



# *GMV6 Modular Inverter VRF System*





## Gree GMV6 Modular Inverter VRF System

The Gree GMV6 is an advanced variable refrigerant flow (VRF) air conditioning system developed by Gree Electric Appliances Inc., a leading global manufacturer of HVAC equipment. Their systems are designed for both residential and commercial applications, offering a range of innovative features that make it a standout choice in the global market. One of the key advantages of the GMV6 is its energy efficiency. Utilizing cutting-edge inverter technology, it optimizes energy consumption, significantly reducing operating costs compared to traditional HVAC systems. Additionally, the GMV6 offers a broad capacity range, making it suitable for various building sizes and types, from small to large commercial spaces.

The flexibility of the GMV6 is another notable feature. It supports long piping lengths and a wide variety of indoor unit types, allowing for installations tailored to specific needs and architectural constraints. The system is equipped with advanced control systems, including smart thermostats Wi-Fi capability and integration with building management systems (BMS), enabling precise temperature control and monitoring. Built with robust components and designed for durability, the GMV6 ensures reliable operation with minimal maintenance requirements. Furthermore, it incorporates technologies that reduce refrigerant loss and its environmental impact. Overall, the Gree GMV6 represents a high-performance, versatile, and energy-efficient solution for modern heating, ventilation, and air conditioning needs.

## High Efficiency EVI Scroll Type DC Inverter High Pressure Cavity Compressor

#### 1. High Efficiency EVI Control Technology

High efficiency EVI compressor, which is developed according to the requirements of the VRF unit, its 0~420Hz adjustable range can perfectly match with the entire unit, to excel the performance to the greatest extent.

#### 2. Release Valve

Improving partial load energy, adapting to the condition of the variable pressure ratio, upgrading compressor performance.

#### 3. Improved Asymmetric Wrap

A new asymmetric wrap is adopted, and compressor efficiency is improved by reducing internal leakage and invalid superheat.

#### 4. Internal Oil Circulation Structure

Internal circulation of lubricating oil to reduce over-heat losses and oil discharge rate and to improve efficiency and reliability.

#### 5. Dynamic Oil Balance Structure

Advanced oil balance technology, with high reliability and flexible design without installation limit. This can realise parallel connection of compressors with different delivery capacities and revolving speeds.

#### 6. High Speed

0~420Hz stepless inverter operation, wide adjustment range of capacity with precision of 1Hz.

#### 7. Oil Pump Filter

Filtration of any impurities to ensure that the oil supplied is clean.

#### 8. Positive Displacement Gear Pump

Ensures the necessary oil supply regardless of the compressors revolving speed, improves the reliability of the compressor.



#### Large Air Volume, Low Noise Fan Blade

GMV6 outdoor units come with a brushless DC inverter fan motor with speed adjustment from 5 to 85Hz in 1Hz increments.

Connected to the new Reverse "S" tail designed fan blade and along with a new grille design; the GMV6 outdoor air flow has increase by 16%.

The outdoor fan is also rated at 110Pa to allow the fitting of a diversion cover and has a wind prevention function and the ability to run backwards to blow dust and dirt from the outdoor heat exchanger.

#### **Multiple Prevention Technologies**

Protecting the unit from corrosion, duct, wind, lightening and snow, to prolong the service life of the unit and to suit different environmental conditions.

- The heat exchanger adopts acid-proof and highly anti-corrosive black aluminium fin stock with w neutral salt spray time up to 2000 hours.
- 2. The sheet steel of the casing is coated with zinc before being painted with weather resistant powder coating for corrosion prevention. The neutral salt spray time is up to 1000 hours.
- **3.** The surface of the controller is coated with a protection coating, to prevent damp, mildew and has anti-corrosive properties.
- **4.** The outlet grille is electroplated with phosphate and then powder coated to prevent corrosion.
- **5.** External fasteners are made from a zinc-nickel alloy for better anti-corrosive performance.
- 6. The motor adopts a stainless-steel shaft, and the outer case is electroplated to prevent corrosion. The motor is IP55 protected.
- **7.** The outer sealing of the coil adopts stainless steel and electrophoresis.
- 8. The surface of the pressure vessel adopts the treatment of phosphating and is coated with weather resistant powder to prevent corrosion.







When we consider the application of an air conditioning system, which requires multiple nodes, multistep control and intelligent expansion, traditional network structures are limited.

Gree have developed the stratification CAN+ structure with multiple master networks to improve this.

This makes it possible for the number of nodes in a single system to be increased relatively, by 56% and the communication cycle, the preferential and centralised control response times to be shortened to seconds.

#### Intelligent Control and Management

Gree GMV6 has a full range of individual and centralised control options.

- **1.** Remote and wired wall controllers
- 2. G-Cloud Wi-Fi modules
- 3. Gate card wall controller
- 4. Smart Eye
- 5. Central and Zone controllers
- 6. BMS Gateways



# **Control Options**



## Mode Exchange Unit

- 4 Models: NCHS1/2/4/8D
- The mode exchangers are 15% smaller with a loading capacity increase of 25%
- Variable tube diameter design and available in various pipe diameters.
- New Sub Cooling design, reduces noise under heat recovery mode.
- For modular systems, GMV6 HR adopts a continuous heating cycle even during defrost



# **Duct Type Indoor Unit**

#### **General Static Pressure Duct Type Indoor Unit**

- Capacity range 1.8-14kW
- External static pressure can be up to 80Pa
- Standard fitting condensate pump lift; maximum lifting height can be up to 1.2m
- Multiple protections: anti-freezing protection, temperature sensor faulted protection and other multiple guarantees

#### **High Static Pressure Duct Type Unit**

- External static pressure can be up to 250Pa
- Standard fitting condensate water pump lift; lifting height can be up to 1.2m
- Optional PM2.5 electrostatic fiber filter
- 9-stage static pressure for adjustment, convenient for engineering application

#### Fresh Air Processing Indoor Unit

- DC inverter technology
- Direct evaporative cooling
- Air conditioner and fresh air function are linked

\*This function is optional.

#### **Cassette Type Indoor Unit**

#### 1-way Cassette Unit

- 178mm ultra-thin unit body
- Removable grille, with long life filter
- Standard fitting 1.2m condensate pump lift
- High ceiling function; highest corresponding height is 3.5m

#### 2-way Cassette Indoor Unit

- 2-way air flow design, suitable to narrow rooms
- Standard fitting 1.2m condensate water pump lift
- Streamline panel design, elegant and decent

#### 360 ° Air Discharge Cassette Indoor Unit

- 360° air supply
- Smart sensor technology for smart air flow adjustment\*
- Standard fitting 1.2m pump lift
- \*This function is optional.

#### 360 ° Air Discharge Compact Cassette Indoor Unit

- Independent Swing Control
- 360° air supply
- DC quiet condensate pump
- DC motor design for more energy-saving operation
- Multiple protection functions for safe and reliable operation
- Brand new designed air duct and fan blade for lower operating noise
- Compact design for more convenient installation













7

Indoor Units

# Wall-mounted Type Indoor Unit

- High-efficiency and energy-saving DC motor •
- Long-life filter, removable and washable panel and filter for easy maintenance
- Wall-mounted installation, beautiful panel, uniform air flow and up&down 2-way air supply

## **Floor Ceiling Type Indoor Unit**

- Streamlined appearance design, bright white color, pleasing to the eye
- Floor mounted or ceiling mounted, flexible installation
- Compact structural design, saving installation space
- Optional fresh air intake, to meet your high quality living standard

## **Console Indoor Unit**

- Uniform temperature distribution, high level of comfort
- Easy installation without suspended ceiling; arrangement of refrigerant pipe is flexible
- Two-way air supply, upper and lower two air outlets respectively at the upper and lower sides,3D air supply

## Floor Standing Type

- Up and down swing, long air supply distance
- long-life filter, removable and washable panel and filter for easy maintenance
- With I-feel function, it can detect the temperature at the user's position in real time to improve comfort (Remote controller YAP1F is required.)

## **Concealed Floor Standing Type**

- Capacity range: 2.2~7.1kW
- Compact structure, ultra-thin unit body, only 200mm thickness in vertical installation
- Different stages of static pressure for adjustment; highest static pressure can be up to 60Pa
- Flexible installation, supporting feet design to suit different heights, flexible switch of lower air return and side air return

# AHU-KIT

- Independent design, convenient for installation
- Can connect to the third party controller
- Malfunction signal access, safe and reliable







	GMV6 Heat Pump									
Outdoor Unit Model	GMV-224WM/ C-X(A)	GMV-280WM/ C-X(A)	GMV-335WM/ C-X(A)	GMV-400WM/ C-X(A)	GMV-450WM/ C-X(A)	GMV-504WM/ C-X(A)	GMV-560WM/ C-X(A)	GMV-615WM/ C-X(A)		
НР	8	10	12	14	16	18	20	22		
Cool (kW)	22.4	28	33.5	40	45	50.4	56	61.5		
Heat (kW)	25	31.5	37.5	45	50	56.5	63	69		
SEER	7.1	6.66	6.31	6.75	6.12	6.24	5.97	6.02		
SCOP	4.62	4.8	4.4	4.8	4.84	4.19	4.1	4.1		
Power Supply	380~415V 3N~50/60Hz									
MCA	25	25	25	40	40	50	50	50		
Max. input power	6.59	10.57	12.88	16	21.33	17.41	22.78	27		
Max. input power	6.28	9.52	10.36	11.61	14.51	16.58	21.09	24.27		
Max. drive IDU #	13	16	19	23	26	29	33	36		
Refrigerant	5.5	5.5	7.5	7.5	7.5	8.3	8.3	8.3		
SPL Cooling	56	57	59	59	60	61	62	63		
OD Static Pressure	0~110	0~110	0~110	0~110	0~110	0~110	0~110	0~110		
Connecting Pipe	9.52	9.52	12.7	12.7	12.7	15.9	15.9	15.9		
	19.05	22.2	25.4	25.4	28.6	28.6	28.6	28.6		
Dimensions	930x775x1690	930x775x1690	930x775x1690	1340x775x1690	1340x775x1690	1340x775x1690	1340x775x1690	1340x775x1690		
Net Weight	220	220	240	300	300	350	350	355		

	GMV6 Heat Recovery									
Outdoor Unit Model	GMV-VQ224W- M/C-X(A)	GMV-VQ280W- M/C-X(A)	GMV-VQ335W- M/C-X(A)	GMV-VQ400W- M/C-X(A)	GMV-VQ450W- M/C-X(A)	GMV-VQ504W- M/C-X(A)	GMV-VQ560W- M/C-X(A)	GMV-VQ615W- M/C-X(A)		
НР	8	10	12	14	16	18	20	22		
Cool (kW)	22.4	28.0	33.5	40.0	45.0	50.4	56.0	61.5		
Heat (kW)	25.0	31.5	37.5	45.0	50.0	56.5	63.0	69.0		
SEER	7	6.76	6.61	6.97	6.53	6.54	6.38	6.32		
SCOP	4.32	4.58	4.74	4.44	4.42	4.25	4.15	4.15		
Power Supply	380~415V 3N~50/60Hz									
MCA	25	25	25	40	40	50	50	50		
Max. input power	7.00	9.36	11.92	13.84	18.75	17.62	18.91	20.16		
Max. input power	5.49	6.68	8.98	10.15	12.00	13.62	16.37	17.39		
Max. drive IDU #	13	16	19	23	26	29	33	36		
Refrigerant	8.2	8.5	9.6	11.1	11.6	12.8	12.8	13.3		
SPL Cooling	60	61	63	63	63	63	63	64		
OD Static Pressure	0~110	0~110	0~110	0~110	0~110	0~110	0~110	0~110		
Connecting Pipe	9.52	9.52	12.7	12.7	12.7	15.9	15.9	15.9		
	19.05	22.2	25.4	25.4	28.6	28.6	28.6	28.6		
	15.9	19.05	19.05	22.2	22.2	25.4	25.4	25.4		
Dimensions	930x775x1690	930x775x1690	930x775x1690	1340x775x1690	1340x775x1690	1340x775x1690	1340x775x1690	1340x775x1690		
Net Weight	243	243	256	325	325	385	385	385		

or Installation and Sales:

For Parts and Warranty:

1800 GREE 4 ME

1800 4733 4 6 3



www.greeac.com.au