C-V8EASYFIT202305

Midea

V8 EasyFit Series

Catalogue

SMART IN ONE

2023

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

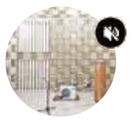
Midea MBT (Midea Building Technologies) is a key division of the Midea Group, a leading provider of comprehensive solutions for intelligent buildings. It specializes in energy sources, elevators, control systems, and heating, ventilation & air conditioning. Midea MBT continues the tradition of innovation 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

1999

- Cooperated with Toshiba in inverter technologies

2005

V3

- Launched **V3** Series VRF AC inverter + fixed compressor
- Maximum capacity of single unit is 16HP

2008-2014

V4

- Launched **V4, D4** Series VRF
- Complete product line with heat pump series, heat recovery series and water - cooled series.
- Maximum capacity of single unit is 16HP

2014

V5X

- Launched **V5X** Series VRF
- Full DC inverter technology
- Maximum capacity of single unit is 22HP

2017-2020

V6 ALL DC INVERTER

- Launched heat pump **V6** Series VRF, cooling only **VC Pro** Series VRF and heat recovery **V6R** Series VRF
- Full DC inverter technology
- Maximum capacity of single unit is 32HP

2022

V8

- Launching the 8th generation **V8** Series VRF, including side-discharge **EasyFit** series
- Full DC inverter technology
- Capacity of EasyFit is from 8HP to 24HP

Benefits of Midea VRF

For End-users

Healthy Operation

Cost Saving Operation

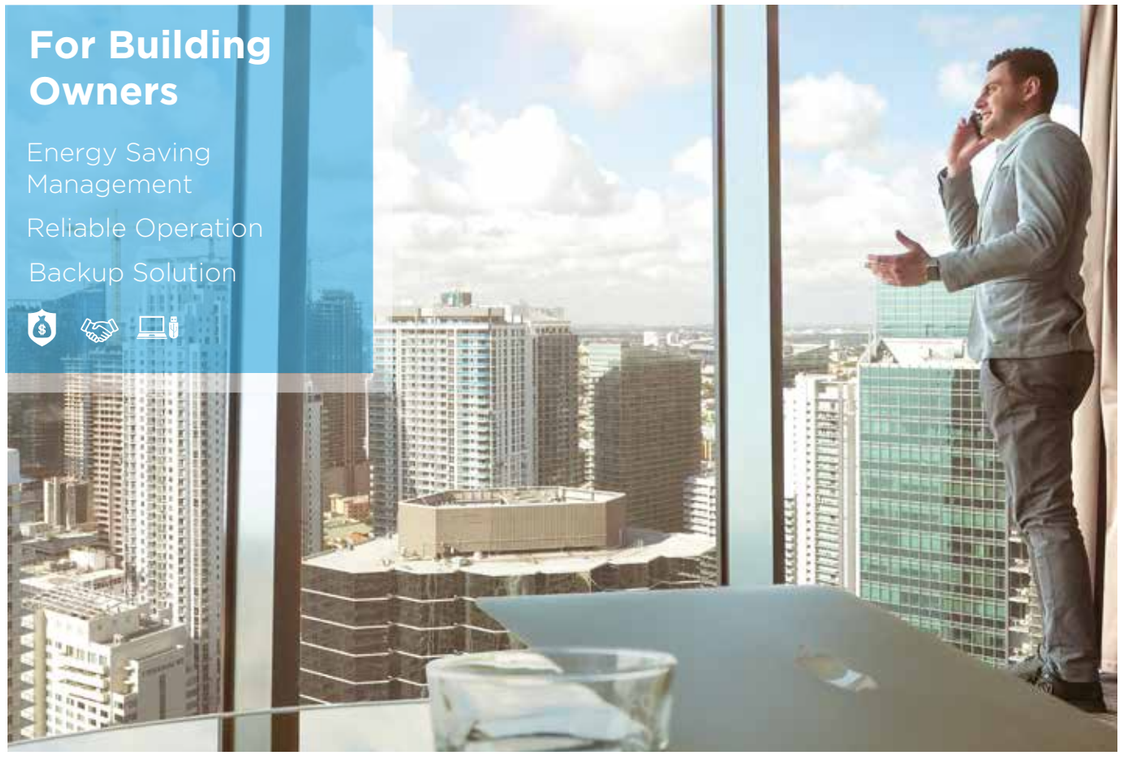
Comfortable Environment

For Consultants

Diversified Solutions

Professional Tool and Support

Design Flexibility



For Building Owners

Energy Saving Management

Reliable Operation

Backup Solution

For Construction Companies

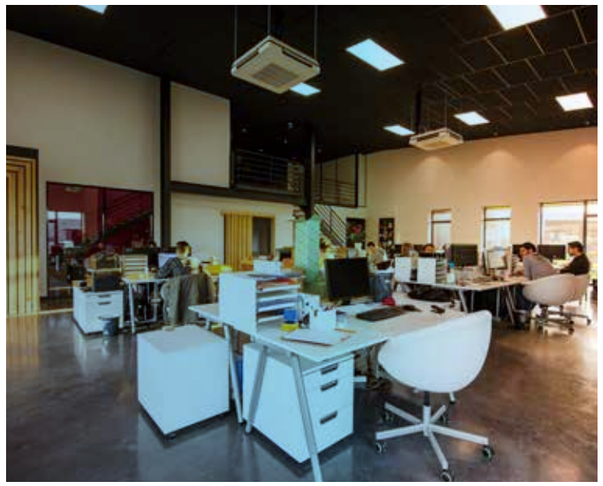
Green Solutions

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.

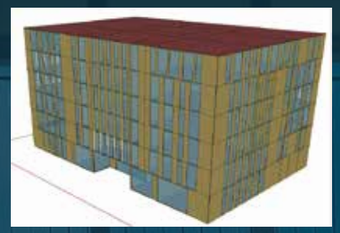
Hospitals/ Schools/ Airports

Meeting all expectations

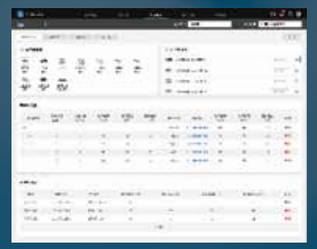
The innovative design and variety of indoor unit options make Midea VRF suitable for all kinds of applications. The newly designed puro-air kit is perfect for modern hospitals.

ALL DIGITALIZED SERVICE

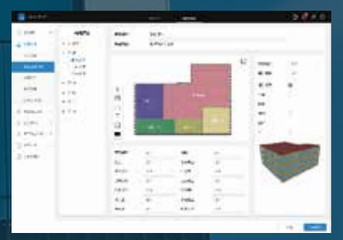
Design Service



Energy Plus
Building load
calculation

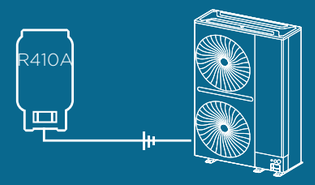


BIM
building
information
import



MSSP Online
VRF system design

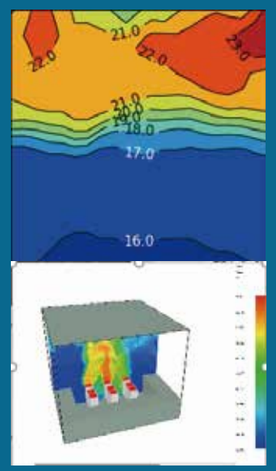
Installation service



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

EasyFit VRF

The EasyFit Series VRF uses algorithms and self-learning technology to monitor the operation of the equipment, so that the equipment can run stably and be maintained in time to ensure that the equipment always runs in optimal condition throughout its life cycle.

8-16HP	18-24HP
	

Outdoor Unit Functions

Functions ●: equipped as standard; O: customization option			EasyFit
Key Technologies	HyperLink	Midea's original communication bus chip greatly simplifies installation and saves installation costs	●
	SuperSense	18 sensors monitor the state of each part of the refrigerant pipeline throughout the whole process	●
	Meta 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 both cooling and heating 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	●

Functions ●: equipped as standard; O: customization option			EasyFit
High Reliability	Backup operation (fan motor)	If one fan motor fails, the other fan motor provides backup so that the system can continue operating	●
	Backup operation (sensor)	If one sensor fails, the virtual sensor provides backup so that the system can continue operating	●
	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	●
	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	●
	Silent mode	15-step silent mode selections provide more freedom and convenience to match the needs of customers	●

Outdoor Unit Functions

Functions			EasyFit
●: equipped as standard; O: customization option			
Enhanced Comfort	Intelligent defrosting technology	Calculates the time required for defrosting according to the actual system status, eliminating heat losses from unnecessary defrosting	●
	Auto cooling-heating changeover	Automatically selects cooling or heating mode to achieve the set temperature (available in changeover priority mode)	●
	Additional ambient temperature sensor	The additional external ambient temperature sensor can detect the true outdoor ambient temperature, correctly judge whether the system is running in cooling or heating in auto priority mode, ensuring indoor comfort	○
	0.1 °C control precision	Control precision of the sensor can reach 0.1°C, ensuring less fluctuations in room temperature	●
	Multiple priority modes	10 priority modes meet the requirements of all scenarios	●
Wide Application Range	Wide capacity range	Meets all customer requirements from small to large buildings	8-24HP
	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 (C) -30-30°C (H)
	Long piping capability	Benefits for the system design, installation flexibility, as well as the less installation cost	●
	Auto addressing	Distributes addresses to indoor units automatically, simplifying the installation	●
	Automatic refrigerant charging	Makes installation and service easier and more efficient	○
	Automatic refrigerant recycling	Refrigerant can be recycled to ODUs or IDUs, 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.	○

Functions			EasyFit
●: equipped as standard; O: customization option			
Easy Installation And Service	Digit display	4 digit 7-segment display can be intuitive for parameter setting, parameter checks and error checks	●
	High external static pressure	Up to 80Pa ESP allows easy handling in a variety of installation environments	0-35Pa ● 35-80Pa ○
	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% ○
	Supports manual and automatic defrosting	Improves maintenance efficiency	●
	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

SuperSense

ETA 2.0

ENair 2.0

DOCTOR m. 2.0

HyperLink

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

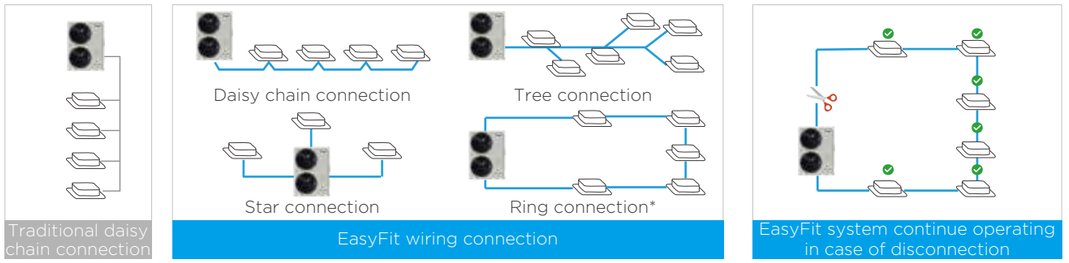
Benefits

- 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.



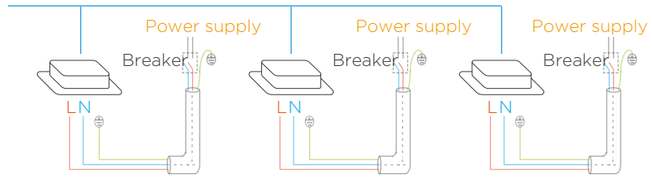
*In ring connection, the communication wire must be connected polarized (M1 port to M1 port and M2 port to M2 port).

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.



SuperSense

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

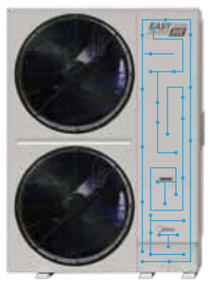
Benefits

- High reliability
- Stable operation
- Enhanced comfort

Up to 18 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.

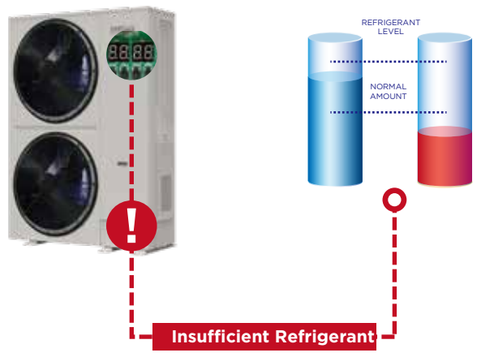
Complete Sensors

The EasyFit VRF features the industry's most comprehensive range of 18 condition sensors with built-in data models for compressors, heat exchangers, throttling components and more. By analyzing sensor data in real time, it can sense the status of the refrigerant anywhere in the system.



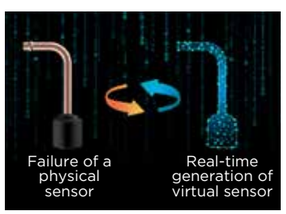
Refrigerant Amount Diagnosis

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

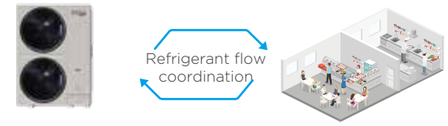
- Energy saving
- Enhanced comfort
- Fast cooling/heating

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.

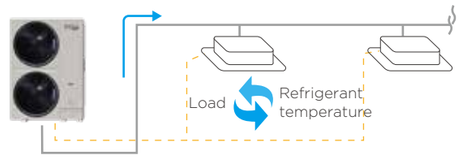


Automatic calculation of the building load and the required refrigerant quantity based on the sensor parameters.

Variable Refrigerant Temperature

STEP 2: System refrigerant temperature determination

The system automatically matches the evaporating temperature (in cooling) or condensing temperature (in heating) to the room load to maximize comfort and energy efficiency.



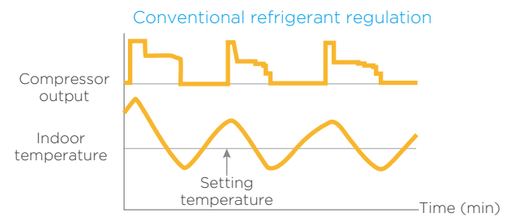
Automatic matching of the corresponding refrigerant temperature to the load.

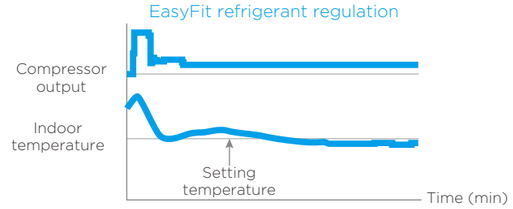
Variable Indoor Airflow

STEP 3: Adaptive indoor airflow and refrigerant flow

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

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





Zen Air 2.0

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

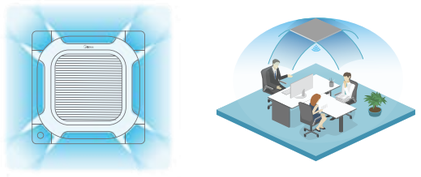
Benefits

- 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 EasyFit 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.

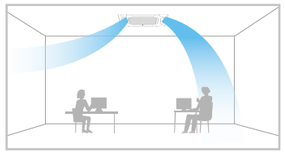


7 Fan Speeds

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

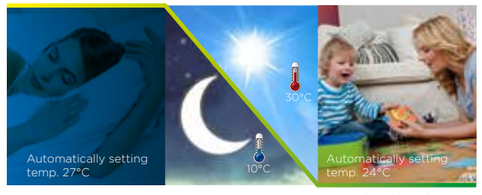
Individual Louver Control

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



Sleep Mode

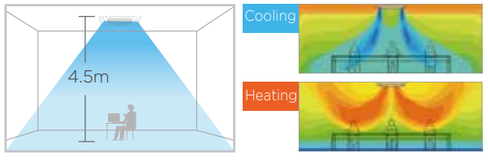
The smart sleep mode provides a comfortable sleep period and a refreshing wake up time.



*Temperature on left is for reference.

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 EasyFit 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.

* Bluetooth module is available as a customization option.

Real-time Monitoring of Operating Parameters

The EasyFit 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 EasyFit 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.

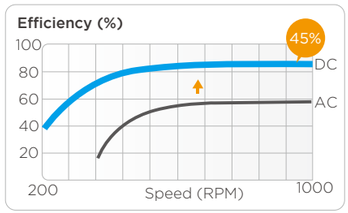
*The data cloud gateway is still under development and needs to be purchased separately.

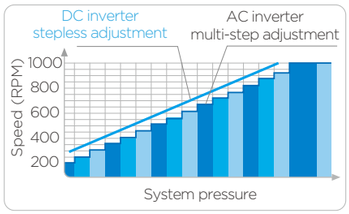
High Efficiency

Full DC Inverter Technology

Full DC Inverter for Outdoor Components

The EasyFit 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 and heating

Higher energy efficiency

Full DC Inverter for Indoor Components

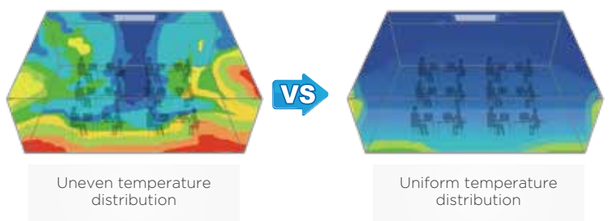
All power devices such as indoor fan motor, drain pump and electric control board are fully DC, which increases electrical efficiency by 20% and results in more accurate temperature control, a more constant indoor temperature and higher energy efficiency.


Fan motor


Drain pump

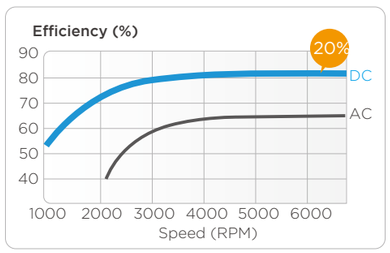

Electric control board

20% Efficiency improvements



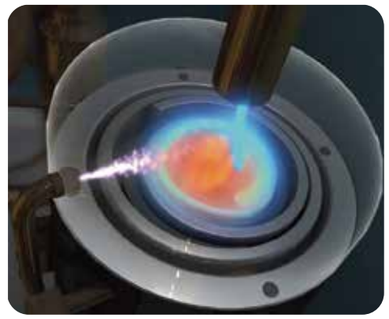
Uneven temperature distribution

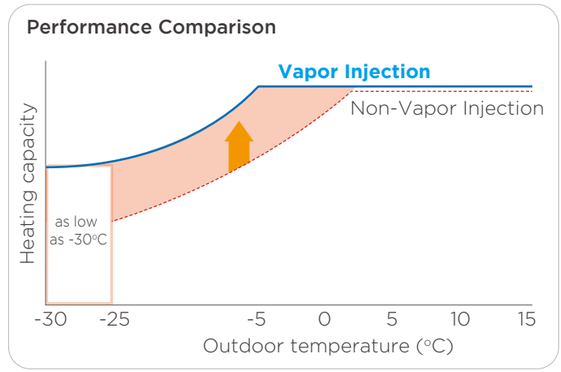
Uniform temperature distribution



Enhanced Vapor Injection (EVI) Compressor

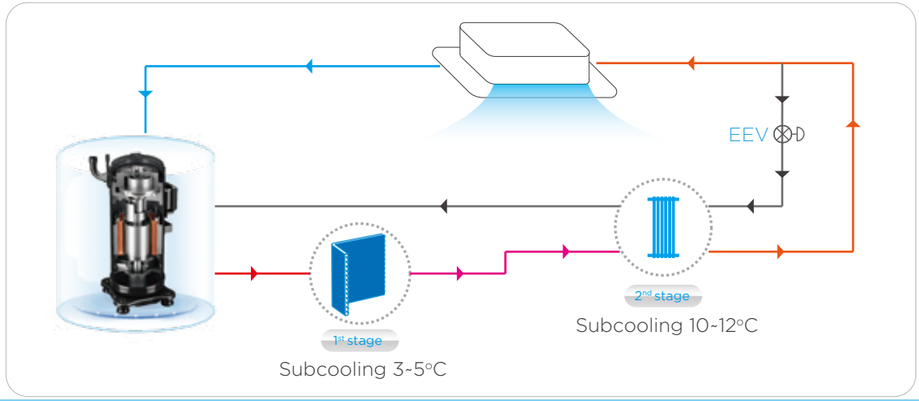
The enhanced vapor injection DC inverter compressor increases refrigerant circulation and improves both cooling and heating capacity.





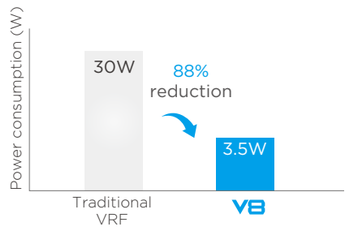
Advanced Subcooling Technology

The EasyFit 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.



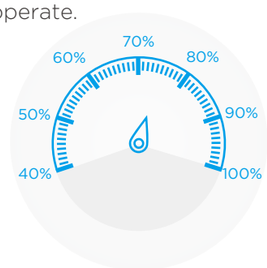
Low Standby Power Consumption

Compared to the standby power consumption of traditional VRF of about 30W, the EasyFit 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

Double Backup

The EasyFit supports fan backup and sensor backup. The double backup ensures no shutdown in the event of a failure, further guaranteeing comfort.

1 Fan Backup

In EasyFit unit, 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

2 Sensor Backup

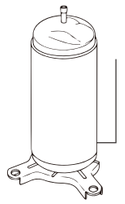
Through digital algorithms, each physical sensor generates a corresponding virtual sensor that acts as a backup to each other, ensuring that the failure of one sensor does not affect the normal operation of the system.

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

Precise Oil Control

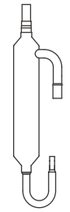
Three stages of oil control technology ensure all outdoor compressor oil is always kept at a safe level, eliminating any compressor oil shortage problems.

1



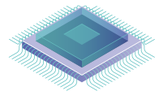
Compressor internal oil separation.

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



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

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

verify.ul.com A926834

Auto Dust-clean Function

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

Self-cleaning

Enhanced Comfort

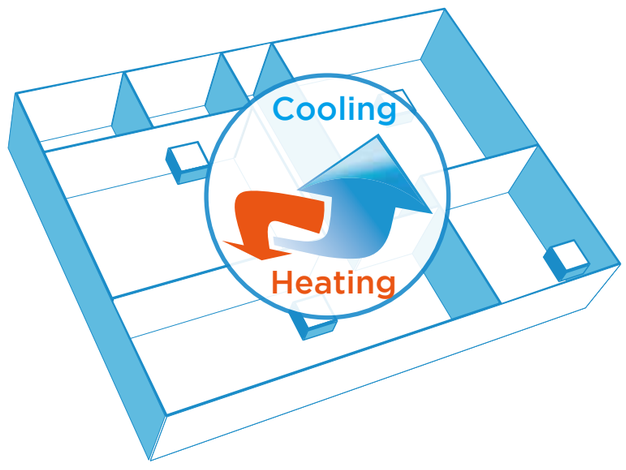
Advanced Silent Technology

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

15 silent options

Auto Cooling-heating Changeover

Automatically selects cooling or heating mode to achieve the set temperature.



10 Priority Modes

10 priority mode options provide more freedom and convenience to match the customer needs.

Additional Ambient Temperature Sensor*

The EasyFit Series VRF can be equipped with an additional external ambient temperature sensor to determine whether the system is operating in cooling or heating in auto priority mode. For some installations, the ambient temperature sensor fixed on the unit cannot detect the true ambient temperature, resulting in the system operating in an inappropriate mode and affecting indoor comfort. The external ambient temperature sensor can detect the true outdoor ambient temperature, and correctly judge whether the system is running in cooling or heating mode, ensuring indoor comfort.

*This function is available as a customization option.

Wide Application Range

Wide Capacity Range

The capacity of EasyFit Series VRF is from 8HP to 24HP, perfectly suitable for all kinds of small and medium-sized buildings.

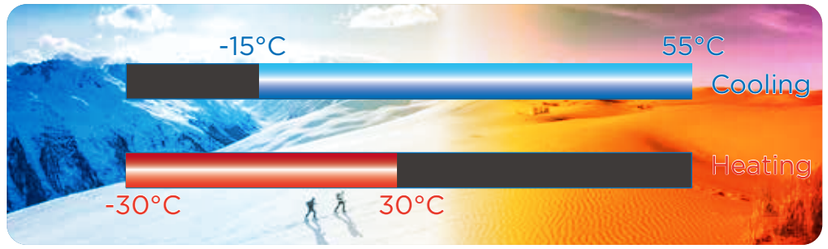
8-16HP	18-24HP
	

Wide Range of Indoor Units

The EasyFit Series VRF offers a variety of types of indoor units to meet different scenarios of applications such as offices, villas, restaurants, etc.

Wide Operation Range

Thanks to the EVI compressor and refrigerant cooling technology, the EasyFit Series VRF can operate at temperatures as low as -30°C for heating and up to 55°C for cooling.



Long Piping Capability

The EasyFit system can support a total piping length of up to 560m, an installation height difference of up to 50m between indoor and outdoor units, and up to 30m between indoor units, making the EasyFit Series VRF adaptable to a wide range of building designs.

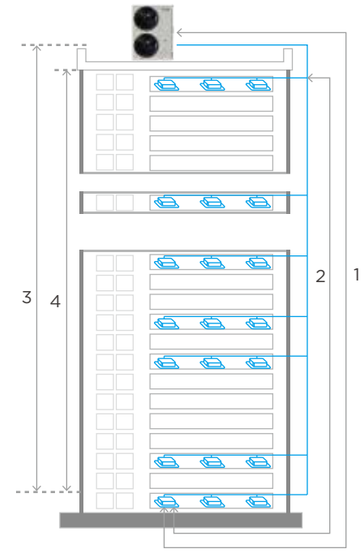
Total piping length: **560m**
1 Longest piping length - actual (equivalent): **150(175)m**

2 Longest piping length after first branch: **40/90*m**

3 Level difference between IDUs and ODU - ODU above (below): **50(40)m**

4 Level difference between IDUs: **30m**

*The longest length after first branch is 40m as a standard but can be extended to up to 90m 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.

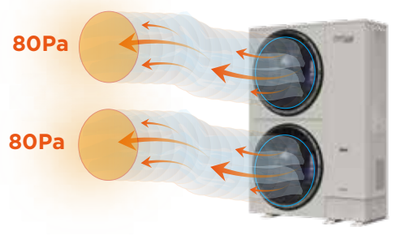
HyperLink

Space Saving

The compact, slim designed outdoor unit can easily be installed on a balcony, realizing complete system installation within each floor. Which release more useful utilization of the space on the building rooftop.

External Static Pressure up to 80Pa*

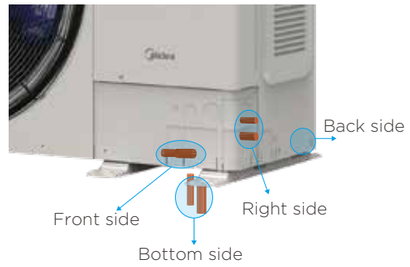
The static pressure of the outdoor unit can be up to 80Pa which facilitates installation of the unit on each floor of high-rise buildings or on balconies.



*External static pressure above 35Pa is available as a customization option.

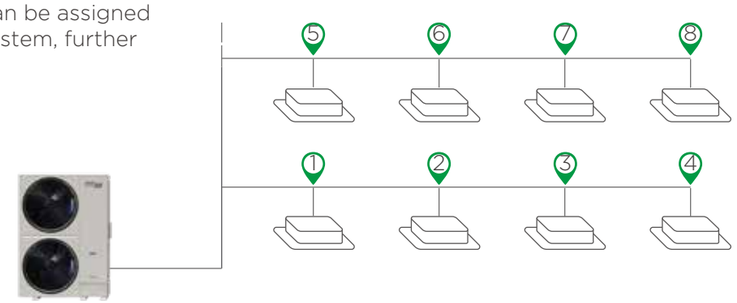
Four-way Piping Connection

A four-direction space is available for connecting pipes and wiring in various installation sites.



Auto Addressing

Addresses for all indoor unitscan be assigned automatically by the EasyFit system, further simplifying installation.



Automatic Refrigerant Charging*

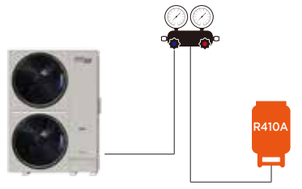
Compared to manual refrigerant charging, automatic refrigerant charging greatly simplifies the process, making installation and maintenance easier and more efficient.

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

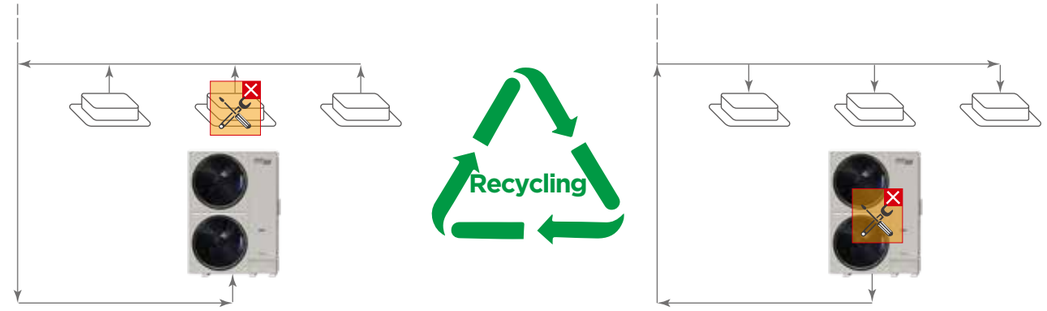
1. Connect refrigerant tank to the outdoor unit & activate automatic charging function
2. Close the shut-off valve automatically & finish the filling process



*This function is available as a customization option.

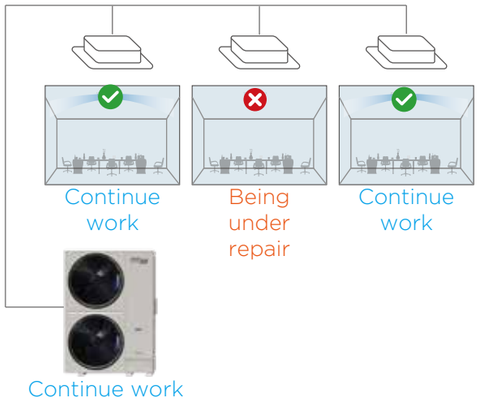
Automatic Refrigerant Recycling

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



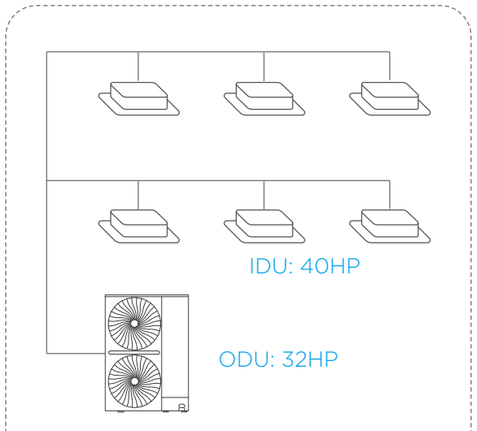
Maintenance Mode

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.

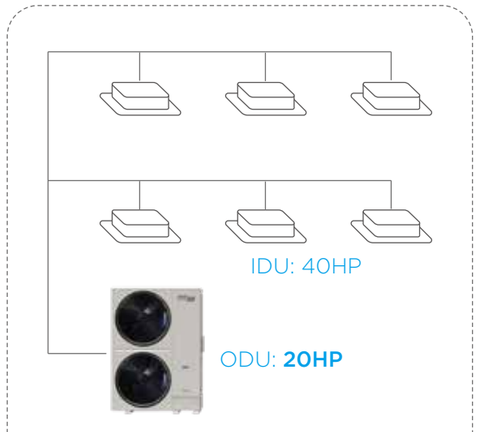


Wide Combination Ratio*

Compared to traditional VRF with combination ratio of 50-130%, the EasyFit 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



EasyFit Series VRF System

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

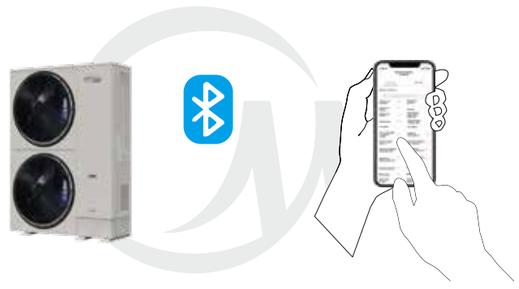
Easy Software Program Upgrade

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 is still under development and 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.

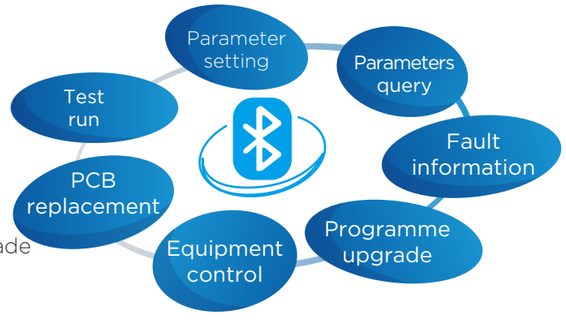


Useful in the following situations:

- 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

HP			8	10
Model			MVi-252WV2GN1(B)	MVi-280WV2GN1(B)
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	25.2	28
		kBtu/h	86.0	95.5
	Power input	kW	5.8	7.5
	EER		4.38	3.73
Heating[2]	Capacity	kW	27	31.5
		kBtu/h	92.1	107.5
	Power input	kW	5.7	6.8
	COP		4.78	4.67
Connected indoor unit	Total capacity		50-130%	50-130%
	Maximum quantity		13	16
Compressor	Type		DC inverter	DC inverter
	Quantity		1	1
Fan motors	Type		Propeller	Propeller
	Motor type		DC	DC
	Static pressure	Pa	0-35 (standard) 35-80 (customized)	0-35 (standard) 35-80 (customized)
	Airflow rate	m^3/h	11800	12500
Refrigerant	Type		R410A	R410A
	Factory charge	kg	6.1	6.1
Pipe connections[3]	Liquid pipe	mm	Φ12.7	Φ12.7
	Gas pipe	mm	Φ25.4	Φ25.4
Sound pressure level[4]		dB(A)	56	57
Net dimensions (W×H×D)		mm	1130×1760×580	1130×1760×580
Packed dimensions (W×H×D)		mm	1210×1916×597	1210×1916×597
Net weight		kg	182	182
Gross weight		kg	196	196
Ambient temp. operation range	Cooling	°C (DB)	-15 to 55	-15 to 55
	Heating	°C (DB)	-30 to 30	-30 to 30

HP			12	14
Model			MVi-335WV2GN1(B)	MVi-400WV2GN1(A)
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	33.5	40
		kBtu/h	114.3	136.5
	Power input	kW	8.0	11.2
	EER		4.21	3.57
Heating[2]	Capacity	kW	37.5	45
		kBtu/h	128.0	153.5
	Power input	kW	7.9	10.7
	COP		4.78	4.21
Connected indoor unit	Total capacity		50-130%	50-130%
	Maximum quantity		19	22
Compressor	Type		DC inverter	DC inverter
	Quantity		1	1
Fan motors	Type		Propeller	Propeller
	Motor type		DC	DC
	Static pressure	Pa	0-35 (standard) 35-80 (customized)	0-35 (standard) 35-80 (customized)
	Airflow rate	m^3/h	12500	12500
Refrigerant	Type		R410A	R410A
	Factory charge	kg	6.4	7.4
Pipe connections[3]	Liquid pipe	mm	Φ12.7	Φ12.7
	Gas pipe	mm	Φ25.4	Φ25.4
Sound pressure level[4]		dB(A)	58	59
Net dimensions (W×H×D)		mm	1130×1760×580	1130×1760×580
Packed dimensions (W×H×D)		mm	1210×1916×597	1210×1916×597
Net weight		kg	185	185
Gross weight		kg	199	199
Ambient temp. operation range	Cooling	°C (DB)	-15 to 55	-15 to 55
	Heating	°C (DB)	-30 to 30	-30 to 30

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. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Diameters given are those of the unit's stop valves.
4. 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

HP			16	18
Model			MVi-450WV2GN1(A)	MVi-500WV2GN1(A)
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	45	50
		kBtu/h	153.5	170.6
	Power input	kW	12.0	12.8
	EER		3.75	3.91
Heating[2]	Capacity	kW	50	56.5
		kBtu/h	170.6	192.8
	Power input	kW	11.1	13.8
	COP		4.50	4.11
Connected indoor unit	Total capacity		50-130%	50-130%
	Maximum quantity		26	29
Compressor	Type		DC inverter	DC inverter
	Quantity		1	1
Fan motors	Type		Propeller	Propeller
	Motor type		DC	DC
	Static pressure	Pa	0-35 (standard) 35-80 (customized)	0-35 (standard) 35-80 (customized)
	Airflow rate	m^3/h	12500	20000
Refrigerant	Type		R410A	R410A
	Factory charge	kg	8	8
Pipe connections[3]	Liquid pipe	mm	Φ15.9	Φ15.9
	Gas pipe	mm	Φ28.6	Φ28.6
Sound pressure level[4]		dB(A)	60	61
Net dimensions (W×H×D)		mm	1130×1760×580	1250×1760×580
Packed dimensions (W×H×D)		mm	1210×1916×597	1330×1916×597
Net weight		kg	192	213
Gross weight		kg	206	228
Ambient temp. operation range	Cooling	°C (DB)	-15 to 55	-15 to 55
	Heating	°C (DB)	-30 to 30	-30 to 30

HP			20	22	24
Model			MVi-560WV2GN1(A)	MVi-615WV2GN1(A)	MVi-670WV2GN1(A)
Power supply		V/Ph/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	191.1	209.8	228.6
	Power input	kW	16.3	18.1	19.7
	EER		3.44	3.40	3.41
Heating[2]	Capacity	kW	63	69	75
		kBtu/h	215.0	235.4	255.9
	Power input	kW	15.3	16.9	17.5
	COP		4.12	4.08	4.29
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%
	Maximum quantity		33	36	39
Compressor	Type		DC inverter	DC inverter	DC inverter
	Quantity		1	1	1
Fan motors	Type		Propeller	Propeller	Propeller
	Motor type		DC	DC	DC
	Static pressure	Pa	0-35 (standard) 35-80 (customized)	0-35 (standard) 35-80 (customized)	0-35 (standard) 35-80 (customized)
	Airflow rate	m^3/h	18500	19000	19000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	8.5	8.5	9.7
Pipe connections[3]	Liquid pipe	mm	Φ15.9	Φ15.9	Φ15.9
	Gas pipe	mm	Φ28.6	Φ28.6	Φ28.6
Sound pressure level[4]		dB(A)	61	62	64
Net dimensions (W×H×D)		mm	1250×1760×580	1250×1760×580	1250×1760×580
Packed dimensions (W×H×D)		mm	1330×1916×597	1330×1916×597	1330×1916×597
Net weight		kg	223	233	238
Gross weight		kg	238	248	253
Ambient temp. operation range	Cooling	°C (DB)	-15 to 55	-15 to 55	-15 to 55
	Heating	°C (DB)	-30 to 30	-30 to 30	-30 to 30

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. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Diameters given are those of the unit's stop valves.
4. 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.