



HVAC
BUILDING
TECHNOLOGIES

2021 VRF

50Hz Catalogue

HVAC & Building Technologies Division
Midea Group

Add.: Midea Headquarters Building, 6 Midea Avenue, Shunde, Foshan, Guangdong, China

Postal code: 528311

hbt.midea.com www.midea-group.com



Note: Product specifications change from time to time as product improvements and developments are released and may vary from those in this document.

GD MIDEA Heating & Ventilating Equipment Co. Ltd participates in the ECP programme for VRF. Check ongoing validity of certificate: WWW.eurovent-certification.com



Midea HBT

Midea HBT (HVAC & Building Technologies) is a key division of the Midea Group, a leading provider of comprehensive solutions of intelligent building, involving energy sources, elevators, control systems, and heating, ventilation & air conditioning. Midea HBT has continued with the tradition of innovation upon which it was founded and 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 HBT at the forefront of a competitive edge. Through these independent projects and joint-cooperation with other global enterprises, Midea has supplied thousands of innovative solutions to customers worldwide.



Several production bases are situated on Shunde, Chongqing, Hefei, and Italy.

MHBT Shunde: 38 product lines focusing on VRF, Split Products, Heat Pump Water Heaters and AHU/FCU.

MHBT Chongqing: 14 product lines focusing on Water Cooled Centrifugal/Screw/Scroll Chillers, Air Cooled Screw/Scroll Chillers and AHU/FCU.

MHBT Hefei: 11 product lines focusing on VRF, Chillers and Heat Pump Water Heaters.

Clivet S.p.A: 50,000m2 workshop in Feltre and Verona, covering products such as ELFO system, hydronic, WHLP, packaged, split and close control and so on.



Benefits of Midea VRF

Benefits for End-users



Healthy Operation

- An outside air intake port in the indoor unit allows outdoor fresh air to be introduced into indoor rooms
- Puro-Air kit, powered by OSRAM's UVC lamps, can effectively kill bacteria, viruses and odors of indoor air to provide a healthy and safe indoor environment
- PCO-kit use magnetic particles coated with TiO₂nanoparticles to oxidize organic pollutants to produce harmless substances such as carbon dioxide and water



Cost Saving Operation

- Cost saving can be up to 31% through Midea META technology
- High efficiency operations thanks to the full DC inverter technology



Comfortable Environment

- 0.5° C or 1° C steps temperature setting and 7 fan speeds, providing comfortable environment
- Zen air technology ensuring comfortable in any condition
- Noise level is as low as 22dB(A), creating a quiet environment



Benefits for Building Owners



Energy Saving Management

- Centralized and unified management of all equipment, saving energy and manpower
- Remote access to CCM-15 allows anytime, anywhere control (via mobile app "M-Control")



Reliable Operation

- The key components are made of internationally renowned brands, like Hitachi, Danfoss, FUJIKOKI, Infineon, Mitsubishi etc., enhancing better performance and guaranteeing reliable operation
- Electric control parts are produced by well-known Midea-SIIX Electronics Corporation, enhancing reliability
- Doctor M technology real-time monitoring system operation, timely self-diagnosis, ensuring stable and reliable operation



Backup Solution

- Double back-up function allowing time for maintenance or repair whilst maintaining comfort
- Maintenance mode can be activated on site during maintenance period as the remaining indoor units continue to operate



Benefits for Consultants



Diversified Solutions

- A wide product portfolio including air cooled heat pump VRF, Air cooled heat recovery VRF, air cooled cooling only VRF and water cooled VRF
- 12 types and more 100 models of VRF indoor units to meet varied customer requirements in a wide range of locations
- Heat Recovery Ventilation and Air Handling Unit adding more options



Professional Tool and Support

- MSSP (Midea Selection Software Platform) enables an easy and quick selection and provides comprehensive system design reports and calculations
- CFD analysis helps optimize solutions and anticipate potential problems in advance
- Energy consumption analysis helps to provide optimal design solutions



Design Flexibility

- Up to 80°C hot water supply in heat recovery system
- Standard and tropical area applications
- Supporting cooling operation even at -15°C



Benefits for Construction Companies



Green Solutions

- Help earn points when applying for a LEED certificate
- Renewable energy solution provided through water cooled application



Space Saving Design

- Top class compact design, 16kW capacity with only 0.42m² footprint which also can be hang on the wall
- Large capacity for single unit design can save space in big system



Intelligent Management

- Full compatibility with the leading BMS protocols: BACnet, LonWorks, Modbus and KNX



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Application Solutions

Office Complexes

Enjoy comfort while working

High-rise office building



- ◆ V6 / V6R VRF
- ◆ High Static Pressure Duct
- ◆ Four-way Cassette
- ◆ DX AHU / HRV
- ◆ BMS Controller

Small and medium-sized office buildings



- ◆ V6 / V6i VRF
- ◆ Medium Static Pressure Duct
- ◆ Four-way Cassette
- ◆ Central Controller

Be it small or large sized, Midea VRF provides solution for all office buildings and its smart control solutions makes the management of VRF simple and easy whereas the wide variety of indoor units are suitable for all designs.

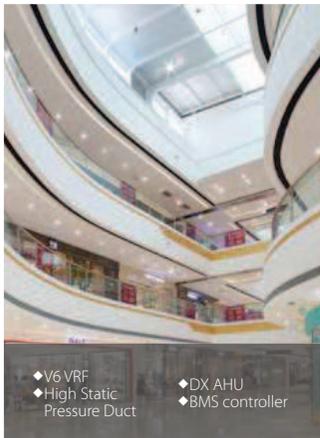
Hotels & Shopping Malls

Increase your business, not your bills

Shopping Malls

Retails

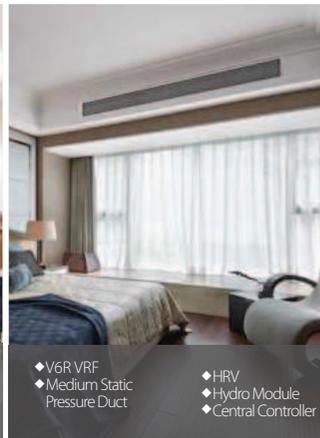
Hotel



- ◆ V6 VRF
- ◆ High Static Pressure Duct
- ◆ DX AHU
- ◆ BMS controller



- ◆ V6i VRF
- ◆ Ceiling & Floor Unit
- ◆ Central Controller



- ◆ V6R VRF
- ◆ Medium Static Pressure Duct
- ◆ HRV
- ◆ Hydro Module
- ◆ Central Controller

The high efficiency and reliability of Midea VRF makes it suitable to be used for all commercial applications. The intelligent control solutions like hotel key cards and touch screen controller makes the management easy

Residential Apartments

One for Every home

Apartments

Villas



- ◆ V6 VRF
- ◆ Wall-mounted Unit
- ◆ Medium Static Pressure Duct
- ◆ HRV
- ◆ BMS Controller



- ◆ V6i VRF
- ◆ Mini VRF
- ◆ Medium Static Pressure Duct
- ◆ Remote Controller

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

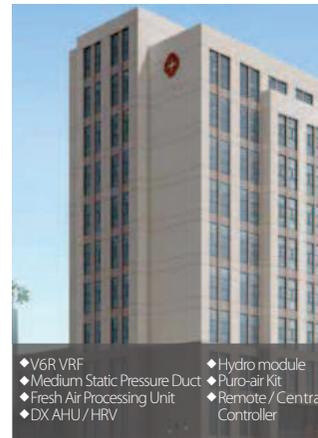
Other Applications

Meeting all expectations

Hospitals

Schools

Airports



- ◆ V6R VRF
- ◆ Medium Static Pressure Duct
- ◆ Fresh Air Processing Unit
- ◆ DX AHU / HRV
- ◆ Hydro module
- ◆ Puro-air Kit
- ◆ Remote / Central Controller



- ◆ V6 VRF
- ◆ Four-way Cassette
- ◆ Central controller



- ◆ V6R VRF
- ◆ High Static Pressure Duct
- ◆ DX AHU / HRV
- ◆ BMS controller

The innovative design and a variety of indoor unit choices makes Midea VRF suitable for all kinds of applications. The newly designed puro-air kit is a must have product for modern hospitals.



MHBT Learning Academy

Objective

Midea HBT Learning Academy aims to provide training to the sales personnel as well as technical personnel in order to increase the utilization for your Midea HBT equipment. Once you have purchased equipment from Midea HBT, taking care of the equipment is topmost priority. Midea HBT Learning Academy offers training courses to learn firsthand from the manufacturer what it takes to get the best out of your Midea HBT product. The goal of Midea HBT Learning Academy is to provide product specific training, safe work procedures and expertise in carrying out the installation and maintenance of Midea HBT products as well as teaching the main selling points in order to help the sales people sell the Midea HBT products with ease.

Training Centers

Our world class training centers provide knowledge and skills necessary to efficiently deploy Midea HBT technologies.

The training centers include dedicated laboratories to provide hands-on experiences with various systems, components and controls to refresh and enhance the skills of your sales, design and installation and service teams. Right now we operate our trainings from the below two locations:

1. Midea HBT Training Center

Address: Midea HBT Training Center, 2nd Floor, Building 6, Midea Global Innovation Center, Beijiao, Shunde, Foshan, China
Pin- 528311

The Midea HBT Training Center is situated 70 kilometers from Baiyun Guangzhou International Airport.

Products: VRF, M thermal

2. Chongqing Midea Training Center

Address: No. 15, Qiangwei Road, Nan'an District, Chongqing, China

Chongqing Midea Training Center is 35 kilometers from Chongqing International Airport.

Products: Centrifugal Chiller, Screw/Scroll Chiller and Terminals



VRF training



M thermal training



Chiller training

Global Technical Trainings

The training courses by Midea HBT Learning Academy are divided into the following two categories with different targeted audiences for each.

Design and Application Trainings: The design and application trainings for various products are basically for the sales personnel selling Midea HBT products in order to give them basic understanding about the main features. The trainings are conducted on a global level inviting sales engineers, technical engineers, consultants and project designers from different parts of the world.

After Sales- Service Trainings: These trainings are dedicated for the After Sales/ Service personnel in order for them to better carry out the installation, commissioning and maintenance of Midea HBT products. Technical person and engineers from different parts of the world are invited to take part in these trainings.

ZOOM Online Trainings: The trainings to the Global customers can also be done online with the help of ZOOM software. This way, the customers do not need to be physically present for the training. Amid the COVID-19 pandemic, Midea HBT Learning Academy has conducted a lot of online trainings. The training videos are available on the TSP system and can be downloaded by using QR codes.

Products: VRF, M thermal, Chillers and Terminals

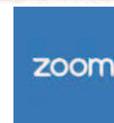
Highly Skilled Trainers: The trainers for various courses by Midea HBT Learning Academy are expert people with vast experiences in their field. Most of them have a deep insight about the global HVAC market and help the attendees to better understand the HBT products.

Training Certificates:

The attendees for Global trainings are provided a training certificate highlighting the courses discussed in the training, signed by Mr. Jason Zhao, General Manager of Midea HBT Overseas Sales Company.

Registration:

You can contact your respective Midea contact point to provide you with the complete schedule about the global technical trainings as well as how to register for these trainings.



VRF V6
Course List



VRF V6R
Course List

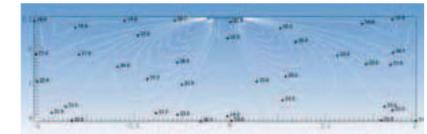
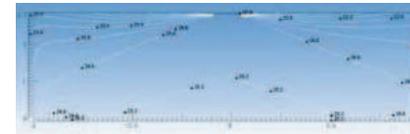
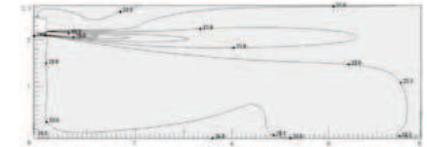
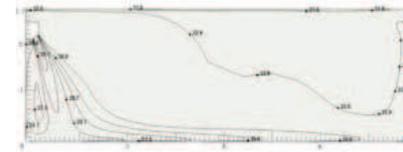


Simulation

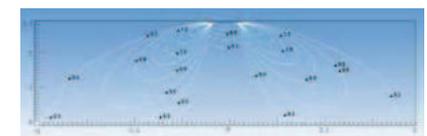
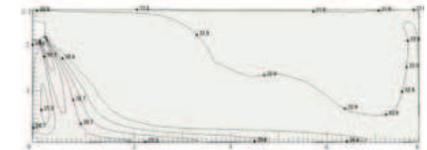
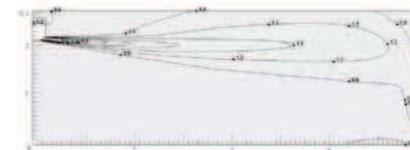
CFD (Computational Fluid Dynamics)

CFD Analysis is applied in areas of estimating: indoor airflow and temperature distribution. By running a simulation before construction, engineers estimate possible issues and find optimal solutions of malfunction that could occur after construction

Temperature distribution



Airflow distribution



Engineering Capability Midea Tool and Support

Midea dedicated to provide the best HVAC engineering support and solutions focused on effectively designed, built, supervised, and maintained throughout the lifecycle, providing our customers a faster, easier, and a more accurate way in everyday duties.

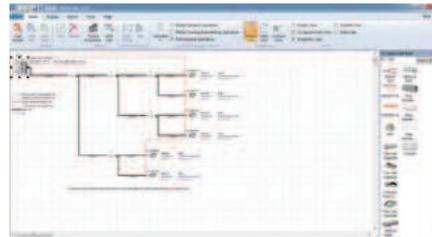


DESIGN

MSSP-Drag/Drop Design

MSSP-Drag/Drop design enables an easy and quick selection and provides comprehensive system design reports and calculations.

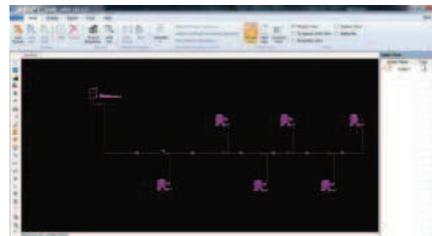
Note: MSSP (Midea Selection Software Platform)



MSSP-CAD Design

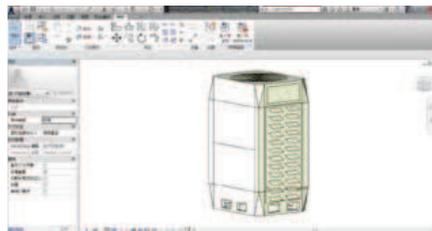
MSSP-CAD design enables an visual and fast selection and provides comprehensive system design reports and calculations.

Note: MSSP (Midea Selection Software Platform)



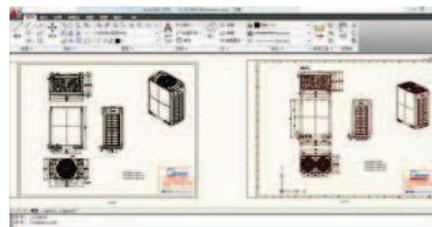
Revit Family

Midea revit is developed to make 3D design of Midea products easier than the previous program. It enables engineers to check 3D images from design stage and prevents possible issues of the installation stage.



CAD Drawing

CAD enables faster and a more accurate design of Midea products.



Midea Global Spare Center

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



A



B



> INDEX

02 INDOOR UNITS

- 061 VRF Indoor Units
- 109 Heat Recovery Ventilator
- 113 Puro-Air Kit

01

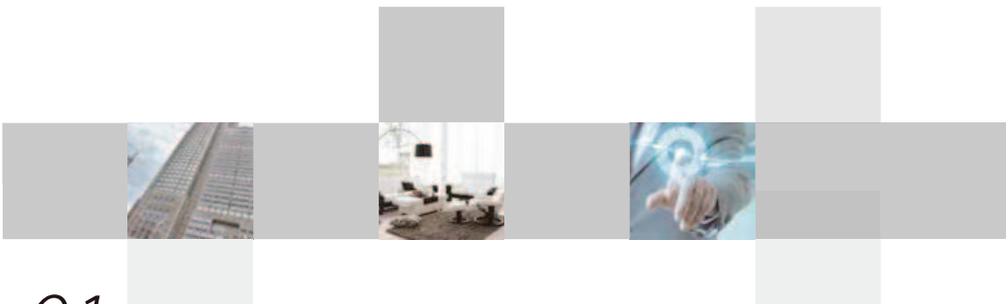
OUTDOOR UNITS

Air cooled - heat pump VRF

- 033 VRF V6
- 041 VRF V6i
- 045 VRF V4+i - side discharge
- 047 Mini VRF

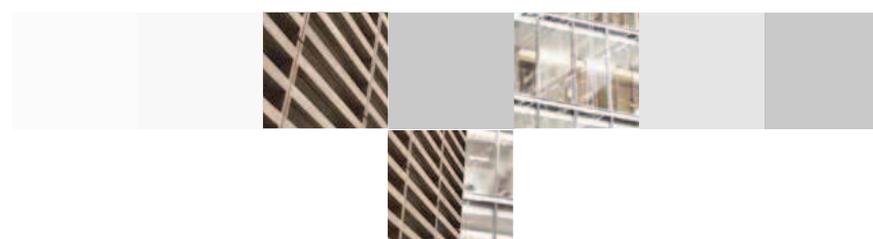
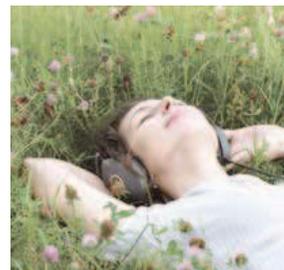
Air cooled - heat recovery VRF

- 053 VRF V6R



04 BRANCH JOINTS

- 167 Branch Joints
- 175 Branch Headers



03 CONTROL SYSTEMS

- 123 Remote Controllers
- 125 Wired Controllers
- 129 Central Controllers
- 134 Data Converter
- 138 Network Control System
- 143 BMS Gateways
- 153 Accessories



OUTDOOR UNITS

Air Cooled - Heat Pump VRF
Air Cooled - Heat Recovery



Outdoor Unit Lineup

HP		2.5	3	4	4.5	5	6	6.5		7	8	9	10	12	14	16	18	20	22	24	26	28	30	32	34-54	56-96
Air Cooled - Heat Pump	VRF V6										●		●	●	●	●	●	●	●	●	●	●	●	●	●	●
	VRF V6i - Top Discharge										●		●	●	●	●	●	●	●	●	●	●	●	●		
	VRF V6i - Side Discharge									●	●	●	●	●												
	VRF V4+i - Side Discharge									●	●	●	●	●	●	●										
	Mini VRF - Standard		●	●	●	●	●	●																		
	Mini VRF - Mini C Series		●	●	●	●	●																			
Air Cooled - Heat Recovery	VRF V6R										●		●	●	●	●	●	●	●	●	●	●	●	●	●	●

● Single unit ● Combination unit

Outdoor Unit Functions

Functions		Air Cooled - Heat Pump				Air Cooled - Heat Pump			Air Cooled - Heat Recovery
		VRF V6	VRF V6i-top discharge	VRF V6i-side discharge		VRF V4+i-side discharge	Mini VRF - standard	Mini VRF - Mini C series	VRF V6R
Key Technology	META technology	●	●	×		×	×	×	●
	Zen air	●	●	●		●	●	●	●
	Doctor M.	●	●	×		×	×	×	●
High Efficiency	Full inverter compressors	●	●	●		●	●	●	●
	Enhanced Vapor Injection (EVI) compressor	●	●	×		×	×	×	●
	Full DC fan motors	●	●	●		● (20-33.5kW)	●	●	●
	Plate Heat Exchanger (PHE) subcooling	●	●	×		×	×	×	●
	G-type heat exchanger	● (24-32HP)	● (24-32HP)	×		×	×	×	×
	7 levels of energy management	40-100%	40-100%	×		×	×	×	40-100%
High Reliability	Duty cycling	●	×	×		×	×	×	●
	Precise oil control	●	●	●		●	●	●	●
	Backup operation (compressor)	●	●	×		×	×	×	●
	Backup operation (module)	●	×	×		×	×	×	●
	Anti-corrosion protection	●	●	●		●	●	●	●
	UL anti-corrosion certificate	●	●	×		×	×	×	×
	Refrigerant cooling PCB	●	●	●		×	×	●	●
	Real-time refrigerant amount monitoring	●	●	×		×	×	×	●
	Auto snow-blowing function	○	○	×		×	×	×	○
	Dust-clean function	○	○	×		×	×	×	○
	Gas leak protection	×	×	×		×	×	×	●
Enhanced Comfort	Silent mode	Night silent mode+silent mode+super silent mode	Night silent mode+silent mode+super silent mode	×		×	×	×	Night silent mode+silent mode+super silent mode
	Intelligent defrosting technology	●	●	●		●	●	●	●
	Continuous heating (alternate defrost)	×	×	×		×	×	×	●
	Connectable to high temperature hydro module for hot water	×	×	×		×	×	×	●
	Multiple priority modes	●	●	●		●	●	●	×
Easy Installation and Service	Auto addressing	●	●	●		●	●	●	●
	Automatic refrigerant charging	○	○	×		×	×	×	○
	Automatic refrigerant recycling	○	○	×		×	×	×	○
	Multi-functional diagnosis box	○	○	×		×	×	×	●
	Maintenance mode	●	●	×		×	×	×	●
	Oil balancing pipe between modules not required	●	●	●		●	●	●	●
	Triple configurations	●	●	×		×	×	×	●
	Digit display	4 digit 7-segment display	4 digit 7-segment display	3 digit 7-segment display		3 digit 7-segment display	3 digit 7-segment display	3 digit 7-segment display	4 digit 7-segment display
	High external static pressure	120Pa	120Pa	×		×	×	×	80Pa

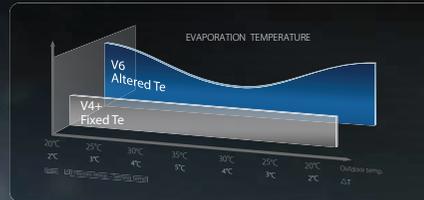
Note:
 ●: equipped as standard; ○: customization option; ×: without this function

KEY TECHNOLOGIES

ETA* tech.

* Midea Evaporative Temperature Alteration

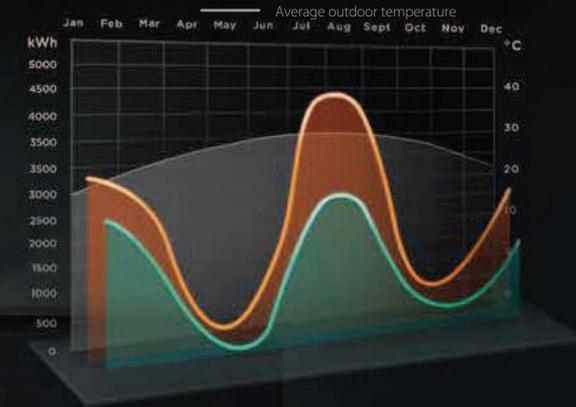
The evaporative temperature (in cooling) and condensing temperature (in heating) are automatically altered according to both indoor and outdoor temperature **TO MAXIMIZE THE COMFORT AND ENERGY EFFICIENCY**



Through the data monitoring of a replacement project in Hangzhou from 2018 to 2019, we obtained the following actual data.

2018-V4+
The total electricity consumption is 24577kWh from 2018 to 2019.

2019-V6(META)
The total electricity consumption is 16904kWh from 2019 to 2020.



Save **1074USD** electricity cost all year round.

A DESIGN STUDIO

In Fuyang District, Hangzhou, China.

The total usable area is 312 m²



AIR LIFE HEALTH

ENSURES PURITY FOR EVERY INDOOR BREATH

PURO-AIR KIT

SAFE indoor air, from the invisible care

PURIFICATION speed industry leader



UV Guard



Clean Wave



Ozone Free



Safe Shading

AIR DYNAMIC HARMONY

BLENT IN DAILY LIFE HARMONIOUSLY

- 7 fan speeds provide **COMFORT WITHOUT NOTICE** under every indoor condition.
- Guaranteed **NON-STOP** indoor warmth in winter by intelligent defrosting.
- **FOLLOW ME** function ensures closer thermal sensing with controller build-in sensor, provide more precise air temp. with **0.5°C** adjustment.



AIR DIMENSION FREEDOM

FLOW FREELY FROM ALL DIMENSIONS



360° FLOW



4-WAY INDEPENDENT
ZONING FLOW



5-LEVEL
SWINGING FLOW



HORIZONTAL FLOW





MULTI-FUNCTIONAL DIAGNOSIS BOX

STORE UP TO 30 SETS OF ERROR DATA
SIMPLIFYING MAINTENANCE



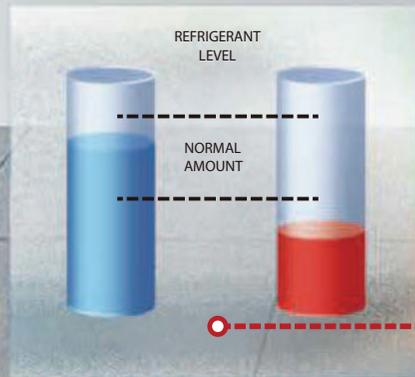
DIAGNOSIS DASHBOARD

REAL TIME MONITORING AND
FAST ERROR LOCATING



REFRIGERANT DETECTOR

REAL TIME REFRIGERANT
AMOUNT MONITORING TO
ALARM AND ENSURE
CONSISTENT PERFORMANCE



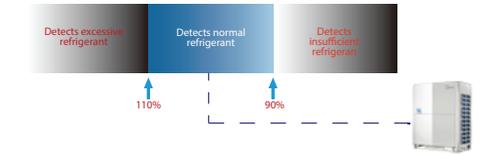
DOCTOR m.



INSUFFICIENT REFRIGERANT

Real-time Refrigerant Amount Monitoring

The temperature and pressure of refrigerant can be real-time monitored by the outdoor unit. When the level of refrigerant is too low or too high, this can cause damage to the unit and poor performance. The unit can detect excessive or insufficient amounts of refrigerant, to ensure consistent performance.



Auto Snow-blowing Function

The innovatively designed auto snow-blowing function enables the outdoor unit to prevent the accumulation of snow by itself.



Dust-clean function

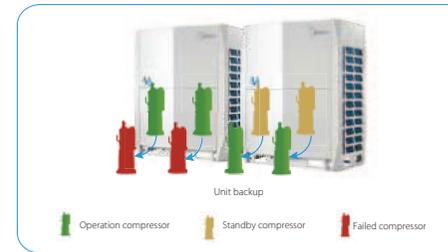
The innovatively designed dust-clean function enables the outdoor unit to prevent the dust by itself.



Self-clean

Unit backup

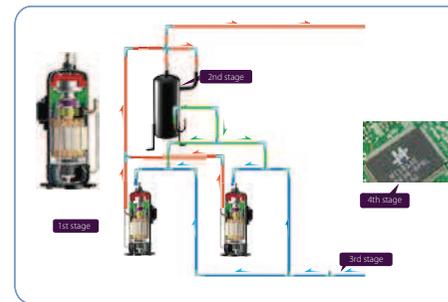
In a multi-unit system, if one module fails, the other modules provide backup so that the system can continue operating.



Precise Oil Control Technology

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

- Compressor internal oil separation.
- 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.
- Oil balance pipes between compressors ensure even oil distribution to keep compressors running normally.
- Auto oil return program monitors the running time and system status to ensure reliable oil return.



Refrigerant Cooling PCB

The unit uses refrigerant cooling technology to cool the electric control box. It decreases the average temperature of electrical control components by about 8 degrees, guaranteeing the stable and safe running of the control system.



7 Levels of Energy Management

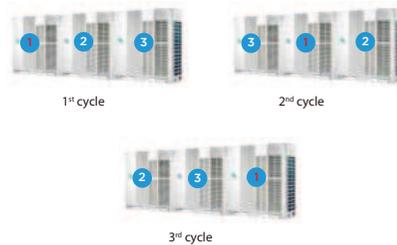
For projects with temporary electricity supply restrictions, the outdoor unit supports 7 levels of energy management which can be set to output 40-100% capacity. It prevents tripping during electricity supply restriction conditions and remains system continue to operate.



HIGH RELIABILITY

Duty Cycling

Duty cycling equalizes the running time of the outdoor units in a multiple-unit system and of the compressors in each unit, significantly extending compressor lifespan.



Double Back-up Operation Compressor backup

In units with two compressors, if one compressor fails, the other compressor can run on its own for up to 4 days, allowing time for maintenance or repair whilst maintaining comfort.



HIGH EFFICIENCY

High Efficiency Enhanced Vapor Injection (EVI) Compressor

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

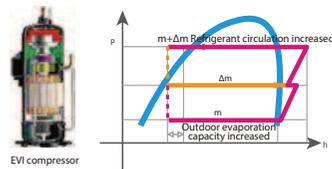
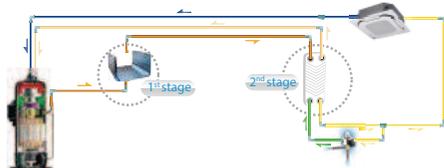


Plate Heat Exchanger (PHE) Subcooling

Plate Heat Exchanger as a secondary intercooler boosts up refrigerant subcooling and improves 10% energy efficiency.

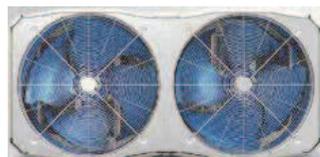


High Efficiency G-Type Heat Exchanger

The large capacity units use a high efficiency G-type heat exchanger which heat exchanger area is 1.5 times of the U-type heat exchanger.



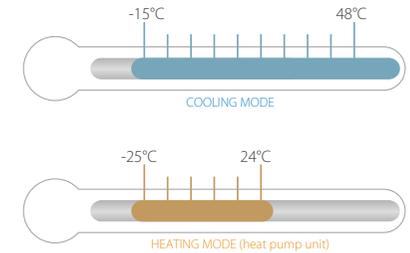
3-rows G-type heat exchanger



Super big size fan

Wide Operation Range

The VRF system operates stably under extreme conditions, ranging from minus -25°C to 48°C.



Note: the operating temperature range of different series may a little different. Please refer to the specification of each series.

ENHANCED COMFORT

Advanced Silent Technology

4 night silent modes, 3 silent modes and 4 super silent modes selections, provide more freedom and convenience to match the customer needs.

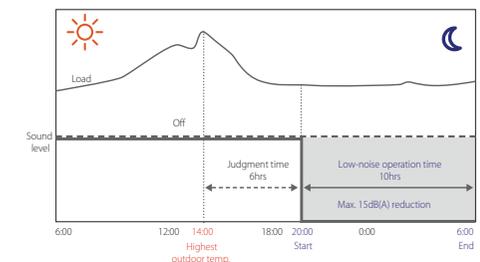


- In night silent mode and silent mode, only maximum fan speed is limited to meet the normal silent requirement.



- In super silent mode, both maximum fan speed and compressor frequency are limited to meet higher silent requirement.

The night silent mode feature, which is easily configured on the outdoor unit's PCB, includes various scheduling options that can be used to reduce noise levels at times when low noise operation is required.



WIDE CAPACITY RANGE

Wide Capacity Range

Midea VRF has an extensive capacity ranging from 2.5HP to 96HP, meeting all customer requirements from small to large buildings.



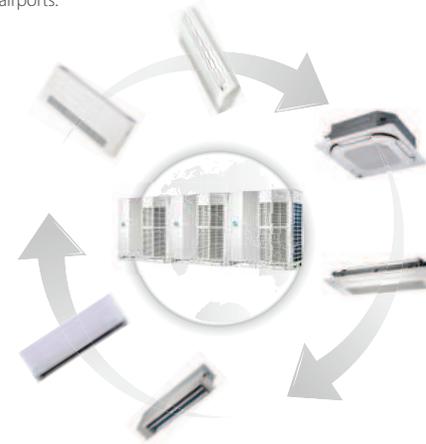
Wide Product Portfolio

Midea VRF supplies a wide product portfolio including air cooled heat pump VRF, Air cooled heat recovery VRF, air cooled cooling only VRF and water cooled VRF to meet the needs of various application scenarios in the market.



Wide Range of Indoor Units

Midea provides 12 types and more 100 models of VRF indoor units to meet varied customer requirements in a wide range of locations including offices, shopping malls, hospitals and airports.



Anti-corrosion Protection

Outdoor units are given anti-corrosion treatment for non-extreme conditions as standard 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.



01 Screws / bolts / gaskets

Standard products:
300h of neutral salt mist
Heavy anti-corrosion products:
720h of neutral salt mist



02 Fan motor

Standard products:
96h of neutral salt mist for IDU
168h of neutral salt mist for ODU
Heavy anti-corrosion products:
1000h of neutral salt mist for ODU



03 Electric control box case

Standard products:
96h of neutral salt mist
Heavy anti-corrosion products:
500h of neutral salt mist



04 Heat exchanger aluminum foil

Standard products:
200h of neutral salt mist
Heavy anti-corrosion products:
1000h of neutral salt mist
140h of acid salt mist

Heat exchanger copper pipe

Standard products:
24h of neutral salt mist
Heavy anti-corrosion products:
48h of neutral salt mist for IDU
150h of neutral salt mist for ODU



05 Painted sheet metal

Standard products:
500h of neutral salt mist
1000h of moisture and heating test
500h of light aging test

Heavy anti-corrosion products:
800h of neutral salt mist
2000h of moisture and heating test
800h of light aging test

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



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.

Triple Configurations

Triple (local/remote/network) configurations greatly simplified installation, commissioning and servicing.

- Field local configuration achieves quick and easy on-site settings, simplifies installation and commissioning.
- System checking and settings also can be easily achieved via wired and centralized controller, making the configuration more flexible and convenient.
- A desktop or laptop PC can be used for browser-based access to achieve system configurations through IMM Pro gateway via a LAN connection.



7-segment Digit Display

4 or 3 digit 7-segment display can easy read out of system check information and error code for quick and accurate inspection and diagnosis of the system.



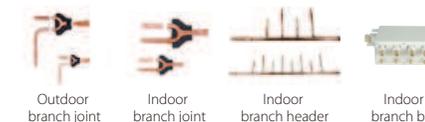
High External Static Pressure

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



Midea Unified Branch Piping

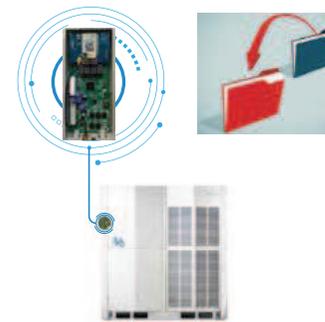
The unified Midea branch piping system is especially designed for simple installation and it also has specifically been designed to optimize refrigerant flow.



Note: Indoor branch box is only available for Mini VRF Series.

Multi-Functional Diagnosis Box

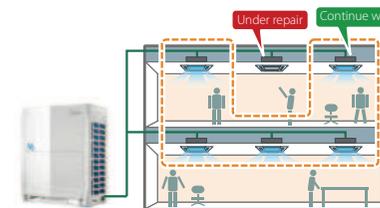
An multi-functional diagnosis box can be installed on the unit's side columns, enabling installation and service engineers to activate Auto-commissioning or check the operating status without removing the front panel. It can also perform automatic data backup of a maximum of 30 sets of error data.



Note: some units are equipped as standard, some units need to customize.

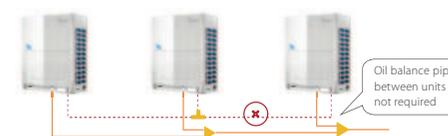
Maintenance Mode

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



Oil Balance pipe not required

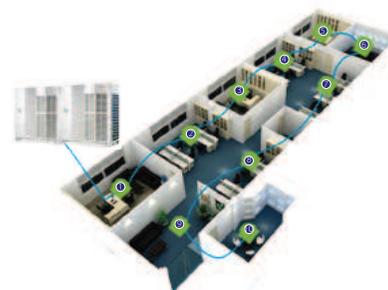
With the new oil management system, there is no need of oil balance pipe.



EASY INSTALLATION AND SERVICE

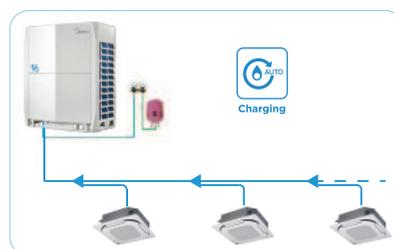
Auto Addressing

Outdoor units can distribute addresses to indoor units automatically. Remote and wired controllers can be used to query or modify each indoor unit's address.



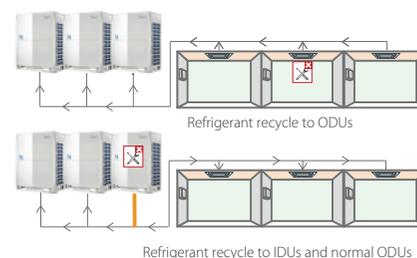
Automatic Refrigerant Charging

Automatic refrigerant charging makes installation and service easier and more efficient.



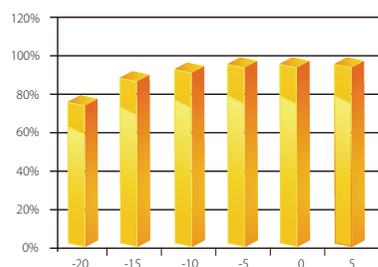
Automatic Refrigerant Recycling

The refrigerant can recycle to ODUs or IDUs and normal ODUs. Two recycling ways make the maintenance easier and more efficient.



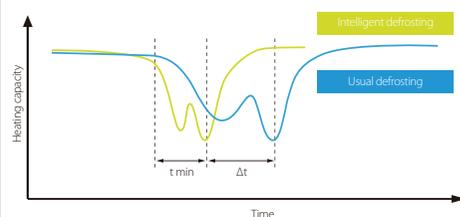
Enhanced Heating Capacity

Thanks to the EVI compressor, the heating capacity can be improved greatly. Heating capacity is 100% of rated capacity at ambient temperatures as low as -5°C and 90% of rated capacity at -15°C.



Intelligent Defrosting Technology

The intelligent defrosting program calculates the time required for defrosting according to the actual system status, eliminating heat losses from unnecessary defrosting. A specialized defrosting valve reduces time required for defrosting to as little as four minutes.



Multiple Priority Modes

Multiple priority modes settings, provide more freedom and convenience to match the customer needs.



Auto priority



Cooling priority



VIP/Vote priority



Heating only



Cooling only

 **Indoor Units**
VRF indoor units

 **Fresh Air Processing Unit**
100% fresh air supply

 **Ventilation**
Heat recovery ventilator (HRV)

 **AHU Connection Kit**
Connect to Midea or third party DX AHU

 **Control Systems**
Smart control systems



VRF V6 Series Heat Pump

Optimized design for small to large buildings

- ▶ META Technology
- ▶ Zen Air Technology
- ▶ Doctor M Technology
- ▶ Enhanced Vapor Injection (EVI) Compressor
- ▶ Triple Configurations
- ▶ High Efficiency G-Shape Heat Exchanger
- ▶ ESP up to 120Pa
- ▶ Plate Heat (PHE) Subcooling
- ▶ Precise Oil Control Technology
- ▶ Multi Silent Modes
- ▶ Duty Cycling
- ▶ Backup Operation
- ▶ UL Anti-Corrosion Certificate
- ▶ Refrigerant Cooling PCB
- ▶ Auto Snow-blowing Function
- ▶ Dust-clean Function
- ▶ Multi-Functional Diagnosis Box
- ▶ Automatic Refrigerant Detecting/Charging/Recycling

Wide Capacity Range

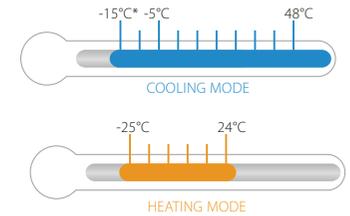
Starting at 8HP, capacity increases in 2HP increments up to 96HP, which is the world's largest single-system VRF capacity.



Wide Operating Temperature Range

The V6 VRF can operate stably in a wide ambient temperature range: from -5°C (-15°C*) to 48°C in cooling mode and from -25°C to 24°C in heating mode.

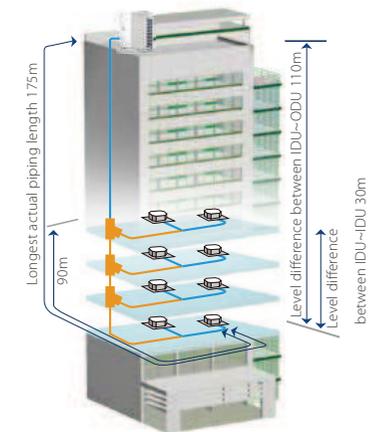
* Cooling operation at -15°C is available as a customization option.



Long Piping Capability

Piping length	Capability (m)
Total piping length	1000
Longest piping length-actual (equivalent)	175 (200)
Longest piping length after first branch	40/90*
Largest level difference between IDUs and ODU-ODU up (down)	90 (110)
Largest level difference between IDUs	30

*The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please contact your local dealer for further information.



VRF V6 Series - Heat Pump

380~415V, 3N, 50Hz

Capacity		HP	24	26	28
Model			MV6-670WV2GN1-E	MV6-730WV2GN1-E	MV6-785WV2GN1-E
Power supply		V/N/Hz	380-415/3/50		
Cooling ¹	Capacity	kW	67.0	73.0	78.5
		kBut/h	228.6	249.1	267.8
	Power input	kW	18.1	20.9	24.2
	EER	kW/kW	3.70	3.49	3.25
Heating ² (Rated)	Capacity	kW	67.0	73.0	78.5
		kBut/h	228.6	249.1	267.8
	Power input	kW	15.33	18.11	21.16
	COP	kW/kW	4.37	4.03	3.71
Heating ² (Max)	Capacity	kW	75.0	81.5	87.5
		kBut/h	255.9	278.1	298.6
	Power input	kW	18.56	21.68	26.04
	COP	kW/kW	4.04	3.76	3.36
Connectable Indoor Unit	Total capacity	50-130% of outdoor unit capacity			
	Max. quantity	39	43	46	
Compressors	Type	DC inverter			
	Quantity	2			
	Type	DC			
Fan motors	Quantity	2			
	Type	DC			
	Max. ESP	Pa	20 default; up to 120 customization option		
Refrigerant	Type	R410A			
	Factory charge	kg	22		
	Pipe connections ³	mm	Φ19.1		Φ22.2
Airflow rate	Liquid pipe	mm	Φ31.8		Φ31.8
	Gas pipe	mm			
	Airflow rate	m ³ /h	25000		
Sound pressure level ⁴	dB(A)	67		68	
Sound power level	dB(A)	89		90	
Net dimensions (WxHxD)	mm	1730 x 1830 x 850			
Packed dimensions (WxHxD)	mm	1800x2000x910			
Net weight	kg	430			
Gross weight	kg	453			
Ambient temp. operating range	Cooling	-5 to 48			
	Heating	-25 to 24			

Capacity		HP	30	32
Model			MV6-850WV2GN1-E	MV6-900WV2GN1-E
Power supply		V/N/Hz	380-415/3/50	
Cooling ¹	Capacity	kW	85.0	90.0
		kBut/h	290.0	307.1
	Power input	kW	27.4	31.0
	EER	kW/kW	3.10	2.90
Heating ² (Rated)	Capacity	kW	85.0	90.0
		kBut/h	290.0	307.1
	Power input	kW	22.9	25.7
	COP	kW/kW	3.71	3.50
Heating ² (Max)	Capacity	kW	95.0	100.0
		kBut/h	324.1	341.2
	Power input	kW	27.78	30.67
	COP	kW/kW	3.42	3.26
Connectable Indoor Unit	Total capacity	50-130% of outdoor unit capacity		
	Max. quantity	50		53
Compressors	Type	DC inverter		
	Quantity	2		
	Type	DC		
Fan motors	Quantity	2		
	Type	DC		
	Max. ESP	Pa	20 default; up to 120 customization option	
Refrigerant	Type	R410A		
	Factory charge	kg	25	
	Pipe connections ³	mm	Φ22.2	Φ31.8
Airflow rate	Liquid pipe	mm	Φ31.8	Φ31.8
	Gas pipe	mm		
	Airflow rate	m ³ /h	24000	
Sound pressure level ⁴	dB(A)	68		68
Sound power level	dB(A)	88		90
Net dimensions (WxHxD)	mm	1730 x 1830 x 850		
Packed dimensions (WxHxD)	mm	1800x2000x910		
Net weight	kg	475		
Gross weight	kg	507		
Ambient temp. operating range	Cooling	-5 to 48		
	Heating	-25 to 24		

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those of the unit's stop valves.
- 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.

VRF V6 Series - Heat Pump

380~415V, 3N, 50Hz

Capacity		HP	8	10	12	14
Model			MV6-252WV2GN1-E	MV6-280WV2GN1-E	MV6-335WV2GN1-E	MV6-400WV2GN1-E
Power supply		V/N/Hz	380-415/3/50			
Cooling ¹	Capacity	kW	25.2	28.0	33.5	40.0
		kBut/h	86.0	95.5	114.3	136.5
	Power input	kW	5.93	6.75	8.7	9.9
	EER	kW/kW	4.25	4.15	3.85	4.05
Heating ² (Rated)	Capacity	kW	25.2	28.0	33.5	40.0
		kBut/h	86.0	95.5	114.3	136.5
	Power input	kW	4.82	5.46	6.6	8.5
	COP	kW/kW	5.23	5.13	5.10	4.70
Heating ² (Max)	Capacity	kW	27.0	31.5	37.5	45.0
		kBut/h	92.1	107.5	128.0	153.5
	Power input	kW	5.39	6.54	7.88	10.27
	COP	kW/kW	5.01	4.82	4.76	4.38
Connectable Indoor Unit	Total capacity	50-130% of outdoor unit capacity				
	Max. quantity	13	16	20	23	
Compressors	Type	DC inverter				
	Quantity	1				
	Type	DC				
Fan motors	Quantity	1				
	Type	DC				
	Max. ESP	Pa	20 default; up to 80 customization option			
Refrigerant	Type	R410A				
	Factory charge	kg	11			
	Pipe connections ³	mm	Φ12.7		Φ15.9	
Airflow rate	Liquid pipe	mm	Φ25.4		Φ28.6	
	Gas pipe	mm				
	Airflow rate	m ³ /h	11000			
Sound pressure level ⁴	dB(A)	58		60		
Sound power level	dB(A)	78		81		
Net dimensions (WxHxD)	mm	990x1635x790		1340x1635x850		
Packed dimensions (WxHxD)	mm	1090x1805x860		1405x1805x910		
Net weight	kg	227		304		
Gross weight	kg	242		304		
Ambient temp. operating range	Cooling	-5 to 48				
	Heating	-25 to 24				

Capacity		HP	16	18	20	22
Model			MV6-450WV2GN1-E	MV6-500WV2GN1-E	MV6-560WV2GN1-E	MV6-615WV2GN1-E
Power supply		V/N/Hz	380-415/3/50			
Cooling ¹	Capacity	kW	45.0	50.0	56.0	61.5
		kBut/h	153.5	170.6	191.1	209.8
	Power input	kW	12.0	12.5	15.1	18.4
	EER	kW/kW	3.75	4.00	3.70	3.35
Heating ² (Rated)	Capacity	kW	45.0	50.0	56.0	61.5
		kBut/h	153.5	170.6	191.1	209.8
	Power input	kW	9.8	10.6	12.7	15.0
	COP	kW/kW	4.60	4.70	4.40	4.10
Heating ² (Max)	Capacity	kW	50.0	56.0	63.0	69.0
		kBut/h	170.6	191.1	215.0	235.4
	Power input	kW	11.76	12.84	15.29	17.78
	COP	kW/kW	4.25	4.36	4.12	3.88
Connectable Indoor Unit	Total capacity	50-130% of outdoor unit capacity				
	Max. quantity	26	29	33	36	
Compressors	Type	DC inverter				
	Quantity	1				
	Type	DC				
Fan motors	Quantity	1				
	Type	DC				
	Max. ESP	Pa	20 default; up to 120 customization option			
Refrigerant	Type	R410A				
	Factory charge	kg	13			
	Pipe connections ³	mm	Φ15.9		Φ19.1	
Airflow rate	Liquid pipe	mm	Φ31.8		Φ31.8	
	Gas pipe	mm				
	Airflow rate	m ³ /h	13000			
Sound pressure level ⁴	dB(A)	65		66		
Sound power level	dB(A)		88			
Net dimensions (WxHxD)	mm	1340x1635x850		1340x1635x825		
Packed dimensions (WxHxD)	mm			1405x1805x910		
Net weight	kg	277		348		
Gross weight	kg	304		368		
Ambient temp. operating range	Cooling	-5 to 48				
	Heating	-25 to 24				

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those of the unit's stop valves.
- 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.

VRF V6 Series - Heat Pump

380~415V, 3N, 50Hz

Capacity		HP	34	36	38	40
Model			MV6-950WV2GN1-E	MV6-1015WV2GN1-E	MV6-1065WV2GN1-E	MV6-1120WV2GN1-E
Combination type			12HP+22HP	14HP+22HP	16HP+22HP	12HP+28HP
Power supply		V/N/Hz	380-415/3/50			
Cooling ¹	Capacity	kW	95.0	101.5	106.5	112.0
		kBut/h	324.1	346.3	363.4	382.1
	Power input	kW	27.1	28.2	30.4	32.9
	EER	kW/kW	3.51	3.59	3.51	3.41
Heating ² (Rated)	Capacity	kW	95.0	101.5	106.5	112.0
		kBut/h	324.1	346.3	363.4	382.1
	Power input	kW	21.6	23.5	24.8	27.7
	COP	kW/kW	4.40	4.32	4.30	4.04
Heating ² (Max)	Capacity	kW	106.5	114.0	119.0	125.0
		kBut/h	363.4	389.0	406.0	426.5
	Power input	kW	25.66	28.06	29.55	33.92
	COP	kW/kW	4.15	4.06	4.03	3.69
Connectable Indoor Unit	Total capacity	50-130% of outdoor unit capacity				
	Max. quantity	64				
Compressors	Type	DC inverter				
	Quantity	3				
	Type	DC				
Fan motors	Quantity	3				
	Type	20 default; up to 120 customization option				
	Max. ESP	Pa				
Refrigerant	Type	R410A				
	Factory charge	kg	11+17	13+17	11+22	
Pipe connections ³	Liquid pipe	mm	Φ19.1		Φ19.1	
	Gas pipe	mm	Φ31.8		Φ38.1	
Airflow rate	m ³ /h	28000		30000	36000	
Sound pressure level ⁴	dB(A)	69		91		
Sound power level	dB(A)	91				
Net dimensions (WxHxD)	mm	(990×1635×790)+(1340×1635×825)	(1340×1635×850)+(1340×1635×825)	(990×1635×790)+(1730×1830×850)		
Packed dimensions (WxHxD)	mm	(1090×1805×860)+(1405×1805×910)	(1405×1805×910)×2	(1090×1805×860)+(1800×2000×910)		
Net weight	kg	227+348	277+348	227+430		
Gross weight	kg	242+368	304+368	242+453		
Ambient temp. operating range	Cooling	°C	-5 to 48			
	Heating	°C	-25 to 24			

Capacity		HP	42	44	46	48
Model			MV6-1175WV2GN1-E	MV6-1230WV2GN1-E	MV6-1285WV2GN1-E	MV6-1345WV2GN1-E
Combination type			20HP+22HP	22HP+22HP	22HP+24HP	22HP+26HP
Power supply		V/N/Hz	380-415/3/50			
Cooling ¹	Capacity	kW	117.5	123.0	128.5	134.5
		kBut/h	400.9	419.7	438.4	458.9
	Power input	kW	33.5	36.7	36.5	39.3
	EER	kW/kW	3.51	3.35	3.52	3.43
Heating ² (Rated)	Capacity	kW	117.5	123.0	128.5	134.5
		kBut/h	400.9	419.7	438.4	458.9
	Power input	kW	27.7	30.0	30.43	33.21
	COP	kW/kW	4.24	4.10	4.22	4.05
Heating ² (Max)	Capacity	kW	132.0	138.0	144.0	150.5
		kBut/h	450.4	470.9	491.3	513.5
	Power input	kW	33.07	35.57	36.35	39.46
	COP	kW/kW	3.99	3.88	3.96	3.81
Connectable Indoor Unit	Total capacity	50-130% of outdoor unit capacity				
	Max. quantity	64				
Compressors	Type	DC inverter				
	Quantity	4				
	Type	DC				
Fan motors	Quantity	4				
	Type	20 default; up to 120 customization option				
	Max. ESP	Pa				
Refrigerant	Type	R410A				
	Factory charge	kg	17×2		17+22	
Pipe connections ³	Liquid pipe	mm	Φ19.1		Φ19.1	
	Gas pipe	mm	Φ38.1		Φ38.1	
Airflow rate	m ³ /h	34000		42000		
Sound pressure level ⁴	dB(A)	70		92		
Sound power level	dB(A)	92				
Net dimensions (WxHxD)	mm	(1340×1635×825)×2		(1340×1635×825)+(1730×1830×850)		
Packed dimensions (WxHxD)	mm	(1405×1805×910)×2		(1405×1805×910)+(1800×2000×910)		
Net weight	kg	348×2		348+430		
Gross weight	kg	368×2		368+453		
Ambient temp. operating range	Cooling	°C	-5 to 48			
	Heating	°C	-25 to 24			

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the V6 Series Engineering Data Book for connection piping diameters.
- 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.

VRF V6 Series - Heat Pump

380~415V, 3N, 50Hz

Capacity		HP	50	52	54	56
Model			MV6-1400WV2GN1-E	MV6-1460WV2GN1-E	MV6-1515WV2GN1-E	MV6-1570WV2GN1-E
Combination type			22HP+28HP	26HP+26HP	26HP+28HP	28HP+28HP
Power supply		V/N/Hz	380-415/3/50			
Cooling ¹	Capacity	kW	140.0	146.0	151.5	157.0
		kBut/h	477.7	498.2	516.9	535.7
	Power input	kW	42.5	41.8	45.1	48.3
	EER	kW/kW	3.29	3.49	3.36	3.25
Heating ² (Rated)	Capacity	kW	140.0	146.0	151.5	157.0
		kBut/h	477.7	498.2	516.9	535.7
	Power input	kW	36.2	36.22	39.3	42.3
	COP	kW/kW	3.87	4.03	3.86	3.71
Heating ² (Max)	Capacity	kW	156.5	163.0	169.0	175.0
		kBut/h	534.0	556.2	576.6	597.1
	Power input	kW	43.83	43.35	47.72	52.08
	COP	kW/kW	3.57	3.76	3.54	3.36
Connectable Indoor Unit	Total capacity	50-130% of outdoor unit capacity				
	Max. quantity	64				
Compressors	Type	DC inverter				
	Quantity	4				
	Type	DC				
Fan motors	Quantity	4				
	Type	20 default; up to 120 customization option				
	Max. ESP	Pa				
Refrigerant	Type	R410A				
	Factory charge	kg	17+22		22×2	
Pipe connections ³	Liquid pipe	mm	Φ19.1		Φ19.1	
	Gas pipe	mm	Φ38.1		Φ41.3	
Airflow rate	m ³ /h	42000		50000		
Sound pressure level ⁴	dB(A)	70		92		
Sound power level	dB(A)	92				
Net dimensions (WxHxD)	mm	(1340×1635×825)+(1730×1830×850)		(1730×1830×850)×2		
Packed dimensions (WxHxD)	mm	(1405×1805×910)+(1800×2000×910)		(1800×2000×910)×2		
Net weight	kg	348+430		430×2		
Gross weight	kg	368+453		453×2		
Ambient temp. operating range	Cooling	°C	-5 to 48			
	Heating	°C	-25 to 24			

Capacity		HP	58	60	62	64
Model			MV6-1635WV2GN1-E	MV6-1685WV2GN1-E	MV6-1750WV2GN1-E	MV6-1800WV2GN1-E
Combination type			28HP+30HP	28HP+32HP	30HP+32HP	32HP+32HP
Power supply		V/N/Hz	380-415/3/50			
Cooling ¹	Capacity	kW	163.5	168.5	175.0	180.0
		kBut/h	557.9	574.9	597.1	614.2
	Power input	kW	51.6	55.2	58.5	62.1
	EER	kW/kW	3.17	3.05	2.99	2.90
Heating ² (Rated)	Capacity	kW	163.5	168.5	175.0	180.0
		kBut/h	557.9	574.9	597.1	614.2
	Power input	kW	44.1	46.9	48.7	51.4
	COP	kW/kW	3.70	3.59	3.59	3.50
Heating ² (Max)	Capacity	kW	182.5	187.5	195.0	200.0
		kBut/h	622.7	639.8	665.3	682.4
	Power input	kW	53.82	56.72	58.45	61.35
	COP	kW/kW	3.39	3.31	3.34	3.26
Connectable Indoor Unit	Total capacity	50-130% of outdoor unit capacity				
	Max. quantity	64				
Compressors	Type	DC inverter				
	Quantity	4				
	Type	DC				
Fan motors	Quantity	4				
	Type	20 default; up to 120 customization option				
	Max. ESP	Pa				
Refrigerant	Type	R410A				
	Factory charge	kg	22+25		25×2	
Pipe connections ³	Liquid pipe	mm	Φ19.1		Φ19.1	
	Gas pipe	mm	Φ41.3		Φ41.3	
Airflow rate	m ³ /h	49000		48000		
Sound pressure level ⁴	dB(A)	70		92		
Sound power level	dB(A)	92				
Net dimensions (WxHxD)	mm	(1730×1830×850)×2		(1800×2000×910)×2		
Packed dimensions (WxHxD)	mm	(1800×2000×910)×2				
Net weight	kg	430+475		475×2		
Gross weight	kg	453+507		507×2		
Ambient temp. operating range	Cooling	°C	-5 to 48			
	Heating	°C	-25 to 24			

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the V6 Series Engineering Data Book for connection piping diameters.
- 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.

VRF V6 Series - Heat Pump

380~415V, 3N, 50Hz

Capacity			HP	66	68	70	72
Model				MV6-1850WV2GN1-E	MV6-1915WV2GN1-E	MV6-1965WV2GN1-E	MV6-2020WV2GN1-E
Combination type				12HP+22HP+32HP	14HP+22HP+32HP	16HP+22HP+32HP	12HP+28HP+32HP
Power supply			V/N/Hz	380-415/3/50			
Cooling ¹	Capacity	kW		185.0	191.5	196.5	202.0
		kBut/h		631.2	653.4	670.5	689.2
	Power input	kW		58.1	59.3	61.4	63.9
	EER	kW/kW		3.18	3.23	3.20	3.16
Heating ² (Rated)	Capacity	kW		185.0	191.5	196.5	202.0
		kBut/h		631.2	653.4	670.5	689.2
	Power input	kW		47.3	49.2	50.5	53.4
	COP	kW/kW		3.91	3.89	3.89	3.78
Heating ² (Max)	Capacity	kW		206.5	214.0	219.0	225.0
		kBut/h		704.6	730.2	747.2	767.7
	Power input	kW		56.34	58.73	60.22	64.59
	COP	kW/kW		3.67	3.64	3.64	3.48
Connectable Indoor Unit	Total capacity			50-130% of outdoor unit capacity			
Compressors	Indoor Unit			Max. quantity			
	Type			DC inverter			
	Quantity			5			
Fan motors	Type			DC			
	Quantity			5			
	Max. ESP			Pa			
Refrigerant	Type			R410A			
	Factory charge			kg			
	Liquid pipe			mm			
Pipes	Liquid pipe			mm			
	Gas pipe			mm			
	connections ³			mm			
Airflow rate			m ³ /h				
Sound pressure level ⁴			dB(A)				
Sound power level			dB(A)				
Net dimensions (WxHxD)			mm				
Packed dimensions (WxHxD)			mm				
Net weight			kg				
Gross weight			kg				
Ambient temp. operating range			°C				
			°C				

Capacity			HP	74	76	78	80
Model				MV6-2075WV2GN1-E	MV6-2130WV2GN1-E	MV6-2185WV2GN1-E	MV6-2245WV2GN1-E
Combination type				20HP+22HP+32HP	22HP+22HP+32HP	22HP+24HP+32HP	22HP+26HP+32HP
Power supply			V/N/Hz	380-415/3/50			
Cooling ¹	Capacity	kW		207.5	213.0	218.5	224.5
		kBut/h		708.0	726.8	745.5	766.0
	Power input	kW		64.5	67.8	67.5	70.3
	EER	kW/kW		3.22	3.14	3.24	3.19
Heating ² (Rated)	Capacity	kW		207.5	213.0	218.5	224.5
		kBut/h		708.0	726.8	745.5	766.0
	Power input	kW		53.4	55.7	56.13	58.91
	COP	kW/kW		3.88	3.82	3.89	3.81
Heating ² (Max)	Capacity	kW		232.0	238.0	244.0	250.5
		kBut/h		791.6	812.1	832.5	854.7
	Power input	kW		63.75	66.24	67.02	70.13
	COP	kW/kW		3.64	3.59	3.64	3.57
Connectable Indoor Unit	Total capacity			50-130% of outdoor unit capacity			
Compressors	Indoor Unit			Max. quantity			
	Type			DC inverter			
	Quantity			6			
Fan motors	Type			DC			
	Quantity			6			
	Max. ESP			Pa			
Refrigerant	Type			R410A			
	Factory charge			kg			
	Liquid pipe			mm			
Pipes	Liquid pipe			mm			
	Gas pipe			mm			
	connections ³			mm			
Airflow rate			m ³ /h				
Sound pressure level ⁴			dB(A)				
Sound power level			dB(A)				
Net dimensions (WxHxD)			mm				
Packed dimensions (WxHxD)			mm				
Net weight			kg				
Gross weight			kg				
Ambient temp. operating range			°C				
			°C				

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 for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the V6 Series Engineering Data Book for connection piping diameters.
 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.

VRF V6 Series - Heat Pump

380~415V, 3N, 50Hz

Capacity			HP	82	84	86	88
Model				MV6-2300WV2GN1-E	MV6-2360WV2GN1-E	MV6-2415WV2GN1-E	MV6-2470WV2GN1-E
Combination type				22HP+28HP+32HP	26HP+26HP+32HP	26HP+28HP+32HP	28HP+28HP+32HP
Power supply			V/N/Hz	380-415/3/50			
Cooling ¹	Capacity	kW		230.0	236.0	241.5	247.0
		kBut/h		784.8	805.2	824.0	842.8
	Power input	kW		73.5	72.8	76.1	79.3
	EER	kW/kW		3.13	3.24	3.17	3.11
Heating ² (Rated)	Capacity	kW		230.0	236.0	241.5	247.0
		kBut/h		784.8	805.2	824.0	842.8
	Power input	kW		61.9	61.92	65.0	68.0
	COP	kW/kW		3.72	3.81	3.72	3.63
Heating ² (Max)	Capacity	kW		256.5	263.0	269.0	275.0
		kBut/h		875.2	897.4	917.8	938.3
	Power input	kW		74.50	74.03	78.39	82.76
	COP	kW/kW		3.44	3.55	3.43	3.32
Connectable Indoor Unit	Total capacity			50-130% of outdoor unit capacity			
Compressors	Indoor Unit			Max. quantity			
	Type			DC inverter			
	Quantity			6			
Fan motors	Type			DC			
	Quantity			6			
	Max. ESP			Pa			
Refrigerant	Type			R410A			
	Factory charge			kg			
	Liquid pipe			mm			
Pipes	Liquid pipe			mm			
	Gas pipe			mm			
	connections ³			mm			
Airflow rate			m ³ /h				
Sound pressure level ⁴			dB(A)				
Sound power level			dB(A)				
Net dimensions (WxHxD)			mm				
Packed dimensions (WxHxD)			mm				
Net weight			kg				
Gross weight			kg				
Ambient temp. operating range			°C				
			°C				

Capacity			HP	90	92	94	96
Model				MV6-2535WV2GN1-E	MV6-2585WV2GN1-E	MV6-2650WV2GN1-E	MV6-2700WV2GN1-E
Combination type				28HP+30HP+32HP	28HP+32HP+32HP	30HP+32HP+32HP	32HP+32HP+32HP
Power supply			V/N/Hz	380-415/3/50			
Cooling ¹	Capacity	kW		253.5	258.5	265.0	270.0
		kBut/h		864.9	882.0	904.2	921.2
	Power input	kW		82.6	86.2	89.5	93.1
	EER	kW/kW		3.07	3.00	2.96	2.90
Heating ² (Rated)	Capacity	kW		253.5	258.5	265.0	270.0
		kBut/h		864.9	882.0	904.2	921.2
	Power input	kW		69.8	72.6	74.4	77.1
	COP	kW/kW		3.63	3.56	3.56	3.50
Heating ² (Max)	Capacity	kW		282.5	287.5	295.0	300.0
		kBut/h		963.9	981.0	1006.5	1023.6
	Power input	kW		84.49	87.39	89.13	92.02
	COP	kW/kW		3.34	3.29	3.31	3.26
Connectable Indoor Unit	Total capacity			50-130% of outdoor unit capacity			
Compressors	Indoor Unit			Max. quantity			
	Type			DC inverter			
	Quantity			6			
Fan motors	Type			DC			
	Quantity			6			
	Max. ESP			Pa			
Refrigerant	Type			R410A			
	Factory charge			kg			
	Liquid pipe			mm			
Pipes	Liquid pipe			mm			
	Gas pipe			mm			
	connections ³			mm			
Airflow rate			m ³ /h				
Sound pressure level ⁴			dB(A)				
Sound power level			dB(A)				
Net dimensions (WxHxD)			mm				
Packed dimensions (WxHxD)			mm				
Net weight			kg				
Gross weight			kg				
Ambient temp. operating range			°C				
			°C				

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 for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the V6 Series Engineering Data Book for connection piping diameters.
 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.

 **Indoor Units**
VRF indoor units

 **Fresh Air Processing Unit**
100% fresh air supply

 **Ventilation**
Heat recovery ventilator (HRV)

 **AHU Connection Kit**
Connect to Midea or third party DX AHU

 **Control Systems**
Smart control systems



VRF V6-i Series Heat Pump

Optimized design
for middle-sized
buildings

- ▶ Side-discharge and Top-discharge Options
- ▶ META Technology (Available for Top-discharge Only)
- ▶ Zen Air Technology
- ▶ Doctor M Technology (Available for Top-discharge Only)
- ▶ Enhanced Vapor Injection (EVI) Compressor (Available for Top-discharge Only)
- ▶ Triple Configurations (Available for Top-discharge Only)
- ▶ High Efficiency G-Shape Heat Exchanger (Available for Top-discharge Only)
- ▶ ESP up to 120Pa (Available for Top-discharge Only)
- ▶ Plate Heat (PHE) Subcooling (Available for Top-discharge Only)
- ▶ Precise Oil Control Technology
- ▶ Multi Silent Modes
- ▶ Backup Operation (Available for Top-discharge Only)
- ▶ UL Anti-Corrosion Certificate (Available for Top-discharge Only)
- ▶ Refrigerant Cooling PCB
- ▶ Auto Snow-blowing Function (Available for Top-discharge Only)
- ▶ Dust-clean Function (Available for Top-discharge Only)
- ▶ Optional Multi-Functional Diagnosis Box (Available for Top-discharge Only)
- ▶ Automatic Refrigerant Detecting/Charging/Recycling(Available for Top-discharge Only)

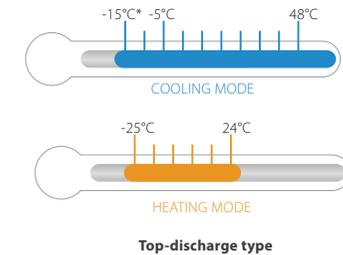
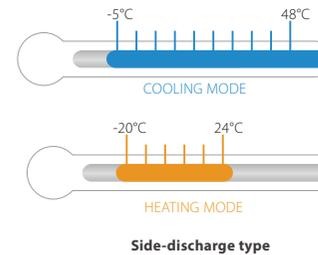
Wide Capacity Range

V6-i VRF has two options, side-discharge and top-discharge. For side-discharge type, it has four models, 7/8/9/10/12HP. For top-discharge type, the capacity is from 8HP to 32HP in 2HP increments.

Side-discharge type	Top-discharge type			
7/8/9/10/12HP	8/10/12HP (with single fan)	14/16/18HP (with single fan)	20/22HP (with dual fans)	24/26/28/30/32HP (with dual fans)
				

Wide Operation Range

The V6-i VRF can operate stably in a wide ambient temperature range.

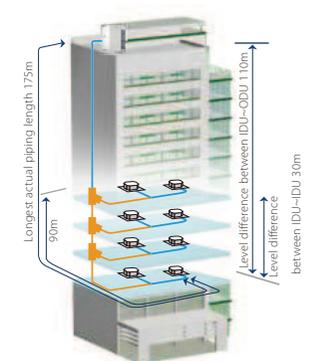


* Cooling operation at -15°C is available as a customization option.

Long Piping Capability

Piping length	Capability (m)	
	Top-discharge	Side-discharge
Total piping length	1000	150
Longest piping length-actual (equivalent)	175 (200)	100 (110)
Longest piping length after first branch	40/90*	40
Largest level difference between IDUs and ODU-ODU up (down)	90 (110)	50 (40)
Largest level difference between IDUs	30	15

*The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please contact your local dealer for further information.



VRF V6-i Series - Heat Pump (Top-discharge type)

380~415V, 3N, 50Hz

Capacity		HP	8	10	12	14	16	18	
Model			MV6-1252WV2GN1-E	MV6-1280WV2GN1-E	MV6-1335WV2GN1-E	MV6-1400WV2GN1-E	MV6-1450WV2GN1-E	MV6-1500WV2GN1-E	
Power supply		V/Ph/Hz	380-415/3/50						
Cooling ¹	Capacity	kW	25.2	28	33.5	40	45	50	
		kBtu/h	86	95.5	114.3	136.5	153.5	170.6	
	Power input	kW	6.19	7.14	8.9	11	12.9	14.7	
	EER		4.07	3.92	3.75	3.65	3.5	3.4	
Heating ² (Rated)	Capacity	kW	25.2	28	33.5	40	45	50	
		kBtu/h	86	95.5	114.3	136.5	153.5	170.6	
	Power input	kW	5.10	5.77	7.6	9.3	10.7	12.2	
	COP		4.94	4.85	4.4	4.3	4.2	4.1	
Heating ² (Max)	Capacity	kW	27.0	31.5	37.5	45.0	50.0	56.0	
		kBtu/h	92.1	107.5	128.0	153.5	170.6	191.1	
	Power input	kW	5.71	6.91	9.13	11.23	12.89	14.72	
	COP		4.73	4.56	4.11	4.01	3.88	3.80	
Connected indoor unit	Total capacity	50-130% of outdoor unit capacity							
	Maximum quantity	13	16	20	23	26	29		
Compressors	Type	DC inverter							
	Quantity	1							
Fan motors	Type	DC							
	Quantity	1							
Refrigerant	Type	R410A							
	Factory charge	kg	11			13			
Pipe connections ³	Liquid pipe	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ19.1	
	Gas pipe	mm	Φ25.4	Φ25.4	Φ28.6				
Airflow rate	m ³ /h	11000			13000				
Sound pressure level ⁴	dB(A)	58	58	60	62	65	65		
Sound power level	dB(A)	78	78	81	85	88	88		
Net dimensions (WxHxD)	mm	990x1635x790			1340x1635x850				
Packed dimensions (WxHxD)	mm	1090x1805x860			1405x1805x910				
Net weight	kg	227			277				
Gross weight	kg	242			304				
Ambient temp. operating range	Cooling	°C	-5 to 48						
	Heating	°C	-25 to 24						

Capacity		HP	20	22
Model			MV6-1560WV2GN1-E	MV6-1615WV2GN1-E
Power supply		V/Ph/Hz	380-415/3/50	
Cooling ¹	Capacity	kW	56	61.5
		kBtu/h	191.1	209.8
	Power input	kW	16	20.2
	EER		3.5	3.05
Heating ² (Rated)	Capacity	kW	56	61.5
		kBtu/h	191.1	209.8
	Power input	kW	13.8	17.6
	COP		4.05	3.5
Heating ² (Max)	Capacity	kW	63.0	69.0
		kBtu/h	215.0	235.4
	Power input	kW	16.61	20.83
	COP		3.79	3.31
Connected indoor unit	Total capacity	50-130% of outdoor unit capacity		
	Maximum quantity	33	36	
Compressors	Type	DC inverter		
	Quantity	2		
Fan motors	Type	DC		
	Quantity	2		
Refrigerant	Type	R410A		
	Factory charge	kg	17	
Pipe connections ³	Liquid pipe	mm	Φ19.1	
	Gas pipe	mm	Φ31.8	
Airflow rate	m ³ /h	17000		
Sound pressure level ⁴	dB(A)	66		
Sound power level	dB(A)	88		
Net dimensions (WxHxD)	mm	1340x1635x825		
Packed dimensions (WxHxD)	mm	1405x1805x910		
Net weight	kg	344		
Gross weight	kg	364		
Ambient temp. operating range	Cooling	°C	-5 to 48	
	Heating	°C	-25 to 24	

- 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.

Capacity		HP	24	26	28	30	32
Model			MV6-1670WV2GN1-E	MV6-1730WV2GN1-E	MV6-1785WV2GN1-E	MV6-1850WV2GN1-E	MV6-1900WV2GN1-E
Power supply		V/Ph/Hz	380-415/3/50				
Cooling ¹	Capacity	kW	67	73	78.5	85	90
		kBtu/h	228.6	249.1	267.8	290	307.1
	Power input	kW	21.6	21.6	24.9	28.3	32.1
	EER		3.1	3.4	3.15	3	2.8
Heating ² (Rated)	Capacity	kW	67	73	78.5	85	90
		kBtu/h	228.6	249.1	267.8	290	307.1
	Power input	kW	17.27	18.58	22.49	24.3	26.5
	COP		3.88	3.93	3.49	3.5	3.4
Heating ² (Max)	Capacity	kW	75.0	81.5	87.5	95.0	100.0
		kBtu/h	255.9	278.1	298.6	324.1	341.2
	Power input	kW	20.91	22.23	27.53	29.37	31.58
	COP		3.59	3.67	3.18	3.24	3.17
Connected indoor unit	Total capacity	50-130% of outdoor unit capacity					
	Maximum quantity	39	43	46	50	53	
Compressors	Type	DC inverter					
	Quantity	2					
Fan motors	Type	DC					
	Quantity	2					
Refrigerant	Type	R410A					
	Factory charge	kg	22			25	
Pipe connections ³	Liquid pipe	mm	Φ19.1	Φ22.2		Φ38.1	
	Gas pipe	mm	Φ31.8			Φ24000	
Airflow rate	m ³ /h	25000			24000		
Sound pressure level ⁴	dB(A)	67	68			90	
Sound power level	dB(A)	89	90				
Net dimensions (WxHxD)	mm	1730x1830x850			1800x2000x910		
Packed dimensions (WxHxD)	mm	1800x2000x910					
Net weight	kg	407	429		475		
Gross weight	kg	430	452		507		
Ambient temp. operating range	Cooling	°C	-5 to 48				
	Heating	°C	-25 to 24				

VRF V6-i Series - Heat Pump (Side-discharge type)

380~415V, 3N, 50Hz

Capacity		HP	7	8	9	10	12
Model			MV6-200WV2RN1(A)	MV6-224WV2RN1(A)	MV6-260WV2RN1(A)	MV6-280WV2RN1(A)	MV6-335WV2RN1(A)
Power supply		V/N/Hz	380-415/3/50				
Cooling ¹	Capacity	kW	20	22.4	26	28.5	33.5
		kBtu/h	68.2	76.4	88.7	97.2	114.3
	Power input	kW	4.90	6.83	9.63	12.28	14.38
	EER		4.08	3.28	2.70	2.32	2.33
Heating ² (Nominal)	Capacity	kW	20	22.4	26	28.5	33.5
		kBtu/h	68.2	76.4	88.7	97.2	114.3
	Power input	kW	4.21	4.98	5.53	6.16	8.1
	COP		4.75	4.50	4.70	4.63	4.14
Heating ² (Max)	Capacity	kW	22.5	25	28.5	31.5	37.5
		kBtu/h	76.8	85.3	97.2	107.5	128.0
	Power input	kW	6.59	6.67	7.43	7.41	9.08
	COP		3.41	3.75	3.83	4.25	4.13
Connected indoor unit	Total capacity	50-130% of outdoor unit capacity					
	Maximum quantity	11	13	15	16	20	
Compressor	Type	DC inverter					
	Quantity	1					
Fan motors	Type	DC					
	Quantity	2					
Refrigerant	Type	R410A					
	Factory charge	kg	6.5	6.5	6.5	6.5	8
Pipe connections ³	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ12.7
	Gas pipe	mm	Φ19.1	Φ19.1	Φ22.2	Φ22.2	Φ25.4
Airflow rate	m ³ /h	9000	10000		11000		
Sound pressure level ⁴	dB(A)	58	58	59	60	61	
Net dimensions (WxHxD)	mm	1120x1558x528					
Packed dimensions (WxHxD)	mm	1270x1720x565					
Net weight	kg	143	143	144	144	157	
Gross weight	kg	159	159	160	160	173	
Operating temperature range	Cooling	°C	-5 to 48				
	Heating	°C	-20 to 24				

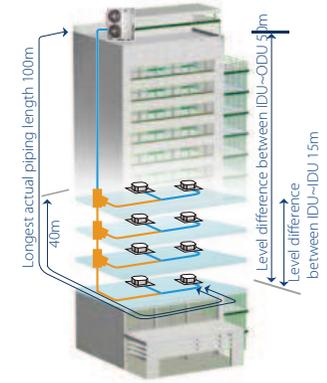
- Notes:
 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 3. Diameters 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 1m above the floor in a semi-anechoic chamber.

-  **Indoor Units**
VRF indoor units
-  **Ventilation**
Heat recovery ventilator (HRV)
-  **Control Systems**
Smart control systems
-  **AHU Connection Kit**
Connect to Midea or third party DX AHU



Long Piping Capability

Piping length	Capability (m)		
	20/22.4/26kW	28/33.5kW	40/45kW
Total piping length	120	150	250
Longest length - actual (equivalent)	60 (70)	100 (110)	100 (120)
Longest length after first branch	20	40	40
Longest length after nearest branch	15	15	15
Largest level difference between IDUs and ODU-ODU up (down)	30 (20)	50 (40)	30 (20)
Largest level difference between IDUs	8	15	8



VRF V4 Plus I Series Heat Pump

Optimized design for small and medium-sized buildings

- ▶ Capacity up to 16HP
- ▶ Connectable Indoor Units Quantity up to 20
- ▶ Precise Oil Control Technology
- ▶ Advanced Silence Technology

VRF V4 Plus I Series - Heat Pump

HP			7	8	9	10	12	14	16	
Model			MDV-V200W/DRN1	MDV-V224W/DRN1	MDV-V260W/DRN1	MDV-V280W/DGN1	MDV-V335W/DGN1	MDV-V400W/DRN1(A)	MDV-V450W/DRN1(A)	
Power supply	V/N/Hz		380-415/3/50							
Cooling ¹	Capacity	kW	20.0	22.4	26.0	28.0	33.5	40.0	45.0	
	Power input	kW	6.35	6.81	8.13	12.07	15.09	15.09	13.55	
	EER		3.15	3.29	3.20	2.32	2.22	2.65	3.32	
Heating ²	Capacity	kW	22.0	24.5	28.5	28.0	33.5	40.0	45.0	
	Power input	kW	6.20	5.9	7.22	6.68	7.94	10.0	11.11	
	COP		3.55	4.15	3.95	4.19	4.22	4.00	4.05	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity								
	Max. quantity		10	11	12	16	20	14	15	
Compressor	Type	DC inverter								
	Quantity		1	1	1	1	1	2	2	
Fan motor	Type	DC motor								
	Quantity		2							
Refrigerant	Type	R410A								
	Factory charging	kg	4.8	6.2	6.2	8	8	9	12	
Pipe connections	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ12.7	Φ12.7	Φ12.7	
	Gas pipe	mm	Φ19.1	Φ19.1	Φ22.2	Φ22.2	Φ25.4	Φ22.2	Φ25.4	
Air flow rate	m ³ /h	10999	10494	10494	11000	11300	16575	16575		
Sound power level ³	dB(A)	76	76	77	79	81	82	83		
Net dimension (WxHxD)	mm	1120x1558x528						1360x1650x540		1460x1650x540
Packing size (WxHxD)	mm	1270x1720x565						1450x1785x560		1550x1785x560
Net weight	kg	137	146.5	147	157	157	240	275		
Gross weight	kg	153	162.5	163	173	173	260	290		
Operating temperature range	°C	Cooling: -15~46; Heating: -15~24			Cooling: -5~48; Heating: -20~24		Cooling: -5~48; Heating: -15~24			

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. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.



Indoor Units
VRF indoor units



Ventilation
Heat recovery ventilator (HRV)



Control Systems
Smart control systems



AHU Connection Kit
Connect to Midea or third party DX AHU



VRF Mini Series Heat Pump

Optimized design for small buildings

- ▶ Two Options: Standard and Mini C Series
- ▶ Capacity Up to 18kw
- ▶ Connectable Indoor Units Quantity up to 9
- ▶ Refrigerant Cooling PCB (Available for Mini C Series Only)
- ▶ Precise Oil Control Technology
- ▶ Advanced Silence Technology
- ▶ Compact, Easy Installation



DC Inverter Compressor

DC inverter compressor makes the output of the outdoor unit to be modulated by the cooling or heating demands of the zone that it controls. This advanced system ensures precise temperature regulation and highly efficient energy usage, making a significant contribution to limiting the impact on the environment.

Compressor (Twin Rotor) structure



- Highly Efficient DC Motor:**
 - Creative motor core design
 - High density neodymium magnet
 - Concentrated type stator
 - Wider operating frequency range
- Better balance and Extremely Low Vibration:**
 - Twin eccentric cams
 - 2 balance weights
- Highly Stable Moving Parts:**
 - Optimal material matching rollers and vanes
 - Optimize compressor drive technology
 - Highly robust bearings
 - Compact structure

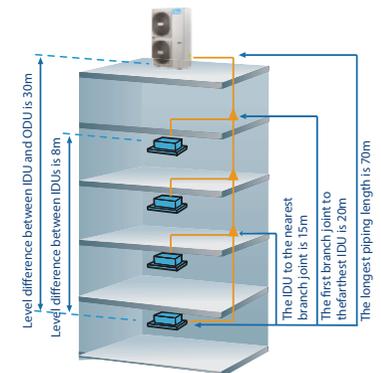
Wide Capacity Range

Mini VRF has two options, standard series and Mini C series. For standard series, it has 6 models from 8kW to 18kW. For Mini C series, it has 5 models from 8kW to 16kW. The Mini VRF is perfect for commercial and residential applications: small offices, villas, apartments, shops, etc.

Mini C series			Standard series	
8kW	10-12kW	14-16kW	8-10kW	12-18kW

Long Piping Capability

Piping length	Capability (m)				
	Mini C series			Standard series	
	8kW	10-12kW	14-16kW	8-10kW	12-18kW
Total piping length	50	65	100	100	100
Longest piping length-actual (equivalent)	35 (40)	45 (50)	60 (70)	45 (50)	60 (70)
Longest piping length after first branch	20	20	20	20	20
Longest piping length after nearest branch	15	15	15	15	15
Largest level difference between IDUs and ODU-ODU up (down)	10 (10)	20 (20)	30 (20)	30 (20)	30 (20)
Largest level difference between IDUs	8	8	8	8	8

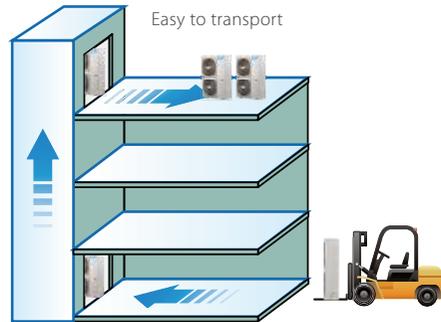


More Convenient Piping Connector – Branch Box

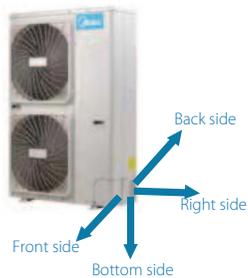


Easy Installation

The mini VRF can be transported by elevator which makes installation dramatically easy, and effectively reduces time and labor thanks to the small size.



Four-Way Piping Connection



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

Mini VRF (Standard Series) - Heat Pump

220~240V, 1N, 50Hz

Model			MDV-V80WDN1	MDV-V105WDN1	MDV-V120WDN1	MDV-V140WDN1	MDV-V160WDN1(B)
Power supply		V/N/Hz	220-240/1/50				
Cooling	Capacity	kW	7.2	9.0	12.3	14	15.5
	Power input	kW	1.85	2.54	3.25	3.85	4.39
	EER		3.9	3.55	3.78	3.64	3.53
Heating	Capacity	kW	7.2	9.0	13.2	15.4	17
	Power input	kW	1.79	2.43	3.47	4.05	4.58
	COP		4.02	3.71	3.8	3.8	3.71
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity				
	Max. quantity		4	5	6	6	7
Compressor	Type		DC Inverter				
	Quantity		1				
Fan motor	Type		DC				
	Quantity		1		2		
Refrigerant	Type		R410A				
	Factory charging	kg	2.95		3.3	3.9	3.9
Pipe connections	Liquid pipe	mm	Φ9.53				
	Gas pipe	mm	Φ15.9				Φ19.1
Air flow rate	$\frac{3}{m^3/h}$		5500			6000	
Sound power level	dB(A)		67	68	72	73	73
Net dimension (WxHxD)	mm		1075x966x396			900x1327x400	
Packing size (WxHxD)	mm		1120x1100x435			1030x1456x435	
Net weight	kg		75.5			95	100
Gross weight	kg		85.5			106	111
Operating temperature range	°C		Cooling: -15~43; Heating: -15~27				

Model			MDV-120WDON1	MDV-140WDON1	MDV-160WDON1
Power supply		V/N/Hz	220-240/1/50		
Cooling	Capacity	kW	12.5	14	16
	Power input	kW	3.31	3.74	4.47
	EER		3.78	3.74	3.58
Heating	Capacity	kW	14	16	17.5
	Power input	kW	3.68	4.21	4.72
	COP		3.8	3.8	3.71
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity		
	Max. quantity		7	8	9
Compressor	Type		DC Inverter		
	Quantity		1		
Fan motor	Type		DC		
	Quantity		2		
Refrigerant	Type		R410A		
	Factory charging	kg	2.8	3.2	3.8
Pipe connections	Liquid pipe	mm	Φ9.53		
	Gas pipe	mm	Φ15.9		Φ19.1
Air flow rate	$\frac{3}{m^3/h}$		6000		
Sound power level	dB(A)		72	73	73
Net dimension (WxHxD)	mm		900x1327x400		
Packing size (WxHxD)	mm		1030x1456x435		
Net weight	kg		95	99	100
Gross weight	kg		105	109	110
Operating temperature range	°C		Cooling: -15~46; Heating: -15~27		

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. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.

Mini VRF (Standard Series) - Heat Pump

380~415V, 3N, 50Hz

Model		MDV-V120WDRN1	MDV-V140WDRN1	MDV-V160WDRN1	MDV-V180WDRN1
Power supply		V/N/Hz 380-415/3/50			
Cooling	Capacity	kW 12.3	14	15.5	17.5
	Power input	kW 3.25	3.85	4.39	5.47
	EER	3.78	3.64	3.53	3.2
Heating	Capacity	kW 13.2	15.4	17	19
	Power input	kW 3.47	4.05	4.58	5
	COP	3.8	3.8	3.71	3.8
Connectable indoor unit	Total capacity	45~130% of outdoor unit capacity			
Compressor	Max. quantity	6	6	7	9
	Type	DC Inverter			
Fan motor	Quantity	1			
	Type	DC			
Refrigerant	Quantity	2			
	Type	R410A			
Pipe connections	Factory charging	kg 3.3	3.9	3.9	4.5
	Liquid pipe	mm	Φ9.53		
Air flow rate	Gas pipe	mm	Φ15.9		Φ19.1
	3 m ³ /h	6000			
Sound power level	dB(A)	72	73	73	74
Net dimension (WxHxD)	mm	900x1327x400			
Packing size (WxHxD)	mm	1030x1456x435			
Net weight	kg	95		102	107
Gross weight	kg	106		113	118
Operating temperature range	°C	Cooling: -15~43; Heating: -15~27			

Model		MDV-120WDGN1	MDV-140WDGN1	MDV-160WDGN1
Power supply		V/N/Hz 380-415/3/50		
Cooling	Capacity	kW 12.5	14	16
	Power input	kW 3.31	3.74	4.47
	EER	3.78	3.74	3.58
Heating	Capacity	kW 14	16	17.5
	Power input	kW 3.68	4.21	4.72
	COP	3.8	3.8	3.71
Connectable indoor unit	Total capacity	45~130% of outdoor unit capacity		
Compressor	Max. quantity	7	8	9
	Type	DC Inverter		
Fan motor	Quantity	1		
	Type	DC		
Refrigerant	Quantity	2		
	Type	R410A		
Pipe connections	Factory charging	kg 2.8	3.2	3.8
	Liquid pipe	mm	Φ9.53	
Air flow rate	Gas pipe	mm	Φ15.9	
	3 m ³ /h	6000		
Sound power level	dB(A)	72	73	73
Net dimension (WxHxD)	mm	900x1327x400		
Packing size (WxHxD)	mm	1030x1456x435		
Net weight	kg	95	99	100
Gross weight	kg	105	109	110
Operating temperature range	°C	Cooling: -15~46; Heating: -15~27		

- 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. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.

Mini VRF (Mini C series) - Heat Pump

220~240V, 1N, 50Hz

HP		3	4	4.5
Model		MDV-V80W/DN1(C)	MDV-V100W/DN1(C)	MDV-V120W/DN1(C)
Power supply		V/N/Hz 220-240/1/50		
Cooling ¹	Capacity	kW 7.2	9.0	12.2
		kBtu/h 24.6	30.7	40.9
	Power input	kW 2.18	2.64	4.32
Heating ²	EER	3.30	3.41	2.83
	Capacity	kW 7.2	9.0	14.0
		kBtu/h 24.6	30.7	47.8
Compressor	Power input	kW 1.82	2.10	3.17
	COP	3.95	4.29	4.40
Connectable indoor unit	Total capacity	45~130% of outdoor unit capacity		
Compressor	Max. quantity	4	6	7
	Type	DC Inverter		
Fan motor	Quantity	1		
	Type	DC		
Refrigerant	Quantity	1		
	Type	R410A		
Pipe connections ³	Factory charge	kg 2.2	2.35	3
	Liquid pipe	mm	Φ9.53	
Airflow rate	Gas pipe	mm	Φ15.9	
	3 m ³ /h	5200		
Sound pressure level	dB(A)	54	54	56
Net dimensions (WxHxD)	mm	982x712x440	950x840x426	
Packed dimensions (WxHxD)	mm	1048x810x485	1025x950x510	
Net weight	kg	55	72.5	84
Gross weight	kg	59.5	82	93
Operating temperature range	°C	Cooling: -5~55; Heating: -15~27		

HP		5	6	
Model		MDV-V140W/DN1(C)	MDV-V160W/DN1(C)	
Power supply		V/N/Hz 220-240/1/50		
Cooling ¹	Capacity	kW 14.0	15.5	
		kBtu/h 47.8	52.9	
	Power input	kW 4.56	5.35	
Heating ²	EER	3.07	2.90	
	Capacity	kW 16.0	18.0	
		kBtu/h 54.6	61.4	
Compressor	Power input	kW 4.08	5.71	
	COP	3.92	3.20	
Connectable indoor unit	Total capacity	45~130% of outdoor unit capacity		
Compressor	Max. quantity	8	9	
	Type	DC Inverter		
Fan motor	Quantity	1		
	Type	DC		
Refrigerant	Quantity	1		
	Type	R410A		
Pipe connections ³	Factory charge	kg 3.4	3.8	
	Liquid pipe	mm	Φ9.53	
Airflow rate	Gas pipe	mm	Φ15.9	
	3 m ³ /h	5400		
Sound pressure level	dB(A)	56	56	
Net dimensions (WxHxD)	mm	1040x865x523		
Packed dimensions (WxHxD)	mm	1120x980x560		
Net weight	kg	91.4	95.4	
Gross weight	kg	101.4	105.4	
Operating temperature range	°C	Cooling: -5~55; Heating: -15~27		

- 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. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.



Indoor Units
VRF indoor units



Fresh Air Processing Unit
100% fresh air supply



Ventilation
Heat recovery ventilator (HRV)



AHU Connection Kit
Connect to Midea or third party DX AHU



Control Systems
Smart control systems



VRF V6R Series Heat Recovery

Offers simultaneous cooling and heating operation in one system

- ▶ META Technology
- ▶ Zen Air Technology
- ▶ Doctor M Technology
- ▶ Enhanced Vapor Injection (EVI) Compressor
- ▶ Triple Configurations
- ▶ ESP up to 80Pa
- ▶ Plate Heat (PHE) Subcooling
- ▶ Precise Oil Control Technology
- ▶ Multi Silent Modes
- ▶ Duty Cycling
- ▶ Backup Operation
- ▶ Refrigerant Cooling PCB
- ▶ Auto Snow-blowing Function
- ▶ Dust-clean Function
- ▶ Standard Multi-Functional Diagnosis Box
- ▶ Automatic Refrigerant Detecting/Charging/Recycling

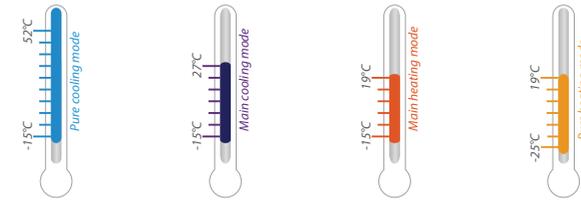
Wide Capacity Range

Starting at 8HP, capacity increases in 2HP increments up to 54HP, which is perfect for small to large buildings.



Wide Operation Range

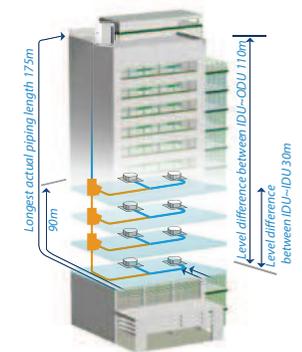
The V6R VRF system has a wide operation range in cooling mode, heating mode and simultaneous cooling and heating mode.



Long Piping Capability

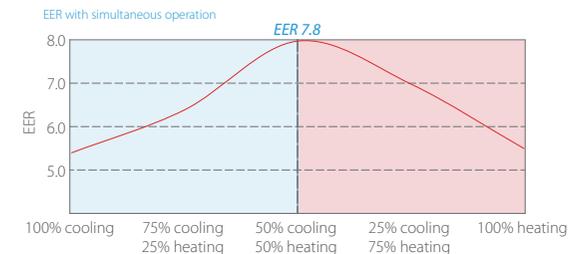
Piping length	Capability (m)
Total piping length	1000
Longest piping length-actual (equivalent)	175 (200)
Longest piping length after first branch	40/90*
Largest level difference between IDUs and ODU-ODU up (down)	110 (110)
Largest level difference between IDUs	30

*The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please contact your local dealer for further information.



Heat Recovery, Maximum Energy Saving

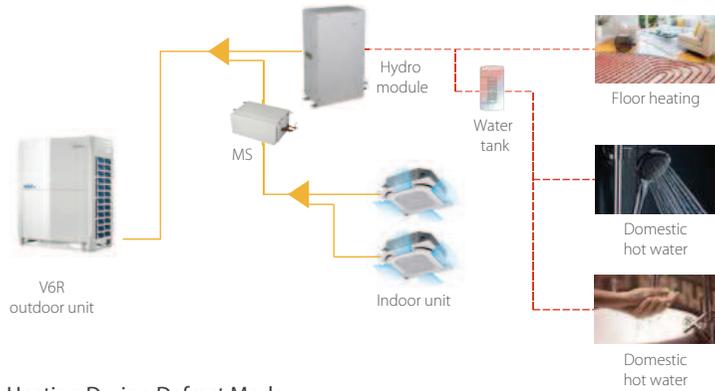
V6R Heat Recovery system can perform both cooling and heating operation simultaneously in one system. Heat recovery is achieved by diverting exhaust heat from indoor units in cooling mode to areas requiring heating. As a result of this, energy efficiency is maximized and electricity costs are reduced. The part load efficiencies are high as well (up to 7.8 in 8 HP category).



EER in simultaneous cooling and heating mode are based on the following conditions:
Outdoor temperature 7°CDB/6°CWB, indoor temperature 27°CDB/19°CWB for cooling, indoor temperature 20°CDB for heating.

Hot Water Supply

The V6R system can produce hot water (25°C to 80°C) when providing room air conditioning. The hot water can be used for space heating and domestic hot water, improving room comfort.



Continuous Heating During Defrost Mode

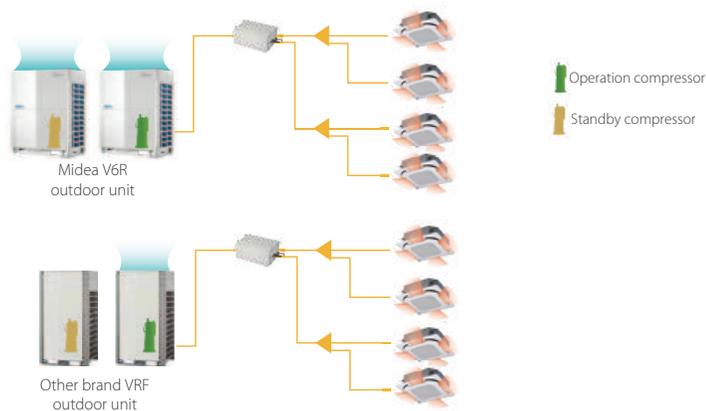
Normally, it is necessary to stop the heating operation during defrosting. However, the continuous heating operation method makes it possible to perform defrosting while the heating operation continues. With the combination model, units perform defrosting alternately. While one unit is performing defrosting, the other continues heating.



Note: This function is only available when the indoor units connected in V6R system are 2nd generation AC VRF indoor units (which will be released soon) or 2nd generation DC VRF indoor units produced after May 31st, 2020 only.

Independent Control of Heat Exchanger and Compressor to Improve Energy Efficiency

In cooling or heating mode, for a multi-unit system, the outdoor heat exchanger and compressor are independently controlled to improve energy efficiency, which means even the compressor of the outdoor unit does not operate, the heat exchanger of this outdoor unit can be used for heat exchange. This function can maximum use the outdoor heat exchanger to improve heat exchange efficiency.

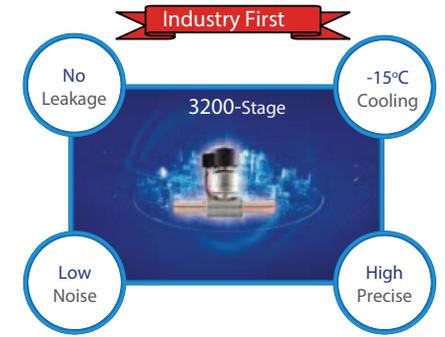


Intelligent MS Box

The V6R Heat Recovery system can perform simultaneous heating and cooling operation through the intelligent MS-box. It switches operation mode according to user requirement while it increases efficiency with simultaneous operation.

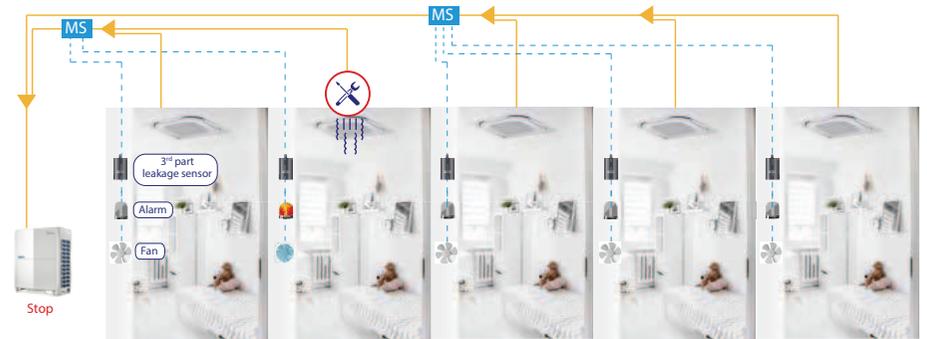
Single Port

- ▶ Compact and light to install
- ▶ No drain piping needed
- ▶ Connect up to 8 indoor units, capacity up to 32kW
- ▶ Double direction connection for refrigerant pipe to improve installation flexibility
- ▶ Electric ball valve control precision is up to 3200-stage
 - Completely close the valve with almost no leakage
 - Can be opened and closed in stages with very low noise
 - Can achieve cooling at ambient temperatures as low as -15°C
 - High precision refrigerant flow control
 - Low noise operation



- ▶ Real-time refrigerant leakage detection, safe and reliable operation.

- Real-time refrigerant leakage detection
- Provide dry contact to 3rd party for alarm and exhaust fan. When refrigerant leakage occurs, the alarm light will be on and the exhaust fan will automatically run to timely reduce the concentration of refrigerant in the room



Multiple Ports: 4-6-8-10-12

- ▶ Compact and light to install
- ▶ Low noise operation
- ▶ Up to 5 indoor units can be connected to one port
- ▶ Up to 47 indoor units can be connected to one MS12 box
- ▶ Up to 16 kW capacity available per port
- ▶ Connect up to 280 index unit (28kW) by combining 2 ports



VRF V6R Series - Heat Recovery

380~415V, 3N, 50Hz

HP			8	10	12	14	16	18	
Model name			MV6-R252WV2RN1	MV6-R280WV2RN1	MV6-R335WV2RN1	MV6-R400WV2RN1	MV6-R450WV2RN1	MV6-R500WV2RN1	
Combination type			380-415/3/50						
Power supply	V/N/Hz								
Cooling ¹	Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0	
	Power input	kW	5.25	7.18	8.64	9.83	12.00	13.81	
	EFER		4.27	3.90	3.88	4.07	3.75	3.62	
Heating ² (Rated)	Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0	
	Power input	kW	3.96	5.46	6.57	8.26	9.78	11.90	
	COP		5.66	5.13	5.10	4.84	4.60	4.20	
Heating ² (Max)	Capacity	kW	25.0	31.5	37.5	45.0	50.0	56.0	
	Power input	kW	4.69	7.12	9.48	9.78	12.26	14.77	
	COP		5.33	4.43	3.95	4.60	4.08	3.79	
Connected indoor unit	Total capacity	50-200% of outdoor unit capacity							
Compressor	Maximum quantity		64						
	Type		DC inverter						
	Quantity		2						
Fan	Type		Propeller						
	Motor type		DC						
	Quantity		1						
Refrigerant	Static pressure	Pa	0,20,40,60,80>Selectable						2
	Air flow rate	m ³ /h	9000	9500	10000	14000	14900	15800	
	Type		R410A						
Pipe connections ³	Factory charge	kg	8						
	Liquid pipe	mm	Φ12.7						
	Low pressure gas pipe	mm	Φ25.4						
Sound pressure level ⁴	High pressure gas pipe	mm	Φ19.1						
	Sound pressure level ⁴	dB(A)	58	58	60	61	64	65	
	Sound power level ⁴	dB(A)	78	78	81	81	88	88	
Net dimensions (WxHxD)	Net dimensions (WxHxD)	mm	990x1635x790			1340x1635x825			
	Packed dimensions (WxHxD)	mm	1090x1805x860			1405x1805x910			
	Net weight	kg	232			300			
Gross weight	Gross weight	kg	248			325			
	Ambient temp. operation range	Cooling °C(DB)	-15 ~ 52						
	Heating °C(WB)	-25 ~ 19							
Domestic hot water °C(DB)	-20 ~ 43								

HP			20	22	24	
Model name			MV6-R560WV2RN1	MV6-R615WV2RN1	MV6-R680WV2RN1	
Combination type			10HP+10HP			
Power supply	V/N/Hz		380-415/3/50			
Cooling ¹	Capacity	kW	56.0	61.5	68.0	
	Power input	kW	14.36	15.82	17.01	
	EFER		3.90	3.89	4.00	
Heating ² (Rated)	Capacity	kW	56.0	61.5	68.0	
	Power input	kW	10.92	12.03	13.72	
	COP		5.13	5.11	4.96	
Heating ² (Max)	Capacity	kW	63.0	69.0	76.5	
	Power input	kW	14.24	16.60	16.90	
	COP		4.43	4.16	4.53	
Connected indoor unit	Total capacity	50-200% of outdoor unit capacity				
Compressor	Maximum quantity		64			
	Type		DC inverter			
	Quantity		2			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		2			
Refrigerant	Static pressure	Pa	0,20,40,60,80>Selectable			
	Air flow rate	m ³ /h	19000	19500	23500	
	Type		R410A			
Pipe connections ³	Factory charge	kg	16			
	Liquid pipe	mm	Φ15.9			
	Low pressure gas pipe	mm	Φ28.6			
Sound pressure level ⁴	High pressure gas pipe	mm	Φ28.6			
	Sound pressure level ⁴	dB(A)	61	62	63	
	Sound power level ⁴	dB(A)	81	83	83	
Net dimensions (WxHxD)	Net dimensions (WxHxD)	mm	(990x1635x790)x2		990x1635x790+1340x1635x825	
	Packed dimensions (WxHxD)	mm	(1090x1805x860)x2		1090x1805x860+1405x1805x910	
	Net weight	kg	232x2		232+300	
Gross weight	Gross weight	kg	248x2		248+325	
	Ambient temp. operation range	Cooling °C(DB)	-15 ~ 52			
	Heating °C(WB)	-25 ~ 19				
Domestic hot water °C(DB)	-20 ~ 43					

- Notes:
- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
 - Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 - For single units, diameters given are those of the unit's stop valves. For combined units, 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.
 - 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.

VRF V6R Series - Heat Recovery

380~415V, 3N, 50Hz

HP			26	28	30	
Model name			MV6-R735WV2RN1	MV6-R785WV2RN1	MV6-R835WV2RN1	
Combination type			12HP+14HP			
Power supply	V/N/Hz		380-415/3/50			
Cooling ¹	Capacity	kW	73.5	78.5	83.5	
	Power input	kW	18.46	20.64	22.45	
	EFER		3.98	3.80	3.72	
Heating ² (Rated)	Capacity	kW	73.5	78.5	83.5	
	Power input	kW	14.83	16.35	18.47	
	COP		4.96	4.80	4.52	
Heating ² (Max)	Capacity	kW	82.5	87.5	93.5	
	Power input	kW	19.27	21.74	24.25	
	COP		4.28	4.02	3.86	
Connected indoor unit	Total capacity	50-200% of outdoor unit capacity				
Compressor	Maximum quantity		64			
	Type		DC inverter			
	Quantity		2			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		3			
Refrigerant	Static pressure	Pa	0,20,40,60,80>Selectable			
	Air flow rate	m ³ /h	24000	24900	25800	
	Type		R410A			
Pipe connections ³	Factory charge	kg	18			
	Liquid pipe	mm	Φ19.1			
	Low pressure gas pipe	mm	Φ34.9			
Sound pressure level ⁴	High pressure gas pipe	mm	Φ28.6			
	Sound pressure level ⁴	dB(A)	64	65	66	
	Sound power level ⁴	dB(A)	84	89	89	
Net dimensions (WxHxD)	Net dimensions (WxHxD)	mm	990x1635x790+1340x1635x825			
	Packed dimensions (WxHxD)	mm	1090x1805x860+1405x1805x910			
	Net weight	kg	232+300			
Gross weight	Gross weight	kg	248+325			
	Ambient temp. operation range	Cooling °C(DB)	-15 ~ 52			
	Heating °C(WB)	-25 ~ 19				
Domestic hot water °C(DB)	-20 ~ 43					

HP			32	34	36	
Model name			MV6-R900WV2RN1	MV6-R950WV2RN1	MV6-R1000WV2RN1	
Combination type			16HP+18HP			
Power supply	V/N/Hz		380-415/3/50			
Cooling ¹	Capacity	kW	90.0	95.0	100.0	
	Power input	kW	24.00	25.81	28.72	
	EFER		3.75	3.68	3.48	
Heating ² (Rated)	Capacity	kW	90.0	95.0	100.0	
	Power input	kW	19.57	21.69	21.83	
	COP		4.60	4.38	4.58	
Heating ² (Max)	Capacity	kW	100.0	106.0	112.0	
	Power input	kW	24.52	27.03	29.54	
	COP		4.08	3.92	3.79	
Connected indoor unit	Total capacity	50-200% of outdoor unit capacity				
Compressor	Maximum quantity		64			
	Type		DC inverter			
	Quantity		2			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		4			
Refrigerant	Static pressure	Pa	0,20,40,60,80>Selectable			
	Air flow rate	m ³ /h	29800	30700	31600	
	Type		R410A			
Pipe connections ³	Factory charge	kg	20			
	Liquid pipe	mm	Φ19.1			
	Low pressure gas pipe	mm	Φ34.9			
Sound pressure level ⁴	High pressure gas pipe	mm	Φ28.6			
	Sound pressure level ⁴	dB(A)	67	68	68	
	Sound power level ⁴	dB(A)	91	91	91	
Net dimensions (WxHxD)	Net dimensions (WxHxD)	mm	(1340x1635x825)x2			
	Packed dimensions (WxHxD)	mm	(1405x1805x910)x2			
	Net weight	kg	300x2			
Gross weight	Gross weight	kg	325x2			
	Ambient temp. operation range	Cooling °C(DB)	-15 ~ 52			
	Heating °C(WB)	-25 ~ 19				
Domestic hot water °C(DB)	-20 ~ 43					

- Notes:
- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
 - Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 - 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.
 - 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.

VRF V6R Series - Heat Recovery

380~415V, 3N, 50Hz

HP	38		40		42		44		
Model name	MV6-R1070WV2RN1		MV6-R1120WV2RN1		MV6-R1185WV2RN1		MV6-R1235WV2RN1		
Combination type	12HP+12HP+14HP		12HP+12HP+16HP		12HP+14HP+16HP		12HP+16HP+16HP		
Power supply	V/N/Hz		380-415/3/50		118.5		123.5		
Cooling ¹⁾	Capacity	kW	107.0	112.0	118.5	123.5			
	Power input	kW	27.10	29.27	30.46	32.64			
	EER		3.95	3.83	3.89	3.78			
Heating ²⁾ (Rated)	Capacity	kW	107.0	112.0	118.5	123.5			
	Power input	kW	21.40	22.92	24.62	26.13			
	COP		5.00	4.89	4.81	4.73			
Heating ²⁾ (Max)	Capacity	kW	120.0	125.0	132.5	137.5			
	Power input	kW	28.75	31.23	31.53	34.01			
	COP		4.17	4.00	4.20	4.04			
Connected indoor unit	Total capacity	50-200% of outdoor unit capacity							
	Maximum quantity	64							
Compressor	Type	DC inverter							
	Quantity	3							
Fan	Type	Propeller							
	Motor type	DC							
	Quantity	4							
	Static pressure	Pa	0,20,40,60,80(Selectable)						
Refrigerant	Air flow rate	m ³ /h	34000	34900	38900	39800			
	Type	R410A							
Pipe connections ³⁾	Factory charge	kg	26		28				
	Liquid pipe	mm	Φ19.1		Φ19.1		Φ19.1		
	Low pressure gas pipe	mm	Φ41.3		Φ41.3		Φ41.3		
Sound pressure level ⁴⁾	High pressure gas pipe	mm	Φ34.9		Φ34.9		Φ34.9		
	Sound power level ⁴⁾	dB(A)	65	67	67	68			
	Sound power level ⁴⁾	dB(A)	86	89	89	91			
Net dimensions (WxHxD)	mm	(990x1635x790)×2+1340x1635x825		990x1635x790+(1340x1635x825)×2					
Packed dimensions (WxHxD)	mm	(1090x1805x860)×2+1405x1805x910		1090x1805x860+(1405x1805x910)×2					
Net weight	kg	232×2+300		232+300×2					
Gross weight	kg	248×2+325		248+325×2					
Ambient temp. operation range	Cooling	°C (DB)	-15 ~ 52						
	Heating	°C (WB)	-25 ~ 19						
	Domestic hot water	°C (DB)	-20 ~ 43						

HP	46		48		50		52		54		
Model name	MV6-R1300WV2RN1		MV6-R1350WV2RN1		MV6-R1400WV2RN1		MV6-R1450WV2RN1		MV6-R1500WV2RN1		
Combination type	14HP+16HP+16HP		16HP+16HP+16HP		16HP+18HP+18HP		16HP+18HP+18HP		18HP+18HP+18HP		
Power supply	V/N/Hz		380-415/3/50		145.0		150.0		154.0		
Cooling ¹⁾	Capacity	kW	130.0	135.0	140.0	145.0	150.0				
	Power input	kW	33.83	36.00	37.81	39.62	41.44				
	EER		3.84	3.75	3.70	3.66	3.62				
Heating ²⁾ (Rated)	Capacity	kW	130.0	135.0	140.0	145.0	150.0				
	Power input	kW	27.83	29.35	31.47	33.59	35.71				
	COP		4.67	4.60	4.45	4.32	4.20				
Heating ²⁾ (Max)	Capacity	kW	145.0	150.0	156.0	162.0	168.0				
	Power input	kW	34.31	36.79	39.29	41.80	44.31				
	COP		4.23	4.08	3.97	3.88	3.79				
Connected indoor unit	Total capacity	50-200% of outdoor unit capacity									
	Maximum quantity	64									
Compressor	Type	DC inverter									
	Quantity	3									
Fan	Type	Propeller									
	Motor type	DC									
	Quantity	4									
	Static pressure	Pa	0,20,40,60,80(Selectable)								
Refrigerant	Air flow rate	m ³ /h	43800	44700	45600	46500	47400				
	Type	R410A									
Pipe connections ³⁾	Factory charge	kg	30		30		30		30		
	Liquid pipe	mm	Φ19.1		Φ19.1		Φ19.1		Φ19.1		
	Low pressure gas pipe	mm	Φ41.3		Φ41.3		Φ41.3		Φ41.3		
Sound pressure level ⁴⁾	High pressure gas pipe	mm	Φ34.9		Φ34.9		Φ34.9		Φ34.9		
	Sound power level ⁴⁾	dB(A)	68	69	69	69	70				
	Sound power level ⁴⁾	dB(A)	91	93	93	93	93				
Net dimensions (WxHxD)	mm	(1340x1635x825)×3		(1340x1635x825)×3		(1340x1635x825)×3		(1340x1635x825)×3			
Packed dimensions (WxHxD)	mm	(1405x1805x910)×3		(1405x1805x910)×3		(1405x1805x910)×3		(1405x1805x910)×3			
Net weight	kg	300×3		300×3		300×3		300×3			
Gross weight	kg	325×3		325×3		325×3		325×3			
Ambient temp. operation range	Cooling	°C (DB)	-15 ~ 52								
	Heating	°C (WB)	-25 ~ 19								
	Domestic hot water	°C (DB)	-20 ~ 43								

- Notes:
- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
 - Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 - 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.
 - 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.

VRF V6R Series - MS box



Model name	MS01/N1-D	MS04/N1-D	MS06/N1-D	MS08/N1-D	MS10/N1-D	MS12/N1-D
Power supply	220-240V~50Hz					
Max. number of indoor unit groups	1	4	6	8	10	12
Max. number of indoor units per group	8	5	5	5	5	5
Max. number of downstream indoor units	8	20	30	40	47	47
Max. capacity of each group of indoor units	32	16	16	16	16	16
Max. total capacity of all downstream indoor units	32	49	63	85	85	85
Pipe connections to ODU ¹⁾	Liquid pipe	mm	Φ9.53/Φ12.7	Φ9.53/Φ12.7/Φ15.9/Φ19.1	Φ9.53/Φ12.7/Φ15.9/Φ19.1	Φ12.7/Φ15.9/Φ19.1/Φ22.2
	Low pressure gas pipe	mm	Φ15.9/Φ19.1/Φ22.2	Φ19.1/Φ22.2/Φ28.6	Φ19.1/Φ22.2/Φ28.6	Φ22.2/Φ28.6/Φ34.9
	High pressure gas pipe	mm	Φ12.7/Φ15.9/Φ19.1	Φ15.9/Φ19.1/Φ22.2/Φ28.6	Φ15.9/Φ19.1/Φ22.2/Φ28.6	Φ19.1/Φ22.2/Φ28.6
Pipe connections to IDU ¹⁾	Liquid pipe	mm	Φ6.35/Φ9.53	Φ6.35/Φ9.53	Φ6.35/Φ9.53	Φ6.35/Φ9.53
	Gas pipe	mm	Φ12.7/Φ15.9	Φ12.7/Φ15.9	Φ12.7/Φ15.9	Φ12.7/Φ15.9
Sound pressure level ¹⁾	dB(A)	40	44	45	47	47
Sound power level ¹⁾	dB(A)	60	63	65	65	65
Net dimensions (WxHxD)	mm	440x195x296	668x250x574	668x250x574	974x250x574	974x250x574
Packed dimensions (WxHxD)	mm	740x275x405	1020x390x850	1020x390x850	1320x390x850	1320x390x850
Net weight	kg	10.5	33	36	48	51
Gross weight	kg	14	58	61	79	82

Note:
1 There is more than one size for pipe diameter in the above table because MS provides multiple sizes for different installation conditions.



VRF V6R Series - High temperature hydro module

Model	SMK-D140HN1-3	
Power supply	220-240V~50Hz	
Heating Capacity ¹⁾	kW	14
Operating temperature range	Heating	°C
	Domestic hot water	°C
Water temperature	°C	-20~30
Water flow rate	Nominal (Min.-Max.)	m ³ /h
Allowable water pressure	Bar	2.4 (1.2-2.9)
Refrigerant	Type	1-10
	Factory charge	R134a
Sound pressure level	dB(A)	44
Net dimensions (WxHxD)	mm	450x795x300
Packed dimensions (WxHxD)	mm	735x820x380
Net / Gross weight	kg	58 / 67.2
Refrigerant pipe	Connection type	Brazing
	Liquid pipe diameter	mm
	Gas pipe diameter	mm
Water pipe	Connection type	External thread
	Inlet pipe diameter	mm
	Outlet pipe diameter	mm
Unit installation ambient temperature range	°C	0~40
Unit installation place	Indoor only	

Note:
Nominal heating capacity is based on the following conditions: ambient temperature 7°C DB/6°C WB; water inlet/outlet temperature 40°C DB/45°C.