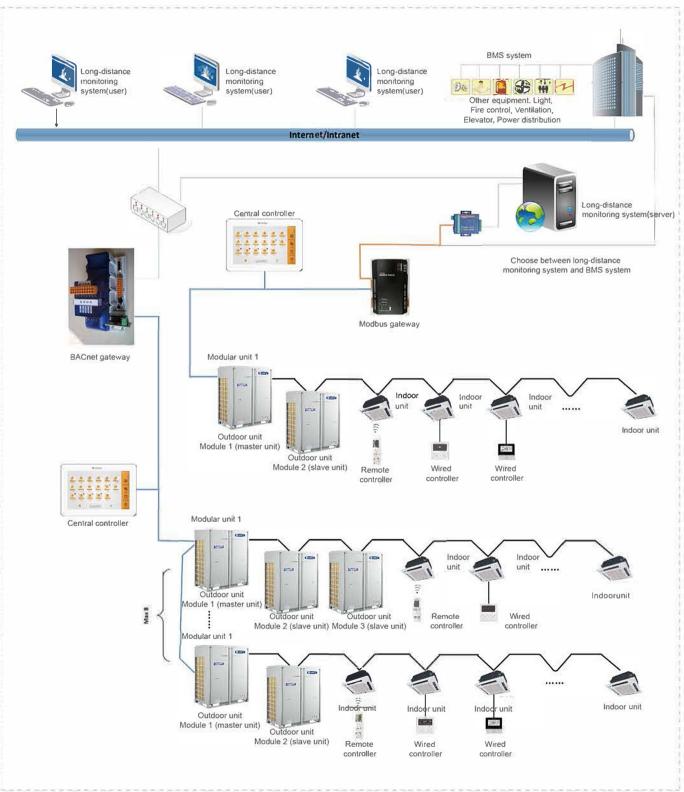
The wiring diagram will direct connection way automatically, so that the user can get the connection way quickly.





Multiple Intelligent Remote Control Management

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



Visualized Management

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



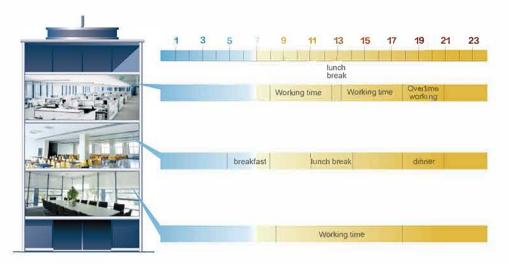
Everyday Management

Setting for daily operation

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

Other functions

- a.Power on/off, modes, humidity, fan speed b.Waste of energy that may be caused by forgetting to turn off the air conditioner can be avoided
- Everyday Management at different locations a.Management for overtime working
- b.Management for meal breaks c.Management for working time



Group Management

Central management in groups

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





Authority Management

• Only for indoor units

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



Statistics Analysis

Recording statistics

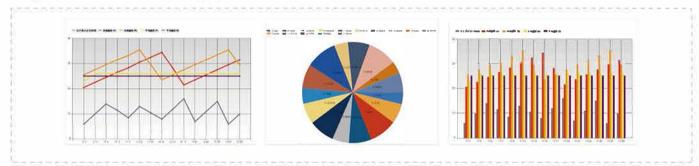
System can self generate graphs of statistics for easy management and analysis.

Recording errors

System can show the information of errors in charts and send alarms of errors through emails.

Recording operation

System can record users' daily operation.



Calculating Cost of Electricity

Auto calculation according to users

a. According to the operating time, modes, flow of refrigerant, humidity and other factors, system can calculate the cost of electricity for users in different locations.

b.Detailed information of bills and operation can be provided.



Energy Management

Analysis of energy cost

a.Air conditioners that cost much energy b.Air conditioners that are set in low temperature c.Air conditioners with bad cooling performance

Ways to save energy based on the following aspects:

a. Operating time

b.Unit is on too early

c.Unit is off too late

d.Comfort

e.Cost of electricity/cost of electricity per square meter

Energy saving

Limits on electricity

a. Analysis on the cost of electricity

b. Set the maximum cost of electricity and unit will be operating in limited conditions when the maximum number is reached.

c.System can remind users the cost of electricity during operation and give suggestions on energy saving.

Economic operation

System is able to operate under an energy-saving condition



VIP Management

System can provide independent and unique service to VIP users.



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 XK49 (For hotel)



- With simplified functions, mechanical buttons, back lighting LCD and convenient operation;
- Can be switched in auto, cooling, dehumidifying, fan and heating operation modes;
- Master and slave wired controllers can be set; simultaneous control over several IDUs is available:
- Detect ambient temperature; receive infrared remote controller signal;
- With system parameters viewing and setting functions;
- 7 levels of fan speed, up&down swing;
- Door control system can be connected.

Wired controller XK62



- Small and fashionable outlook with thickness only of 11 mm; LCD with black background and white words; touch buttons;
- Clock can be displayed and set; 24 hours timer setting for on/off;
- 7 levels offan 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 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.



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.

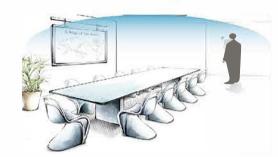
Remote Controller YV1L1



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

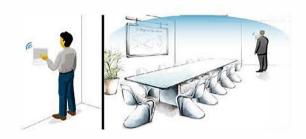


Single control of one unit
 Each indoor unit has an independent controller.

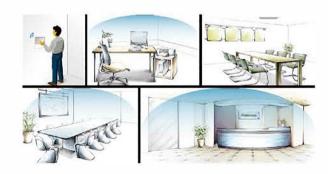


Multiple control of one unit

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)



- 1280*800 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 110~240V wide voltage range;
- With project setting, parameter viewing, malfunction record and access management functions.

Central controller CE52-24/F(C)



- 1280*800 high-resolution color LCD;
- 7" capacitive touch screen for easy operation;
- With project setting, parameter viewing, malfunction record and access management functions.

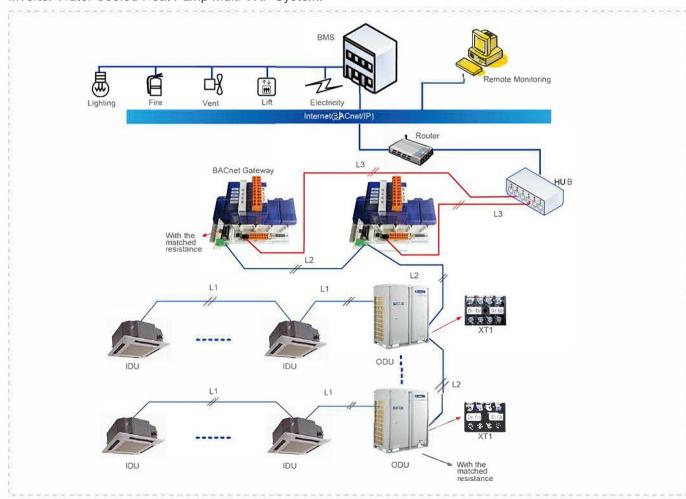
- With various functions: centralized control(control all indoor units), group management(support DIY grouping), schedule management(setting of several schedules) and single unit control(on/off, mode, temp setting, fan speed, quiet, swing control, etc.);
- Shielding function of single unit, group and 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 128 units can be centrally controlled;
- · Elegant and fashionable appearance;
- Embedded installation in wall with projecting thickness only of 11mm;
- Connectable with network of indoor units or outdoor units:
- Independent power supply in 110~240V wide voltage range;

BACnet Gateway

BACnet gateway kits MG30-24/D2(B) are intended to realize the data exchange between the air conditioning unit and BAS, and providing the standard BACnet/IP building interface and 8 I/O interfaces, one of which is the fire alarm signal interface. The status of the other 7 I/O interfaces is mapped to the specific objects of the BACnet/IP bus and can be defined by the user.



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



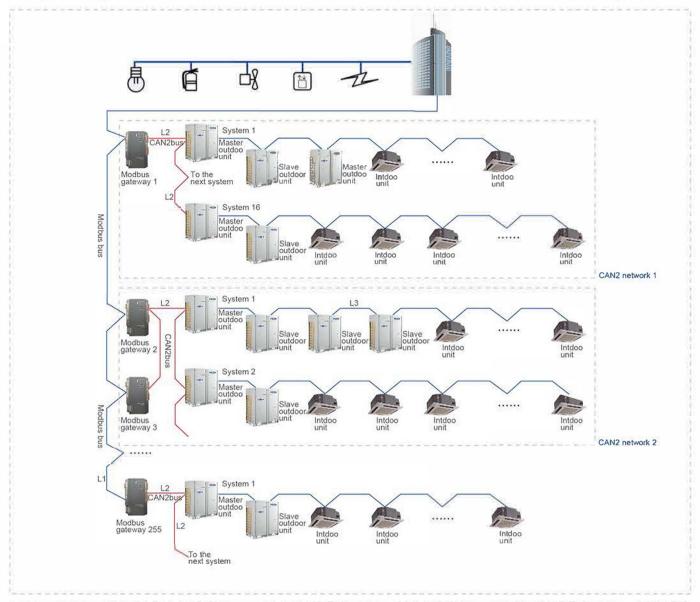
- International standard BACnet/IP interface, which has passed BTL certification;
- Real-time monitoring of unit operation status, e.g. on/off, mode, temperature;
- Real-time response to the control of unit (on/off, mode setting and speed setting, etc.) by monitoring software;
- Monitor unit errors;

- Lock unit operation statuses, directing at all control functions of unit itself or a certain setting function;
- Achieve cooling and heating temperature limitation functions;
- 8 DI/DO interfaces for receiving fire alarm signal and user's definition logic;
- Big storage capacity of unit operation data for 6 months.



Modbus Gateway

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



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

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

- Lock unit operation statuses, directing at all control functions of unit itself or a certain setting function;
- Linkage control, supporting 5 DI and 5 DO for receiving fire alarm signal and user's definition logic;
- CAN, RS485 communication ports are non-polar, convenient for construction wiring;
- Achieve cooling and heating temperature limitation functions;
- 110~240VAC wide voltage range, adapted to the power supply of each country and region.

Control System Lineup |

Contro Ili	ng system	Product s	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
		YAP1F		•	0	0	•	•	•	•	0
Wirel	ess Controller	YV1L1	E	0	0	0	0	0	0	0	0
		XK46		0	•	•	0	0	0	0	•
		XK49		0	0	0	0	0	0	0	0
Wir	ed controller	XK62	- 1 7 -	0	0	0	0	0	0	0	0
		XK55	26.00 900es	0	0	0	0	0	0	0	0
		JS05(receiver)			0	0					
Centra	lized Controller	CE52-24/F(C)	112421	0	0	0	0	0	0	0	0
Smart	Zone Controller	CE53-24/F(C)	124	0	0	0	0	0	0	0	0
Long-distance	e monitoring software	FE31-00/AD(BM)	750	0	0	0	0	0	0	0	0
BMS	Commmunication module(modbus) GMV BACnet gateway (BACnet)	ME30-24/E4(M)		0	0	0	0	0	0	0	0
Accessories		MG30-24/D2(B)		0	0	0	0	0	0	0	0
Other	Optoelectronic isolated converter	RS232-RS422\485		0	0	0	0	0	0	0	0
modules	Optoelectronic isolated signal multiplier	RS-422\485	-	0	0	0	0	0	0	0	0

Note: • means standard, • means optional.



Energy Recovery Ventilation(ERV)

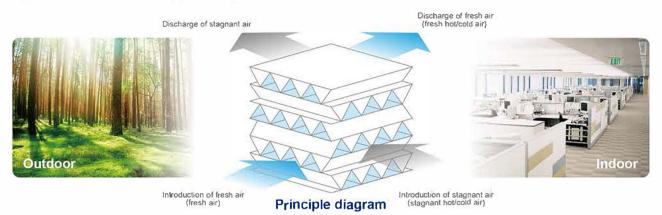


- Air flow: 350~3000m³/ h
- Energy Recovery Ventilation System can introduce the fresh air freely on the condition that all the windows closed or exhausted fan uninstalled. It can solve the problem of stagnant air effectively.

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

Adopt Advanced Heat Exchange Core

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

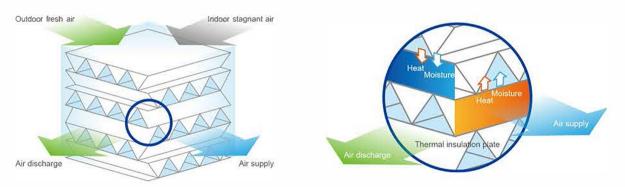


Double-way Ventilation for Fresh Air

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

No Cross Contamination for Ensuring Healthy Fresh Air

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



Pretreatment of Fresh Air for Energy-saving

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



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Finergy Recovery Ventilation(ERV)

	Model		FHBQ- D3.5-K	FHBQ- D5-K	FHBQ- D8-K	FHBQ- D10-K	FHBQ- D15-M	FHBQ- D20-M	FHBQ- D30-M	FHBQ- D5-D	FHBQ- D8-D*1	FHBQ- D10-D	FHBQ- D15-D*1
Air flow volume	H/M/L	M3/ h	350	500	800	1000	1500	2000	3000	500	800	1000	1500
ESP	H/M/L	Pa	100	100	110	110	150	150	220	100	100	110	150
Temperatuer exchange efficiency	H/M/L	%	71 .00	68.00	70.00	7300	73.00	71 .00	70 00	6800	70.00	75.00	73 00
Enthalpy exchange	Heating	%	65.00	62.00	63.00	66.00	65.00	62.00	62.00	62.00	63.00	66.00	65.00
efficiency(H/M/L)	Cooling	%	61.00	57.00	60.00	62.00	60.00	58.00	58.00	57.00	60.00	62.00	60.00
Power supply	Power supply		1/220/50	1/220/50	1/220/50	1/220/50	3/380/50	3/380/50	3/380/50	1/220/60	1/220/60	1/220/60	3/220/60
Power input		KW	0,165	0.262	0.40	0 44	080	0.95	2.80	0.262	0.50	050	1.10
Sound Pressure	Level	Db(A)	37	39	45	46	48	50	54	39	50	46	60
Dimension	Outline	mm	800*879*306	800 879 306	832*1016*380	832*1016*380	1210*1215*452	1210*1215*452	1340"1550"572	600°879°306	832°1016°380	832*1016*380	1210*1215*452
(W*D*H)	Package	mm	1050*1165*315	1050 1165 315	1087*1320*400	1087°1320°400	1540°1550°470	1540°1550°470	1610°1710°700	1050"1165"315	1087°1320°400	1087*1320*400	1540*1550*470
Net weight	Net weight		45	45.0	57.0	57.0	110.0	110.0	215.0	45.0	57.0	57.0	110.0
Gross weight		kg	53	53.0	66.5	66.5	130.0	130.0	236.0	53.0	66.5	66.5	130.0
Loading quantity	40'GP	set	147	147	85	59	37	37	24	147	59	59	37
	40'HQ	set	168	168	104	67	44	44	24	168	67	67	44
Standard wired remote controller		Z5N151	Z5N151	Z5N151	Z5N151	Z5N151	Z5N151	Z:	Z5N151	Z5N151	Z5N151	Z5N151	

Control System Lineup

Control sy		oduct series	ERV				
Wired controller	Z5N151		•				
Interface of the main board	BMS		•				
Optoelectronic isolated converter	RS232- RS42Z\485		0				
Optoelectronic isolated signal multiplier	RS-422/485		0				

Note: • means standard, o means optional.

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

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