C-VCMAX202307

Midea

Catalogue

VC MAX Series VRF

SMART IN ONE

Midea Building Technologies Division

Midea Group

Add.: Midea Headquarters Building, 6 Midea Avenue, Shunde, Foshan, Guangdong, China
Postal code: 528311
mbt.midea.com www.midea-group.com tsp.midea.com

Quality Assurance ISO 9001

Environmental Management ISO 14001

Occupational Health and Safety Management ISO 45001

Midea MBT

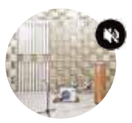
Midea MBT (Midea Building Technologies) is a key division of the Midea Group, a leading provider of comprehensive solutions for intelligent buildings. It specializes in energy sources, elevators, control systems, and heating, ventilation & air conditioning. Midea MBT continues the tradition of innovation upon which it was founded and has emerged as a global leader in the HVAC and building management industry. A strong drive for advancement has resulted in an extensive R&D department that has placed Midea MBT at the forefront of the competition. Through independent projects and joint-cooperation with other global enterprises, Midea has supplied thousands of innovative solutions to customers worldwide.

3 businesses make up the core of Midea intelligent building solutions.

4 production bases can achieve fast delivery.

Over 100 testing labs cover a wide range of real application scenarios.


Security construction


Noise


Performance


Environmental Simulation


Reliable & long-lasting operation


EMC lab

All products can be visualized and digitalized throughout entire process.

Midea VRF History

2005
V3 Platform
- AC inverter + fixed compressor
- Maximum capacity of single unit is 16HP

2008~2014
V4&V5 Platform
- Complete product line with heat pump series, heat recovery series and water-cooled series.

2017~2020
V6 Platform
- Full DC inverter technology
- Complete product line with heat pump series, heat recovery series and cooling only series.

2022~
New Platform
- New generation of VRF with many advanced technologies
- Launching the heat pump series and cooling only series.

Benefits of Midea VRF

For End-users

Healthy Operation

Cost Saving Operation

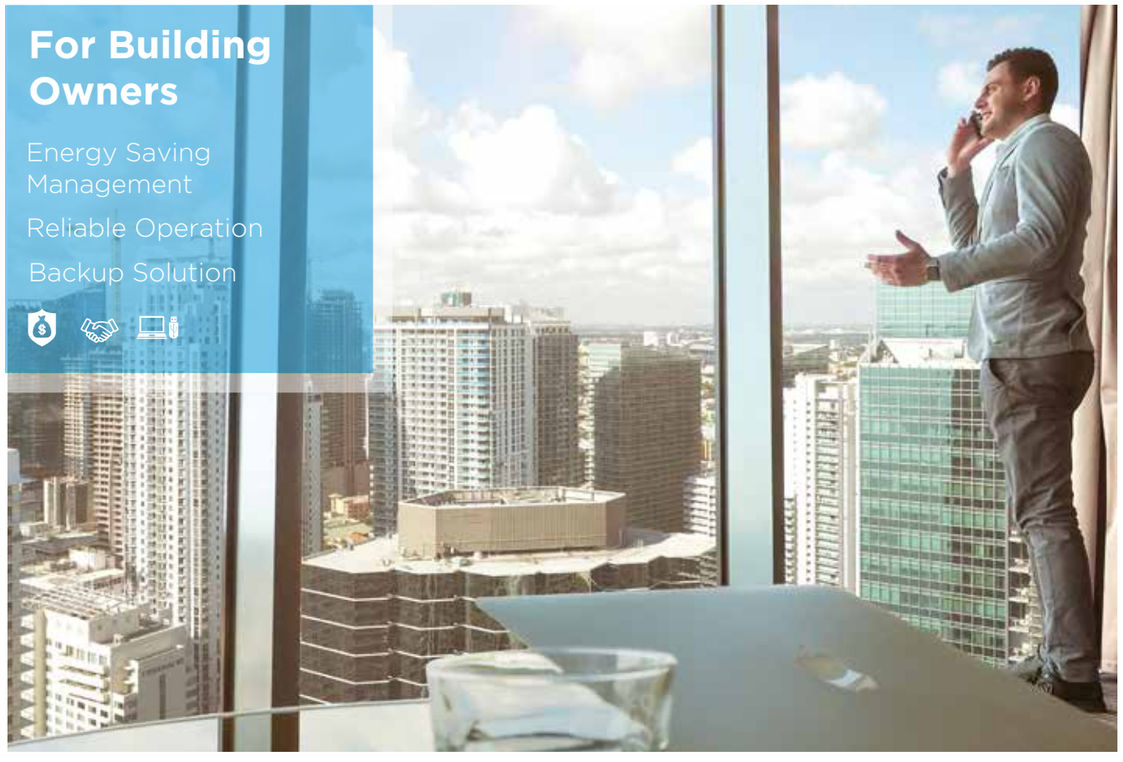
Comfortable Environment

For Consultants

Diversified Solutions

Professional Tool and Support

Design Flexibility



For Building Owners

Energy Saving Management

Reliable Operation

Backup Solution

For Construction Companies

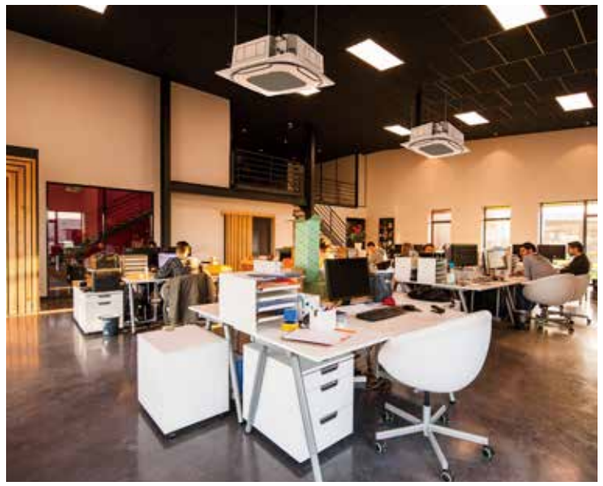
Green Solutions

Space Saving Design

Intelligent Management

Application Solutions

Office Complexes



Enjoy comfort while working

Midea VRF provides solutions for office buildings of all sizes and its smart control solutions streamline the management of VRF. It offers a wide variety of indoor units that are suitable for all designs.

Residential Apartments

One for every home

A compact size and high efficiency make Midea VRF suitable for all residential homes.

Hotels & Shopping Malls

Increase your business, not your bills

The high efficiency and reliability of Midea VRF make it idea for commercial applications. Intelligent control solutions like hotel key cards and touch screen controller make management easy.

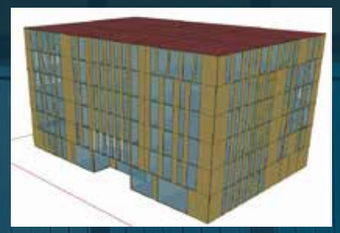
Hospitals/ Schools/ Airports

Meeting all expectations

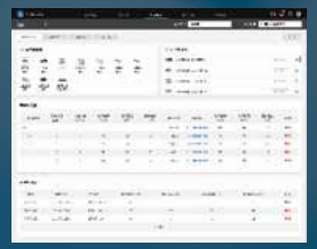
The innovative design and variety of indoor unit options make Midea VRF suitable for all kinds of applications. The newly designed puro-air kit is perfect for modern hospitals.

ALL DIGITALIZED SERVICE

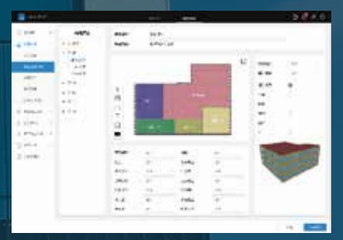
Design Service



Energy Plus
Building load
calculation

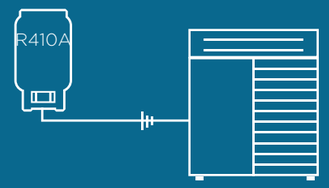


BIM
building
information
import



MSSP Online
VRF system design

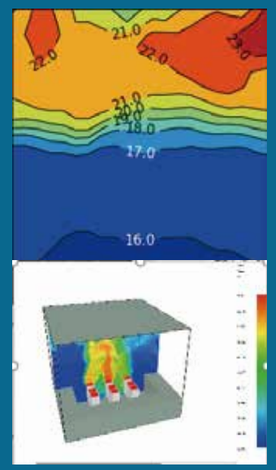
Installation service



Automatic refrigerant
charge

Automatic
commissioning report

MCFD
Energy consumption
and airflow simulation
optimization



Management service

The probability of
Filth blockage 80%

Degradation of energy
efficiency 25%

Continuous energy
saving service

After-sales service

Intelligent
maintenance tool

Cloud-based big
data analytics

2 +10 +N Spare
Parts Layout can
ensure the timely
supply of global
after-sales spare
parts.

Technical Support Platform (TSP)

TSP is a platform for customers to seek professional technical support. Through TSP, you can inquire about product information, documentation, spare parts and troubleshooting, ask technical questions, submit complaints, and order spare parts.

https://tsp.midea.com/

My order

Inquire about spare parts from an exploded view and place orders for spare parts directly in TSP.

Document inquiry and download

View or download product technical documentation online, such as catalogs, images, training PPTs, etc.

Technical inquiry & FAQ

Ask technical questions online and receive a prompt response from our technicians. Or find a quick solution in the FAQ.

Troubleshooting

Query the error code and solution by SN, model name, error code or product type.

Complain

Submit product quality complaints online, and our after-sales engineers will respond promptly.

Mobile Intelligence Service App (MISA)

MISA is the mobile terminal of TSP, with the same functions as TSP. The mobile service improves the response time and convenience of technical support.

https://link.midea.com

FAQ

Complain

Technical Enquiry

Search product manuals

Trouble shooting

Spare parts list

Download

Scan to download the mobile app

Feedback

Thank you for your attention and feedback

Midea Global Spare Parts Center

The global spare parts center provides high quality and fast spare parts supply. Midea' s online system (https://tsp.midea.com) allows users to query and purchase spare parts with one click, further shortening the supply time of spare parts.

The "2 (HQ spare parts center) +10 (Regional spare parts center) +N (Country spare parts inventory)" Spare Parts Layout can ensure the timely supply of after-sales spare parts around the globe.

OUTDOOR UNITS

VC MAX

Outdoor Unit Lineup

VC MAX (Combinable series)

Single Unit

8-20HP	22-30HP
	

Combined Unit

32-60HP


62-90HP


Outdoor Unit Functions

Functions ●: equipped as standard; O: customization option			VC MAX
Innovative Technologies	HyperLink	Midea original communication bus chip greatly simplifies installation and saves installation costs	●
	ShieldBox	IP55 fully sealed electric control box realizes resisting all protects against intrusion and damage to the electric control box	●
	SuperSense	17 sensors monitor the state of each part of the refrigerant pipeline throughout the whole process	●
	Midea ETA 2.0	Triple variable control maximizes comfort and energy efficiency	●
	Zen Air 2.0	Provides comfort and healthy air supply	●
	Doctor M 2.0	Intelligent diagnostic technology makes maintenance easier and more efficient	●
High Efficiency	Full DC inverter technology	All electrical components of outdoor and indoor units use DC power supply, improving electrical efficiency and saving energy	●
	Enhanced Vapor Injection (EVI) compressor	Increases refrigerant circulation and improves cooling capacity	●
	Micro-channel refrigerant subcooling	The refrigerant system can achieve 15°C refrigerant subcooling, which can further improve the refrigerant heat transfer efficiency while reducing noise	●
	Low standby power consumption	The standby power consumption is as low as 3.5W	●
	60-step energy management	The system can be set from 40% to 100% capacity output in 1% increments	●
High Reliability	Duty cycling (unit)	Equalizes the running time of the outdoor units in a multiple-unit system, significantly extending unit lifespan (available for combined units)	●
	Duty cycling (compressor)	Equalizes the running time of the compressor in each unit, significantly extending compressor lifespan (available for units with two compressors)	●
	Backup operation (unit)	If one unit fails, the other units provide backup so that the system can continue operating (available for combined units)	●
	Backup operation (compressor)	If one compressor fails, the other compressor provides backup so that the system can continue operating (available for units with two compressors)	●
	Backup operation (fan motor)	If one fan motor fails, the other fan motor provides backup so that the system can continue operating (available for units with two fan motors)	●
	Backup operation (sensor)	If one sensor fails, the virtual sensor provides backup so that the system can continue operating	●

Outdoor Unit Functions

Functions ●: equipped as standard; O: customization option			VC MAX
High Reliability	Precise oil control	Ensures all outdoor compressor oil is at a safe level, eliminating compressor oil shortages	●
	Heavy anti-corrosion protection	Can be customized with heavy anti-corrosion treatment for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life	○
	UL anti-corrosion certificate	It has been certified by UL that our VRF outdoor unit can withstand 27 years of simulated severe corrosion under a salt contaminated traffic environment	○
	Micro-channel refrigerant cooling PCB	10 times higher than ordinary refrigerant pipe cooling efficiency	●
	Auto dust-clean function	Blows away accumulated dust on the outdoor unit, guaranteeing stable unit operations in a dusty environment	●
	Resistant to magnitude 8 earthquakes	A reinforced frame footprint to prevent tipping and deformation damage in magnitude 8 earthquakes	○
	Resistant to violent typhoon	A reinforced trusses and double fastening for stable operation even under violent typhoon	○
	Alarm output	In the event of system malfunction, remotely output error information and remind maintenance personnel to conduct maintenance	○
	Fire alarm input	In the event of fire, receive fire information in time and stop the system immediately to avoid serious problems	●
Enhanced Comfort	Silent mode	15-step silent mode selections provide more freedom and convenience to match the needs of customers	●
	0.1 °C control precision	Control precision of the sensor can reach 0.1°C, ensuring less fluctuations in room temperature	●
Wide Application Range	Wide capacity range	Meets all customer requirements from small to large buildings	8-30HP (single) 32-90HP (combined)
	Wide range of indoor units	Provides 12 types and more than 100 models of VRF indoor units to meet the needs of different application scenarios	●
	Wide operation range	Operates stably under extreme conditions	-15-55°C
	Long piping capability	Benefits for the system design, installation flexibility, as well as the less installation cost	●
	Auto addressing (ODU-IDU)	Distributes addresses to indoor units automatically, simplifying the installation	●

Outdoor Unit Functions

Functions ●: equipped as standard; O: customization option			VC MAX
Easy Installation And Service	Auto addressing (ODU-ODU)	Distributes addresses to slave outdoor units automatically, further simplifying the installation (available for combined units)	●
	Automatic refrigerant charging	Makes installation and service easier and more efficient	○
	Automatic refrigerant recycling	Refrigerant can be recycled to ODUs or IDUs and normal ODUs, making the maintenance easier and more efficient	●
	Bluetooth module	It can be used for fault information storage, operation parameter enquiry, system parameter setting, quick after-sales PCB replacement, programme upgrade for indoor and outdoor units, etc., simplifying installation and maintenance.	○
	Digit display	4 digit 7-segment display can be intuitive for parameter setting, parameter checks and error checks	●
	High external static pressure	Up to 120Pa ESP allows easy handling in a variety of installation environments	0-20Pa ● 20-120Pa ○
	Arbitrary topology of communication wire	Supports any communication topology, greatly simplifies installation and reduces installation cost	●
	2-core non-polarity communication wiring between the indoor and outdoor units	Simplifies installation and reduces wiring failures	●
	Long communication wiring	Communication wiring up to 2000m makes installation more flexible	●
	Wide combination ratio	Combination ration can be extended to 50%-200% under certain conditions which can meet different project requirements	50-130% ● 50-200% (for single unit system) ○
	Supports manual and automatic oil return	Improves maintenance efficiency	●
	Easy software program upgrade*	The software program can be upgraded via on-site USB and burning, or remotely via the web	●
	Flexible controller connection	Central controller and BMS gateway can connect to the ODU at the same time, and the central controller can connect to the ODU or IDU	●
	Refrigerant amount diagnosis	The unit can diagnose excessive or insufficient amounts of refrigerant, and prompt maintenance personnel to check the system in time to avoid serious malfunction	●
	Easy system commissioning and checking*	System commissioning and checking can easily be completed on-site or remotely via the web	●
	Intelligent maintenance tool	Intelligent bluetooth after-sales kit can simplify maintenance and improve maintenance efficiency	○

*Note: The web function needs to be realized through the data cloud gateway, and the data cloud gateway needs to be purchased separately.

INNOVATIVE
TECHNOLOGIES

HyperLink New & Unique

ShieldBox New & Unique

SuperSense New & Unique

ETA 2.0

ENair 2.0

DOCTOR m. 2.0

HyperLink

New & Unique

Midea's original communication bus chip greatly simplifies installation and saves installation costs.

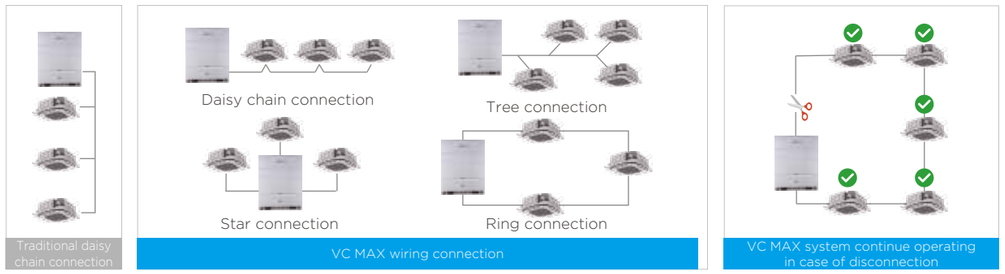
Benefits

- Flexible installation
- Low installation cost
- High reliability
- Stable operation

HyperLink communication technology supports any wiring pattern rather than just daisy chain connection, reducing installation costs and the possibility of an incorrect connection. It has stronger anti-interference ability, achieving a communication distance of up to 2000m.

Arbitrary Topology Communication

In addition to the traditional daisy chain connection, the communication wire supports tree connection, star connection, ring connection and so on. The wring is flexible, which greatly reduces installation costs and has no possibility of wrong connection on site.



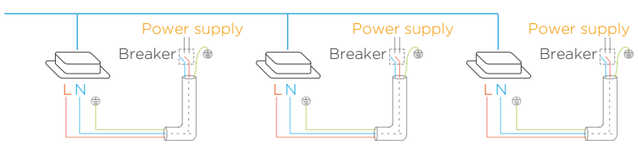
*In ring connection, the communication wire must be connected polarized (M1 port to M1 port and M2 port to M2 port).

Super Anti-interference Capability

Special waveform restoration technology enhances anti-interference performance for more stable communication.

Flexible Power Supply for Indoor Units

HyerLink 's unique communication method allows the indoor units to be powered not only by a uniform power supply, but also by individual and zone power supplies, making it particularly suitable for each shop in a large complex building, which can independently power on and off its own indoor units.



ShieldBox

New & Unique

IP55 fully enclosed electric control box provides all-round protection for internal electronic components, greatly improving system **RELIABILITY**.


Anti-corrosion


Dustproof


Rain & snow proof


Insect proof

Benefits

- High reliability
- Stable operation

IP (INGRESS PROTECTION)

IP 55

Dustproof grade code
Prevent entry foreign objects and dust

Waterproof grade code
Prevent water spray in all directions

Fully enclosed electronic components are isolated from the external environment to protect against corrosion, sand, humidity, snowstorms and other harsh conditions, and prevent small animals and insects from entering the chamber. This protects internal electronic devices and improves the overall environmental tolerance.

All Microchannel Refrigerant Cooling

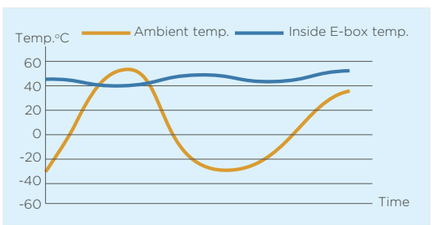
All electronic components including inverter module, filter module and power module are cooled by specially designed microchannel refrigerant to ensure that the electronic components work in the best temperature range.

Built-in Circulating Fan

The built-in circulating fan accelerates the air flow inside the chamber, and the heat exchange is more sufficient to ensure the consistent ambient temperature inside the chamber.

5 High Precision Temperature Sensors

5 high precision temperature sensors are used to accurately monitor the operation state of electronic control under various conditions to ensure that the internal temperature of the chamber is always kept within a stable range.



SuperSense

New & Unique

The status of the refrigerant can be determined throughout the process, ensuring high **RELIABILITY** and **COMFORT**.

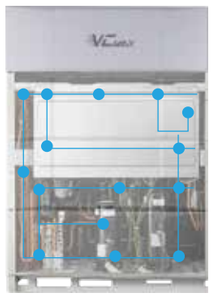
Benefits

- High reliability
- Stable operation
- Enhanced comfort

Up to 17 sensors are distributed throughout the refrigerant system, and the status of the refrigerant can be determined throughout the process, ensuring stable operation. At the same time, combined with the digital twin technology of the refrigerant system, a virtual sensor can be created in the event of a physical sensor failure, so that the system does not shut down in the event of a sensor failure, ensuring comfort.

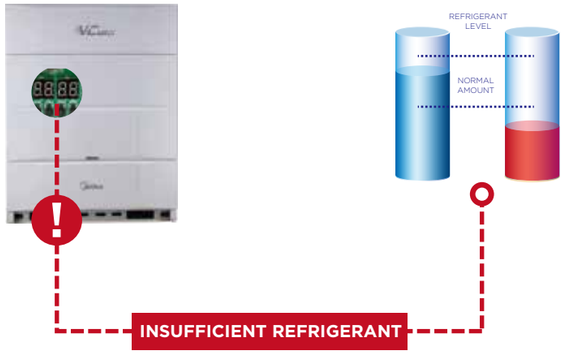
Complete Sensors

The VC MAS Series VRF is equipped with up to 17 condition monitoring sensors, combined with built-in data models of compressors, heat exchangers and throttling components, which can analyze the operation data in real time and monitor the refrigerant condition of the system.



Refrigerant Amount Diagnosis

Thanks to the complete sensors, the refrigerant running state is clearly visible, so as to accurately diagnose the amount of refrigerant.



Virtual Sensor Backup

In the event of a sensor failure, other sensors can automatically simulate a virtual backup sensor, so that the VRF system can continue to operate without stopping.

Midea ETA (META) 2.0

META is the abbreviation of Midea Evaporating Temperature Alteration. Further upgraded META technology to maximize **ENERGY SAVING**.

Benefits

- Energy saving
- Enhanced comfort
- Fast cooling

Built-in professional operation and maintenance algorithm, so that the annual operation energy efficiency of each set of systems is increased by more than 28%.

Variable Refrigerant Flow

STEP 1: Architectural space feature recognition

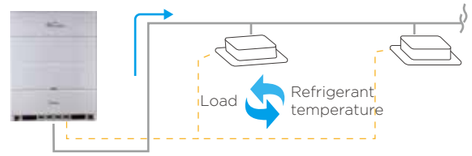
The indoor unit automatically recognizes the size of the building space and the effectiveness of the insulation according to the rate of temperature drop.

Automatic calculation of the building load and the required refrigerant quantity based on the sensor parameters.

Variable Refrigerant Temperature

STEP 2: System refrigerant temperature determination

The system automatically matches the evaporating temperature to the room load to maximize comfort and energy efficiency.

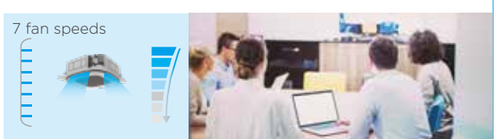


Automatic matching of the corresponding refrigerant temperature to the load.

Variable Indoor Airflow

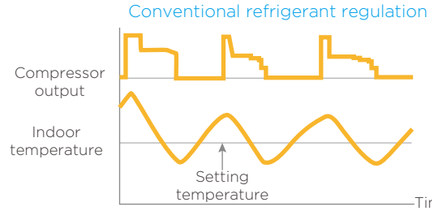
STEP 3: Adaptive indoor airflow and refrigerant flow

Each indoor unit automatically adjusts the corresponding indoor airflow and refrigerant flow according to the evaporating temperature, enabling precise temperature control.

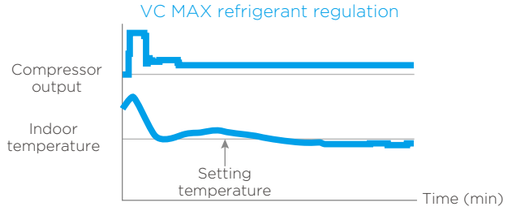


Automatic matching of the corresponding indoor airflow to the load and refrigerant temperature.

Conventional refrigerant regulation

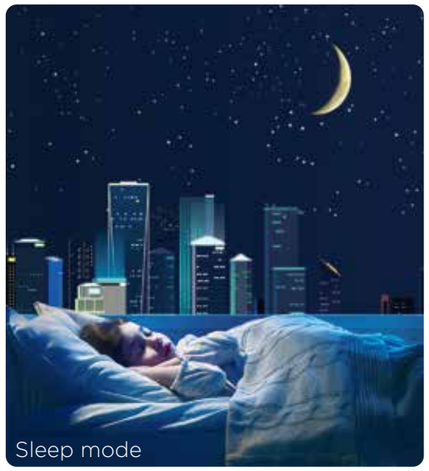


VC MAX refrigerant regulation



Zen Air 2.0

Further upgraded ZEN AIR technology to maximize **COMFORT**.



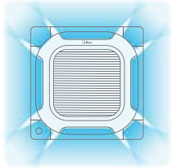
Benefits

- Quiet
- Enhanced comfort
- Healthy

0.5°C temperature adjustment, 7 fan speeds selection, sleep mode, silent mode, windless technology, high efficiency filter, a variety of sterilization devices and other advanced technologies used in VC MAX Series VRF are dedicated to creating a quiet, comfortable and healthy indoor environment.

360° Airflow

New design, round air flow path ensures uniform air flow and temperature distribution.

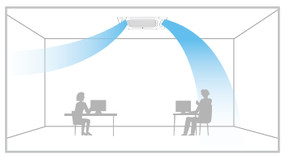


7 Fan Speeds

7 indoor fan speed options to meet the needs of different indoor conditions.

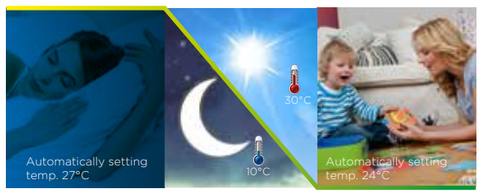
Individual Louver Control

The Individual louver control can control the motors separately, making it possible to control all four louvers independently.



Sleep Mode

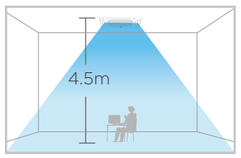
The smart sleep mode provides a comfortable sleep period and a refreshing wake up time.

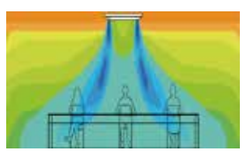


*The above temperatures are for reference only.

Long Distance Air Delivery*

The Four-Way Cassette has an additional 50Pa of static pressure for long airflow delivery and can be used in spaces of up to 4.5m in floor height.





*This function is available as a customization option.

Innovative Puro-air Kit

Protectors of health and safety

From Germany - OSRAM quality UV light source

Ozone –Free
UV leakage-Free

*The indoor unit needs to be customized in order to use the Puro-air Kit.

Doctor M 2.0

Further upgraded DOCTOR M technology to maximize **EASY SERVICE**.

Benefits

- Easy maintenance
- Fast maintenance
- Low maintenance cost

Based on a cloud-based platform of big data and artificial intelligence, the VC MAX Series VRF can monitor the operation status of each unit in real time, predict system faults in advance and provide data analysis for system maintenance. The intelligent Bluetooth module and special Bluetooth after-sales kit can further simplify maintenance and improve maintenance efficiency.

Intelligent Maintenance Tool

With the intelligent Bluetooth module or special Bluetooth after-sales kit, the data of the outdoor unit can be directly read and written on your smart phone without connecting a PC or opening the cabinet.

*The Bluetooth module is available as a customization option.

Real-time Monitoring of Operating Parameters

The VC MAX Series VRF synchronizes and stores all the unit parameters to the cloud through the data cloud gateway, including the running status, locking status, dirty blocking rate, all spot inspection parameters and so on. Users can query real-time and historical parameters on computers, tablets and mobile phones at any time.

Cloud-based Big Data Analytics

Midea VC MAX Series VRF transmits the system operation data to the cloud in real time through the data cloud gateway, and timely reminds the system of abnormal conditions through big data analysis, helping users to proactively avoid the risk of failure that has not yet occurred and minimize hidden problems.

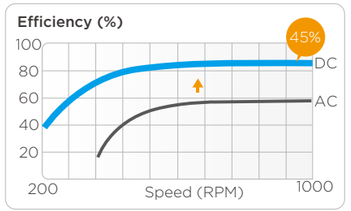
*The data cloud gateway needs to be purchased separately.

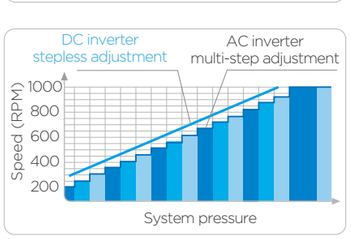
High Efficiency

Full DC Inverter Technology

Full DC Inverter for Outdoor Components

The VC MAX Series VRF uses full DC inverter compressor and fan motor to achieve high precision stepless speed adjustment according to system operation, and ensures that the system is always in optimum condition, operating more efficiently, more consistently and with less noise.





Wider frequency adjustment range

Faster cooling

Higher energy efficiency

Full DC Inverter for Indoor Components

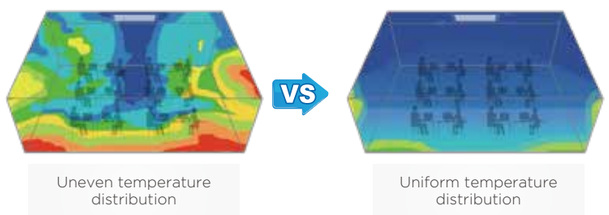
All power devices such as indoor fan motor, drain pump and electric control board are fully DC, which increases electrical efficiency by 20% and results in more accurate temperature control, a more constant indoor temperature and higher energy efficiency.

Fan motor

Drain pump

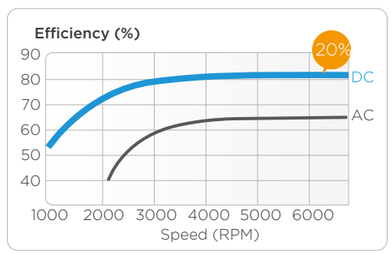
Electric control board

20%
Efficiency improvements



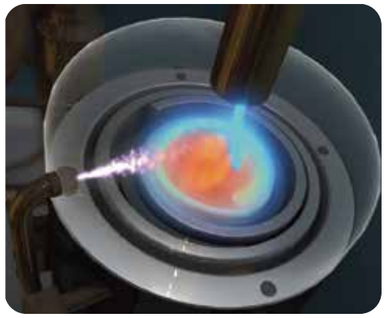
Uneven temperature distribution

Uniform temperature distribution



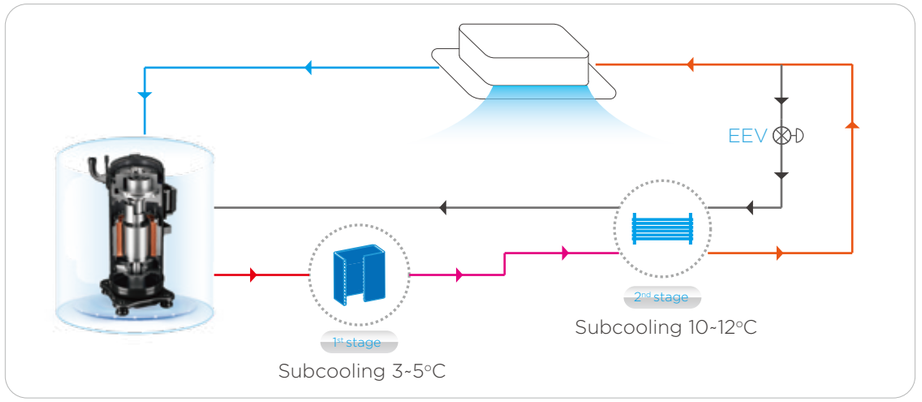
Enhanced Vapor Injection (EVI) Compressor

The enhanced vapor injection DC inverter compressor increases refrigerant circulation and improves cooling capacity.



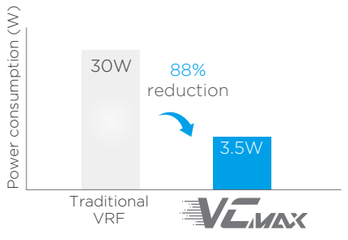
Advanced Subcooling Technology

The VC MAX Series VRF uses a micro-channel heat exchanger to further cool the refrigerant and the refrigerant system can achieve 15°C refrigerant subcooling, which can further improve the refrigerant heat transfer efficiency while reducing the sound of refrigerant flow.



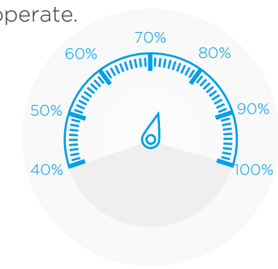
Low Standby Power Consumption

Compared to the standby power consumption of traditional VRF of about 30W, the VC MAX Series VRF uses optimized control scheme to further reduce standby power consumption to as low as 3.5W.



60-step Energy Management

For projects with temporary electricity supply restrictions, the outdoor unit supports 60-step energy management which can be set to output 40-100% capacity in 1% increments. It prevents tripping during conditions of restricted electricity supply and allows the system to continue to operate.



High Reliability

Quadruple Backup

In two fans, two compressors and multiple units, one can run in backup for another. Additionally, the VC MAX series VRF generates a corresponding virtual sensor for each physical sensor by means of a digital algorithm, which serves as a backup for each other, ensuring no shutdown in the event of a fault, and further guaranteeing comfort.

1 Unit Backup

In a multi-unit system, the different units act as a backup to each other, ensuring that the system can continue to operate if one unit fails.

Intelligent load-bearing between units during normal operation

Continue operating in case of failure of one unit

2 Fan Backup

In unit with two fans, the two fans act as a backup to each other, ensuring that the system can continue to operate if one fan fails.

In normal operation, each fan runs on demand

Automatic backup operation of another fan in case of failure of one fan

Operation compressor Failed compressor

Operation fan Failed fan

3 Compressor Backup

In unit with two compressors, the two compressors act as a backup to each other, ensuring that the system can continue to operate if one compressor fails.

Intelligent load-bearing between compressors during normal operation

Continue operating in case of failure of one compressor

4 Sensor Backup

New & Unique

Through digital algorithms, each physical sensor generates a corresponding virtual sensor that acts as a backup to each other, ensuring that the failure of one sensor does not affect the normal operation of the system.

Automatic backup operation of the corresponding virtual sensor in case of failure of one physical sensor

Double Duty Cycling

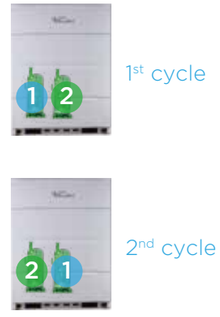
1 Unit Duty Cycling

In a multi-unit system, duty cycling equalizes the running time of each outdoor unit, significantly extending unit lifespan.

Note: The duty cycling sequence shown in the figure is only a schematic reference. The actual duty cycling sequence is not a fixed sequence. Please refer to the technical manual for specific rotation rules.

2 Compressor Duty Cycling

In units with two compressors, duty cycling equalizes the running time of each compressor, significantly extending compressor lifespan.



Compressor start-up sequence

ShieldBox

IP55 fully enclosed electric control box provides all-round protection for internal electronic components, greatly improving system reliability.

Anti-corrosion

Dustproof

Rain & snow proof

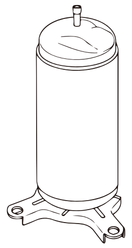
Insect proof

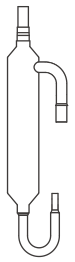
SuperSense

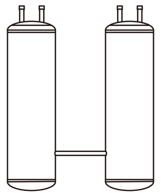
VC MAX Series VRF uses up to 17 sensors for each outdoor unit and 4 sensors for each indoor unit. The operating status of the system refrigerant is clearly visible, which can achieve intelligent analysis of operation parameters, intelligent error diagnosis and forecasting, and visualized energy saving.

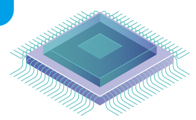
Precise Oil Control

Four stages of oil control technology ensure all outdoor compressor oil is always kept at a safe level, eliminating any compressor oil shortage problems.

1  Compressor internal oil separation.

2  High-efficiency centrifugal oil separator (with separation efficiency of up to 99%) ensures that oil is separated from the discharge gas and returned to the compressors in a timely fashion.

3  Oil balance pipes between gas-liquid separator ensure even oil distribution to keep compressors running normally.

4  The automatic oil return program determines the oil return through the running time and the oil discharge amount, enabling precise oil return.

Heavy Anti-corrosion Protection*

Standard outdoor units are given anti-corrosion treatment for non-extreme conditions and can also be customized with heavy anti-corrosion treatment on main components for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life. The integrity of the anti-corrosion treatment is ensured by subjecting major components and parts to salt mist testing, moisture and heating testing and light aging testing.

*Heavy anti-corrosion treatment is available as a customization option.

UL Anti-Corrosion Certificate*

It has been certified by UL that our VRF outdoor unit can withstand 27 years of simulated severe corrosion under a salt contaminated traffic environment.

*UL anti-corrosion certificate is available for heavy anti-corrosion treatment units.

Outdoor Unit can resist 27 years of simulated severe corrosion under a salt contaminated traffic environment

A926834

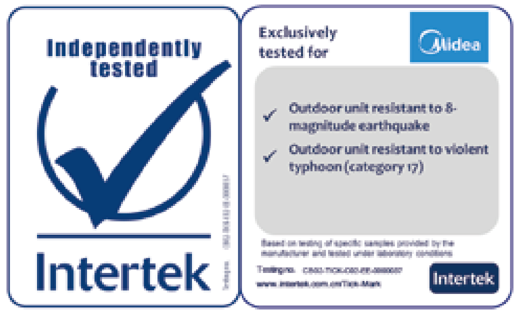
Auto Dust-clean Function

The innovatively designed dust-clean function enables the outdoor unit to prevent the dust by itself.

Resistant to Magnitude 8 Earthquakes*

The VC MAX Series VRF has a reinforced frame footprint to prevent tipping and deformation damage and can still operate normally in magnitude 8 earthquakes.

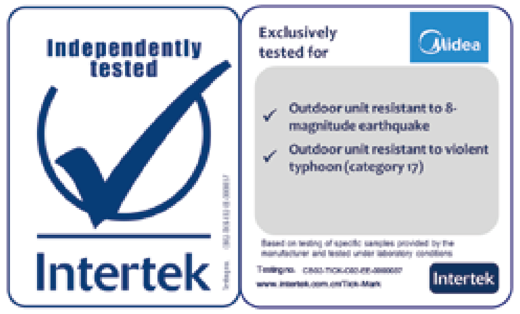
*This function is available as a customization option.



Resistant to Violent Typhoons*

The VC MAX Series VRF has reinforced trusses and double fastening for stable operation even under violent typhoons (Category 17).

*This function is available as a customization option.



Enhanced Comfort

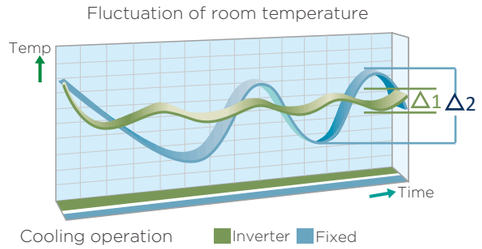
Advanced Silent Technology

15-step silent mode provide more freedom and convenience to match the customer needs.

15 silent options

Fast Cooling

Thanks to advanced full DC inverter technology, the system can quickly reach full load output, shorten cooling time, reduce temperature fluctuations, and create a more comfortable living environment.



Wide Application Range

Wide Capacity Range

The capacity of one VC MAX Series VRF system is from 8HP to 90HP with up to 3 units combined, perfectly suited for small to large buildings.

8-20HP

22-30HP

32-60HP

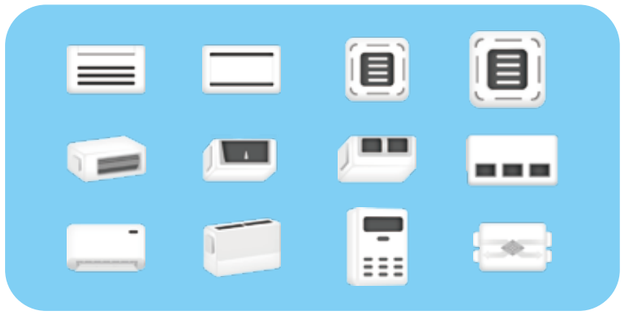
62-90HP

Wide Operation Range

Thanks to the refrigerant cooling technology, the VC MAX Series VRF can operate stably in a temperature range as low as -15°C and as high as 55°C.

Wide Range of Indoor Units

The VC MAX Series VRF offers 12 types of over 100 models of indoor units to meet different scenarios of applications such as offices, shopping malls, hotels, airports, schools, hospitals, etc.



Long Piping Capability

The VC MAX system can support a total piping length of up to 1100m, an installation height difference of up to 110m between indoor and outdoor units, and up to 40m between indoor units, making the VC MAX Series VRF adaptable to a wide range of building designs.

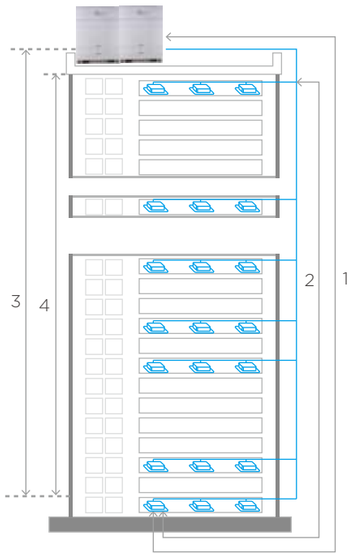
Total piping length: **1100m**
1 Longest piping length - actual (equivalent): **220(260)m**

2 Longest piping length after first branch: **40/120*m**

3 Level difference between IDUs and ODU - ODU above (below): **110(110)m**

4 Level difference between IDUs: **40m**

*The longest length after first branch is 40m as a standard but can be extended to up to 120m under certain conditions. Please contact your local dealer for further information.



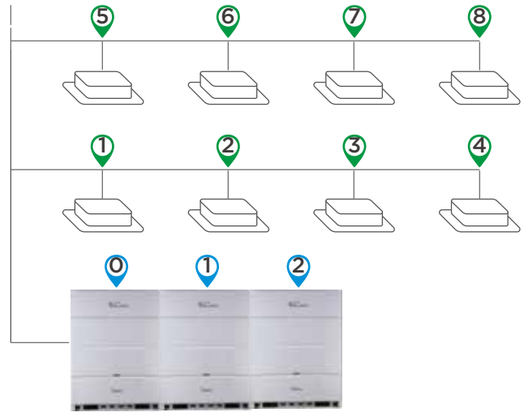
Easy Installation and Service

Free Wiring

HyperLink communication technology supports any wiring pattern rather than just daisy chain connection, reducing the installation cost and the possibility of incorrect connection. It has stronger anti-interference ability, achieving a communication distance of up to 2000m.

Auto Addressing

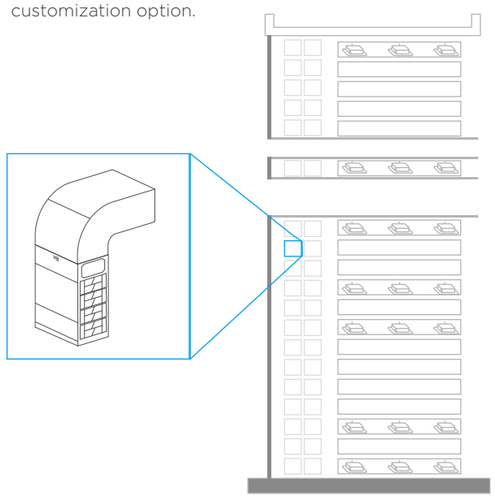
Addresses for all indoor units and combined outdoor units can be assigned automatically by the VC MAX system, further simplifying installation.



External Static Pressure up to 120Pa*

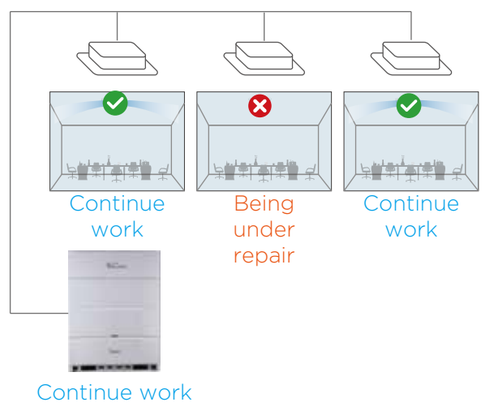
The static pressure of the outdoor unit can be up to 120Pa which facilitates installation of the unit on each floor of high-rise buildings or on balconies.

*External static pressure above 20Pa is available as a customization option.



Maintenance Mode

The maintenance mode allows the shutdown of some indoor units without shutting down the whole VRF system, and it can be activated on site during the maintenance period as the remaining indoor units continue to operate.



Automatic Refrigerant Charging*

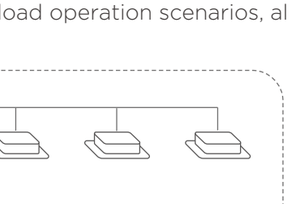
Compared to manual refrigerant charging, automatic refrigerant charging greatly simplifies the process, making installation and maintenance easier and more efficient.

Manual refrigerant charging

1. Calculate additional refrigerant quantity
2. Connect refrigerant tank to the outdoor unit & start the filling process
3. Observe the weight scale to check the refrigerant charge
4. Close the shut-off valve manually & finish the filling process

Automatic refrigerant charging

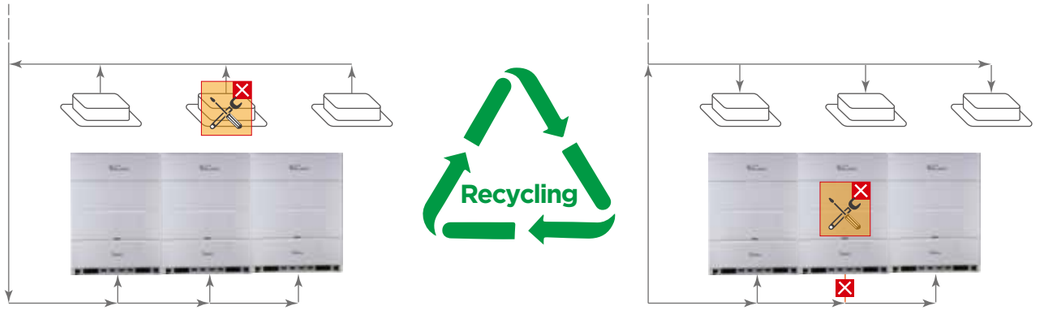
1. Connect refrigerant tank to the outdoor unit & activate automatic charging function
2. Close the shut-off valve automatically & finish the filling process



*This function is available as a customization option.

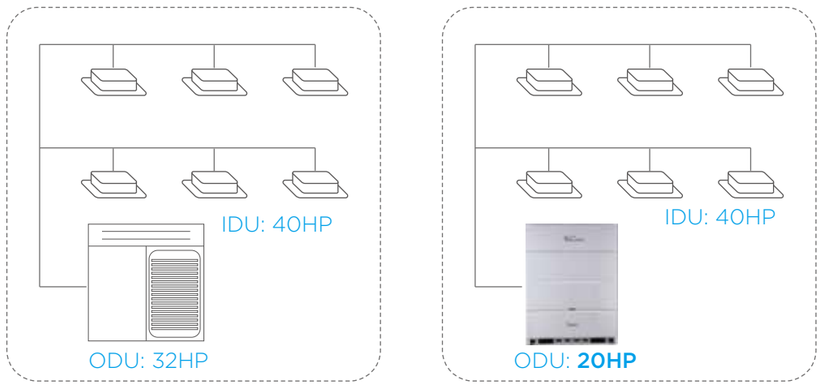
Automatic Refrigerant Recycling

When an indoor unit fails, the refrigerant can be recycled into the outdoor units. When part of the outdoor unit fails, the refrigerant can be recycled into the indoor units and the normal outdoor unit. Two types of refrigerant recycling make the maintenance process easier and more efficient.



Wide Combination Ratio*

Compared to traditional VRF with combination ratio of 50-130%, the VC MAX Series VRF can be extended to 50-200%, and the wider combination ratio allows for more flexible system configuration. The larger combination ratio can be applied to long-term part-load operation scenarios, allowing for further reduction in installation costs.



Traditional VRF System | VC MAX Series VRF System

*Combination ratio over 130% is available as a customization option.

Easy Software Program Upgrade

In addition to upgrading the program of outdoor and indoor units through USB and burner, the new product can also remotely upgrade all the programs of indoor and outdoor units through the data cloud gateway, making system upgrades very convenient and ensuring that the system program is always up to date.

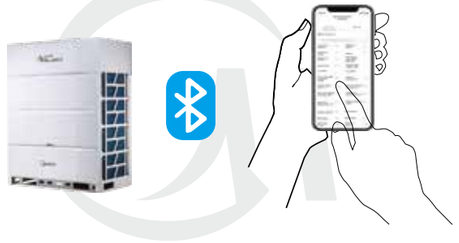
*The data cloud gateway needs to be purchased separately.

Smart Commissioning/Maintenance Tool

With the newly developed smart tool (Bluetooth module and special Bluetooth after-sales kit), system settings, operating parameter queries, trial runs and programme upgrades are all possible without opening the cabinet.

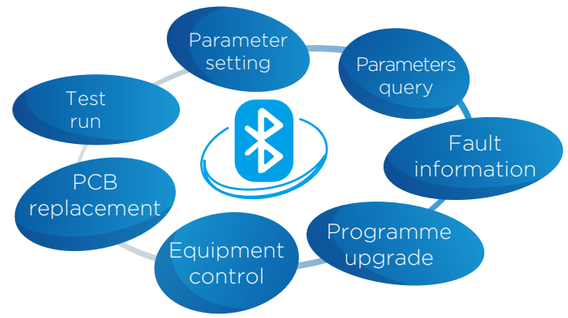
Useful in the following situations:

- Installation
- Service maintenance



Main functions:

- Fault information storage
- Operating parameters query
- Start commissioning test run
- System parameter setting
- Quick after-sales PCB replacement
- Equipment control
- Indoor and outdoor units programme upgrade



Specifications

VC MAX Series VRF

HP			8	10	12
Model name			MVC-M224WV2GN1	MVC-M280WV2GN1	MVC-M335WV2GN1
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	22.4	28	33.5
		kBtu/h	76.4	95.5	114.2
	Power input	kW	4.8	6.8	8.8
	EER		4.65	4.14	3.81
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		13	16	19
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		1	1	1
Fan	Type		DC	DC	DC
	Quantity		1	1	1
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	12600	12600	13500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	7.4	7.4	7.4
Pipe connections[2]	Liquid pipe	mm	Φ12.7	Φ12.7	Φ12.7
	Gas pipe	mm	Φ25.4	Φ25.4	Φ25.4
Sound pressure level[3]		dB(A)	57	58	60
Net dimensions (W×H×D)		mm	940×1760×825	940×1760×825	940×1760×825
Packed dimensions (W×H×D)		mm	1010×1945×890	1010×1945×890	1010×1945×890
Net weight		kg	185	185	185
Gross weight		kg	200	200	200
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			14	16	18
Model name			MVC-M400WV2GN1	MVC-M450WV2GN1	MVC-M500WV2GN1
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	40	45	50
		kBtu/h	136.4	153.5	170.5
	Power input	kW	9.7	12.3	13.4
	EER		4.12	3.67	3.74
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		23	26	29
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		1	1	1
Fan	Type		DC	DC	DC
	Quantity		1	1	2
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	15600	15600	16500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	8.4	8.4	10
Pipe connections[2]	Liquid pipe	mm	Φ15.9	Φ15.9	Φ15.9
	Gas pipe	mm	Φ28.6	Φ28.6	Φ28.6
Sound pressure level[3]		dB(A)	60	61	62
Net dimensions (W×H×D)		mm	940×1760×825	940×1760×825	940×1760×825
Packed dimensions (W×H×D)		mm	1010×1945×890	1010×1945×890	1010×1945×890
Net weight		kg	200	200	212
Gross weight		kg	215	215	232
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's stop valves.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Specifications

VC MAX Series VRF

HP			20	22	24
Model name			MVC-M560WV2GN1	MVC-M615WV2GN1	MVC-M670WV2GN1
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	56	61.5	67
		kBtu/h	191.0	209.7	228.5
	Power input	kW	17.4	17.3	19.0
	EER		3.21	3.55	3.52
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		33	36	39
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		1	1	1
Fan	Type		DC	DC	DC
	Quantity		2	2	2
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	16500	21500	21500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10	12.8	12.8
Pipe connections[2]	Liquid pipe	mm	Φ15.9	Φ19.1	Φ19.1
	Gas pipe	mm	Φ28.6	Φ31.8	Φ31.8
Sound pressure level[3]		dB(A)	63	63	64
Net dimensions (W×H×D)		mm	940×1760×825	1340×1760×825	1340×1760×825
Packed dimensions (W×H×D)		mm	1010×1945×890	1410×1945×890	1410×1945×890
Net weight		kg	225	260	260
Gross weight		kg	245	285	285
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			26	28	30
Model name			MVC-M730WV2GN1	MVC-M785WV2GN1	MVC-M850WV2GN1
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	73	78.5	85
		kBtu/h	248.9	267.7	289.9
	Power input	kW	19.4	22.3	26.4
	EER		3.76	3.52	3.22
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		43	46	50
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		2	2	2
Fan	Type		DC	DC	DC
	Quantity		2	2	2
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	22000	22000	22000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	15.4	15.4	15.4
Pipe connections[2]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2
	Gas pipe	mm	Φ31.8	Φ31.8	Φ31.8
Sound pressure level[3]		dB(A)	64	64	64
Net dimensions (W×H×D)		mm	1340×1760×825	1340×1760×825	1340×1760×825
Packed dimensions (W×H×D)		mm	1410×1945×890	1410×1945×890	1410×1945×890
Net weight		kg	325	325	325
Gross weight		kg	350	350	350
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's stop valves.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Specifications

VC MAX Series VRF

HP			32	34	36
Model name (Combination unit)			MVC-M900WV2GN1	MVC-M960WV2GN1	MVC-M1010WV2GN1
Combination type			16HP+16HP	14HP+20HP	16HP+20HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	90.0	96.0	101.0
		kBtu/h	307.0	327.4	344.5
	Power input	kW	24.6	27.1	29.7
	EER		3.66	3.54	3.40
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		53	56	59
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		2	2	2
Fan	Type		DC	DC	DC
	Quantity		2	3	3
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	31200	32100	32100
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	8.4×2	8.4+10	8.4+10
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ31.8	Φ31.8	Φ38.1
Sound pressure level[3]		dB(A)	64	65	65
Net dimensions (W×H×D)		mm	(940×1760×825)×2	(940×1760×825)×2	(940×1760×825)×2
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2	(1010×1945×890)×2	(1010×1945×890)×2
Net weight		kg	200×2	200+225	200+225
Gross weight		kg	215×2	215+245	215+245
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			38	40	42
Model name (Combination unit)			MVC-M1060WV2GN1	MVC-M1120WV2GN1	MVC-M1170WV2GN1
Combination type			18HP+20HP	16HP+24HP	18HP+24HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	106.0	112.0	117.0
		kBtu/h	361.5	382.0	399.0
	Power input	kW	30.8	31.3	32.4
	EER		3.44	3.58	3.61
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		62	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		2	2	2
Fan	Type		DC	DC	DC
	Quantity		4	3	4
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	33000	37100	38000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10×2	8.4+12.8	10+12.8
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ38.1	Φ38.1	Φ38.1
Sound pressure level[3]		dB(A)	66	66	66
Net dimensions (W×H×D)		mm	(940×1760×825)×2	(940×1760×825)+(1340×1760×825)	(940×1760×825)+(1340×1760×825)
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2	(1010×1945×890)+(1410×1945×890)	(1010×1945×890)+(1410×1945×890)
Net weight		kg	212+225	200+260	212+260
Gross weight		kg	232+245	215+285	232+285
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Specifications

VC MAX Series VRF

HP			44	46	48
Model name (Combination unit)			MVC-M1230WV2GN1	MVC-M1300WV2GN1	MVC-M1350WV2GN1
Combination type			20HP+24HP	16HP+30HP	18HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	123.0	130.0	135.0
		kBtu/h	419.5	443.4	460.4
	Power input	kW	36.4	38.7	39.8
	EER		3.38	3.36	3.39
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		2	3	3
Fan	Type		DC	DC	DC
	Quantity		4	3	4
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	38000	37600	38500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10+12.8	8.4+15.4	10+15.4
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ38.1	Φ38.1	Φ38.1
Sound pressure level[3]		dB(A)	67	66	66
Net dimensions (W×H×D)		mm	(940×1760×825)+(1340×1760×825)	(940×1760×825)+(1340×1760×825)	(940×1760×825)+(1340×1760×825)
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410×1945×890)	(1010×1945×890)+(1410×1945×890)	(1010×1945×890)+(1410×1945×890)
Net weight		kg	225+260	200+325	212+325
Gross weight		kg	245+285	215+350	232+350
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			50	52	54
Model name (Combination unit)			MVC-M1410WV2GN1	MVC-M1465WV2GN1	MVC-M1520WV2GN1
Combination type			20HP+30HP	22HP+30HP	24HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	141.0	146.5	152.0
		kBtu/h	480.9	499.6	518.4
	Power input	kW	43.8	43.7	45.4
	EER		3.22	3.35	3.35
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		3	3	3
Fan	Type		DC	DC	DC
	Quantity		4	4	4
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	38500	43500	43500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10+15.4	12.8+15.4	12.8+15.4
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ38.1	Φ38.1	Φ38.1
Sound pressure level[3]		dB(A)	67	67	67
Net dimensions (W×H×D)		mm	(940×1760×825)+(1340×1760×825)	(1340×1760×825)×2	(1340×1760×825)×2
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410×1945×890)	(1410×1945×890)×2	(1410×1945×890)×2
Net weight		kg	225+325	260+325	260+325
Gross weight		kg	245+350	285+350	285+350
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Specifications

VC MAX Series VRF

HP			56	58	60
Model name (Combination unit)			MVC-M1580WV2GN1	MVC-M1635WV2GN1	MVC-M1700WV2GN1
Combination type			26HP+30HP	28HP+30HP	30HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	158.0	163.5	170.0
		kBtu/h	538.8	557.6	579.8
	Power input	kW	45.8	48.7	52.8
	EER		3.45	3.36	3.22
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		4	4	4
Fan	Type		DC	DC	DC
	Quantity		4	4	4
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	44000	44000	44000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	15.4×2	15.4×2	15.4×2
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ41.3	Φ41.3	Φ41.3
Sound pressure level[3]		dB(A)	67	67	67
Net dimensions (W×H×D)		mm	(1340×1760×825)×2	(1340×1760×825)×2	(1340×1760×825)×2
Packed dimensions (W×H×D)		mm	(1410×1945×890)×2	(1410×1945×890)×2	(1410×1945×890)×2
Net weight		kg	325×2	325×2	325×2
Gross weight		kg	350×2	350×2	350×2
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			62	64	66
Model name (Combination unit)			MVC-M1750WV2GN1	MVC-M1810WV2GN1	MVC-M1860WV2GN1
Combination type			16HP+16HP+30HP	14HP+20HP+30HP	16HP+20HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	175.0	181.0	186.0
		kBtu/h	596.9	617.3	634.4
	Power input	kW	51.0	53.5	56.1
	EER		3.43	3.38	3.32
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		4	4	4
Fan	Type		DC	DC	DC
	Quantity		4	5	5
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	53200	54100	54100
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	8.4×2+15.4	8.4+10+15.4	8.4+10+15.4
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ41.3	Φ41.3	Φ41.3
Sound pressure level[3]		dB(A)	67	67	68
Net dimensions (W×H×D)		mm	(940×1760×825)×2+(1340×1760×825)	(940×1760×825)×2+(1340×1760×825)	(940×1760×825)×2+(1340×1760×825)
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2+(1410×1945×890)	(1010×1945×890)×2+(1410×1945×890)	(1010×1945×890)×2+(1410×1945×890)
Net weight		kg	200×2+325	200+225+325	200+225+325
Gross weight		kg	215×2+350	215+245+350	215+245+350
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Specifications

VC MAX Series VRF

HP			68	70	72
Model name (Combination unit)			MVC-M1910WV2GN1	MVC-M1970WV2GN1	MVC-M2020WV2GN1
Combination type			18HP+20HP+30HP	16HP+24HP+30HP	18HP+24HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	191.0	197.0	202.0
		kBtu/h	651.4	671.9	688.9
	Power input	kW	57.2	57.7	58.8
	EER		3.34	3.41	3.44
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		4	4	4
Fan	Type		DC	DC	DC
	Quantity		6	5	6
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	55000	59100	60000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10×2+15.4	8.4+12.8+15.4	10+12.8+15.4
Pipe connections[2]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2
	Gas pipe	mm	Φ44.5	Φ44.5	Φ44.5
Sound pressure level[3]		dB(A)	68	68	68
Net dimensions (W×H×D)		mm	(940×1760×825)×2+(1340×1760×825)	(940×1760×825)+(1340×1760×825)×2	(940×1760×825)+(1340×1760×825)×2
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2+(1410×1945×890)	(1010×1945×890)+(1410×1945×890)×2	(1010×1945×890)+(1410×1945×890)×2
Net weight		kg	212+225+325	200+260+325	212+260+325
Gross weight		kg	232+245+350	215+285+350	232+285+350
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			74	76	78
Model name (Combination unit)			MVC-M2080WV2GN1	MVC-M2150WV2GN1	MVC-M2200WV2GN1
Combination type			20HP+24HP+30HP	16HP+30HP+30HP	18HP+30HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	208.0	215.0	220.0
		kBtu/h	709.4	733.3	750.3
	Power input	kW	62.8	65.1	66.2
	EER		3.31	3.30	3.32
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		4	5	5
Fan	Type		DC	DC	DC
	Quantity		6	5	6
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	60000	59600	60500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10+12.8+15.4	8.4+15.4×2	10+15.4×2
Pipe connections[2]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2
	Gas pipe	mm	Φ44.5	Φ44.5	Φ44.5
Sound pressure level[3]		dB(A)	69	68	68
Net dimensions (W×H×D)		mm	(940×1760×825)+(1340×1760×825)×2	(940×1760×825)+(1340×1760×825)×2	(940×1760×825)+(1340×1760×825)×2
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410×1945×890)×2	(1010×1945×890)+(1410×1945×890)×2	(1010×1945×890)+(1410×1945×890)×2
Net weight		kg	225+260+325	200+325×2	212+325×2
Gross weight		kg	245+285+350	215+350×2	232+350×2
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Specifications

VC MAX Series VRF

HP			80	82	84
Model name (Combination unit)			MVC-M2260WV2GN1	MVC-M2315WV2GN1	MVC-M2370WV2GN1
Combination type			20HP+30HP+30HP	22HP+30HP+30HP	24HP+30HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	226.0	231.5	237.0
		kBtu/h	770.8	789.5	808.3
	Power input	kW	70.2	70.1	71.8
	EER		3.22	3.30	3.30
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		5	5	5
Fan	Type		DC	DC	DC
	Quantity		6	6	6
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	60500	65500	65500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10+15.4×2	12.8+15.4×2	12.8+15.4×2
Pipe connections[2]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ25.4
	Gas pipe	mm	Φ44.5	Φ44.5	Φ50.8
Sound pressure level[3]		dB(A)	69	69	69
Net dimensions (W×H×D)		mm	(940×1760×825)+(1340×1760×825)×2	(1340×1760×825)×3	(1340×1760×825)×3
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410×1945×890)×2	(1410×1945×890)×3	(1410×1945×890)×3
Net weight		kg	225+325×2	260+325×2	260+325×2
Gross weight		kg	245+350×2	285+350×2	285+350×2
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

HP			86	88	90
Model name (Combination unit)			MVC-M2430WV2GN1	MVC-M2485WV2GN1	MVC-M2550WV2GN1
Combination type			26HP+30HP+30HP	28HP+30HP+30HP	30HP+30HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	243.0	248.5	255.0
		kBtu/h	828.7	847.5	869.7
	Power input	kW	72.2	75.1	79.2
	EER		3.37	3.31	3.22
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		6	6	6
Fan	Type		DC	DC	DC
	Quantity		6	6	6
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	66000	66000	66000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	15.4×3	15.4×3	15.4×3
Pipe connections[2]	Liquid pipe	mm	Φ25.4	Φ25.4	Φ25.4
	Gas pipe	mm	Φ50.8	Φ50.8	Φ50.8
Sound pressure level[3]		dB(A)	69	69	69
Net dimensions (W×H×D)		mm	(1340×1760×825)×3	(1340×1760×825)×3	(1340×1760×825)×3
Packed dimensions (W×H×D)		mm	(1410×1945×890)×3	(1410×1945×890)×3	(1410×1945×890)×3
Net weight		kg	325×3	325×3	325×3
Gross weight		kg	350×3	350×3	350×3
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.